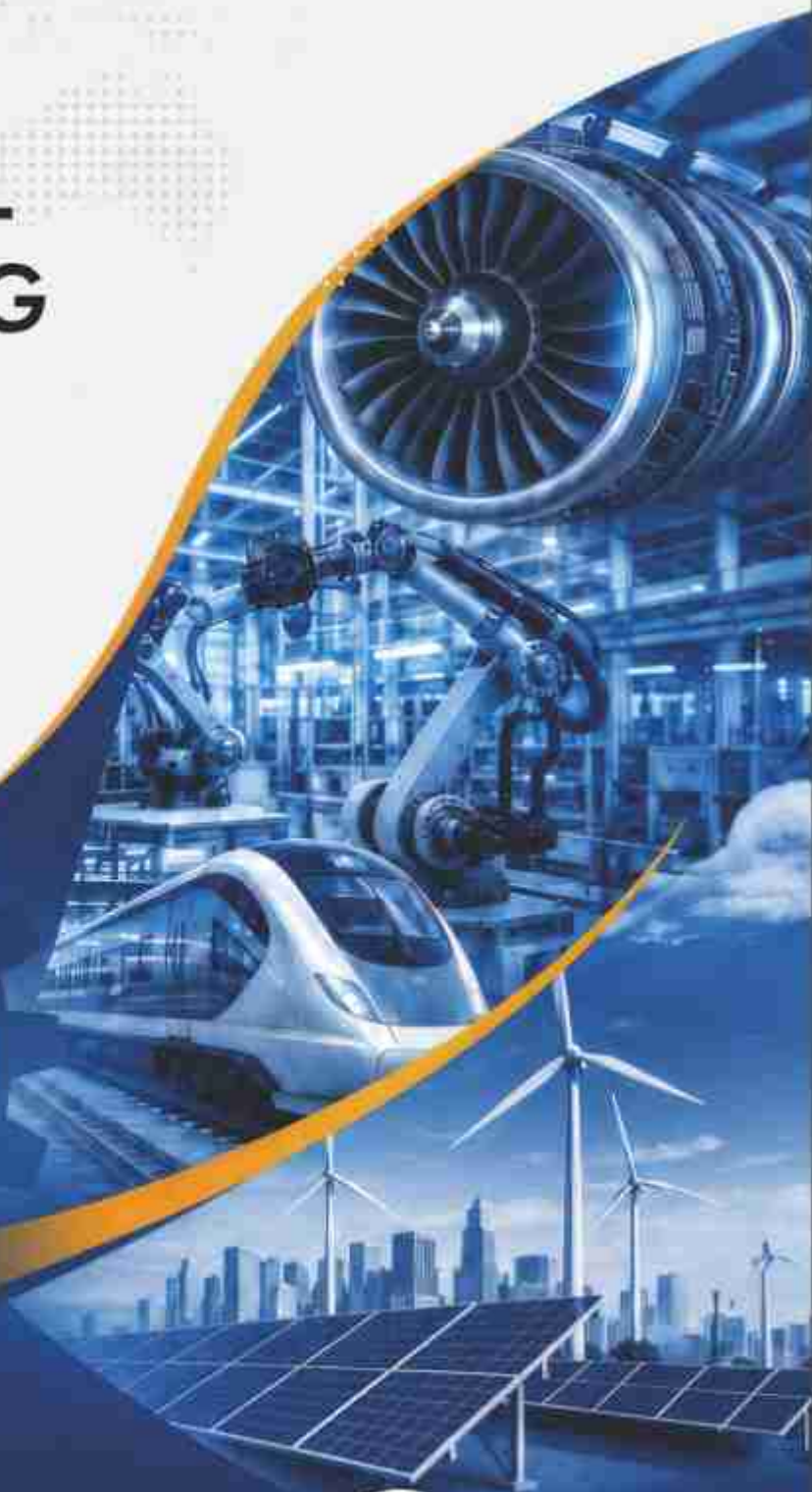


INTERNATIONAL

MECHANICAL ENGINEERING

CONGRESS & EXPOSITION

INDIA



3rd - 5th September, 2026

Chennai Trade Centre, Chennai

The American Society of Mechanical Engineers®
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ORGANISING COMMITTEE



Dr. K Shanmuga Sundaram

Congress Chair

Director, CUIC
Anna University



Dr. Shraman Goswami

Congress Vice Chair

Fellow
Honeywell Aerospace



Dr. Dheepa Srinivasan

Congress Technical Chair

Associate Fellow
Baker & Hughes



Dr. Raghu Prakash

Congress Technical Chair

Professor
IIT Madras



Dr. K Subramanian

Past Congress Chair - 2025

Sr. Vice President - R & D
Ashok Leyland



Dr. M Sathya Prasad

Past Technical Chair - 2025

Professor of Practice
Anna University

MESSAGE FROM THE CONFERENCE CHAIR

The history of civilization is, in many ways, the history of engineering. Every generation has been remembered by its ability to imagine boldly, innovate courageously, and transform knowledge into progress. Today, as we enter an era defined by Artificial Intelligence, sustainable technologies, advanced manufacturing, digital engineering, and unprecedented global connectivity, engineering is once again called upon to redefine the future.

It is with immense pride and great optimism that I welcome you to **ASME IMECE India 2026**.

This Congress is more than a gathering of researchers and practitioners; it is a convergence of minds committed to addressing humanity's greatest challenges. From climate resilience and clean energy to intelligent manufacturing, healthcare technologies, mobility, and space exploration, the engineering community has both the privilege and responsibility of creating solutions that improve lives while safeguarding our planet.

India stands at a defining moment in its technological journey. With a vibrant ecosystem of researchers, entrepreneurs, industries, and young innovators, our nation is uniquely positioned to become a global hub of engineering excellence. IMECE India 2026 reflects this aspiration by bringing together distinguished experts from around the world to exchange ideas, challenge conventions, and build meaningful collaborations that transcend geographical boundaries.

As Congress Chair, my vision is that every participant leaves this Congress with more than technical knowledge. I hope you depart with new friendships, new research partnerships, renewed inspiration, and a stronger commitment to using engineering as a force for societal transformation.

Innovation flourishes where diverse perspectives meet. Discovery accelerates where collaboration replaces competition. Progress becomes sustainable when technology is guided by ethics, inclusivity, and a deep sense of responsibility toward humanity.

I extend my heartfelt gratitude to ASME, the organizing committees, volunteers, reviewers, sponsors, institutional partners, and every contributor whose dedication has transformed this vision into reality.

Let IMECE India 2026 be remembered not only for the papers presented or technologies exhibited, but for the ideas that inspire future generations and the collaborations that shape tomorrow's world.

Together, let us engineer a future that is intelligent, sustainable, inclusive, and profoundly human.

I wish every delegate a stimulating, enriching, and memorable Congress experience.



Dr. K Shanmuga Sundaram

Congress Chair

Anna University

MESSAGE FROM THE CONGRESS VICE CHAIR

The global engineering landscape is undergoing a profound transformation. Artificial Intelligence is converging with traditional engineering disciplines, energy systems are being reimagined for a sustainable future, supply chains are being restructured around resilience and technological sovereignty, and innovation cycles are accelerating at an unprecedented pace.

Amidst this transformation, India is uniquely positioned to emerge as a global engineering innovation hub.

With its growing manufacturing capabilities, world-class engineering talent, vibrant startup ecosystem, and increasing investments in advanced technologies, India has the opportunity not only to participate in the next industrial revolution but to help lead it. Realizing this vision, however, requires deep collaboration between academia, industry, startups, government, and the broader innovation ecosystem.

IMECE India 2026 has been designed as a platform to enable exactly this convergence.

Our technical tracks bring together experts from advanced manufacturing, energy systems, materials, robotics, automation, thermal sciences, and digital engineering to foster the interdisciplinary thinking needed to solve tomorrow's challenges. As AI, machine learning, digital twins, and cyber-physical systems increasingly become integral to engineering practice, IMECE provides a forum where digital innovation meets physical engineering.

The conference's focus on **Energy, Manufacturing, Mobility, and Digitalization** reflects four strategic pillars that will define economic competitiveness and societal progress in the coming decades. The discussions, technical exchanges, and collaborations emerging from these domains have the potential to influence not only India's industrial future but also global engineering practice.

Beyond technical excellence, IMECE India recognizes that innovation thrives through connected ecosystems.

The **Engineering Education Symposium** explores how we prepare future engineers for a world where

domain expertise must be complemented by digital fluency and systems thinking. The **MSME Conclave** highlights the crucial role of small and medium enterprises in transforming innovation into economic growth and manufacturing capability. The **Hardware and Innovation Platforms** bridge the gap between research and commercialization by connecting innovators with industry, mentors, and investors. Our **Student Engagement Programs** cultivate the next generation of engineering leaders, while **Women in Engineering** reinforces our commitment to building a more diverse, inclusive, and innovative profession.

Perhaps the greatest strength of IMECE India lies in its ability to bring together stakeholders who rarely share the same platform—researchers, industrial practitioners, entrepreneurs, policymakers, educators, and students. It is at these intersections that transformative ideas emerge, strategic partnerships are formed, and engineering breakthroughs become societal impact.

As India advances toward becoming a global center for engineering innovation, IMECE India aspires to be more than a conference. It seeks to be a catalyst—for collaboration, for technology leadership, and for engineering solutions that address the world's most pressing challenges.

I invite all participants to engage boldly, collaborate openly, and contribute meaningfully. Together, we have an opportunity not only to discuss the future of engineering, but to shape it.



Dr. Shraman Goswami
Congress Vice-Chair
Honeywell Aerospace

MESSAGE FROM CONGRESS TECHNICAL CHAIRS

Greetings (Vanakkam) and a warm welcome to Chennai!

On behalf of the Organising Committee, it is our privilege to welcome you to the 2nd edition of the International Mechanical Engineering Congress & Exposition (ASME IMECE-India 2026) to be held from September 3rd to the 5th at the Chennai Trade Centre, Chennai, Tamil Nadu, India. This unique event showcasing the recent developments of the largest engineering community, viz., Mechanical Engineers, also serves as an umbrella for all the allied and multidisciplinary engineering and technology domains. The theme of this year's IMECE India 2026 is: **Engineering a Sustainable Future** through advancement in Energy, Manufacturing, Mobility and Digitalisation.

This conference connects several top-notch academic institutions of India and abroad, world-renowned industries, national laboratories, government organisations, MSME, SME and burgeoning start-ups, to showcase the latest scientific and technological endeavours in Aerospace, Automotive, Oil & Gas, Energy, Mobility and Manufacturing sectors – a true reflection of the country's self-sustenance – an "Atma Nirbhar Bharat". We bring in bright minds from other countries as well - to look, appreciate, collaborate and add to what our nation can offer.

IMECE India 2026 received an overwhelming over **1200** abstracts from enthusiastic authors for technical publication and presentation, spread across **12** tracks.

Over **500** distinguished subject matter experts from leading institutions and organisations have dedicated the past **6 months** to rigorously reviewing submissions and shortlisting technical papers of outstanding quality through ASME's stringent peer-review process: over **400 reviewers** from the Indian Institute of Technologies (IITs), National Institute of Technologies (NITs), Indian Institute of Science (IISc), private engineering colleges, CSIR, DRDO, ISRO, and the rest from national and multinational companies volunteered for this process. IMECE India 2026 will feature over 900 technical papers, presentations, and posters from leading minds across academia, industry, and government, addressing critical advancements and shaping future directions in mechanical engineering.

This remarkable achievement in the second edition of IMECE India reflects the strength of collaboration enabled through the ASME IMECE-India platform and sets a high benchmark for technical excellence. The technical deliberations and presentations at this year's conference are expected to serve as a global stage for translating research into impactful engineering solutions. Select papers will also be considered for publication in appropriate ASME journals as part of ASME's Conference-to-Journal (C2J) initiative.

We extend our deepest gratitude to all the track chairs, symposium organisers, reviewers, and the dedicated ASME staff who worked tirelessly to bring this prestigious program alive. Their commitment to ensuring a high quality of technology and research will pave the trajectory of mechanical engineering globally, via IMECE-India 2026. We thank the authors for their continued interest in ASME IMECE India 2026 conference and hope that they too had a good learning through the technical process.

We extend a cordial invitation to all eminent guests, delegates, authors, track chairs, sponsors, and exhibitors to join IMECE India 2026 for an enriching technical knowledge exchange and to build lasting collaborations that accelerate research and innovation.



Dr. Dheepa Srinivasan
Congress Technical Chair
Baker & Hughes



Dr. Raghu Prakash
Congress Technical Chair
IIT Madras

ABOUT ASME

ASME is a not-for-profit membership organization that enables collaboration, knowledge sharing, career enrichment, and skills development across all engineering disciplines, toward a goal of helping the global engineering community develop solutions to benefit lives and livelihoods. Founded in 1880 by a small group of leading industrialists, ASME has grown through the decades to include more than 85,000 members in 135 countries.

For more than 140 years, ASME has successfully enhanced performance and safety worldwide through its renowned codes and standards, conformity assessment programs, training courses, and journals.

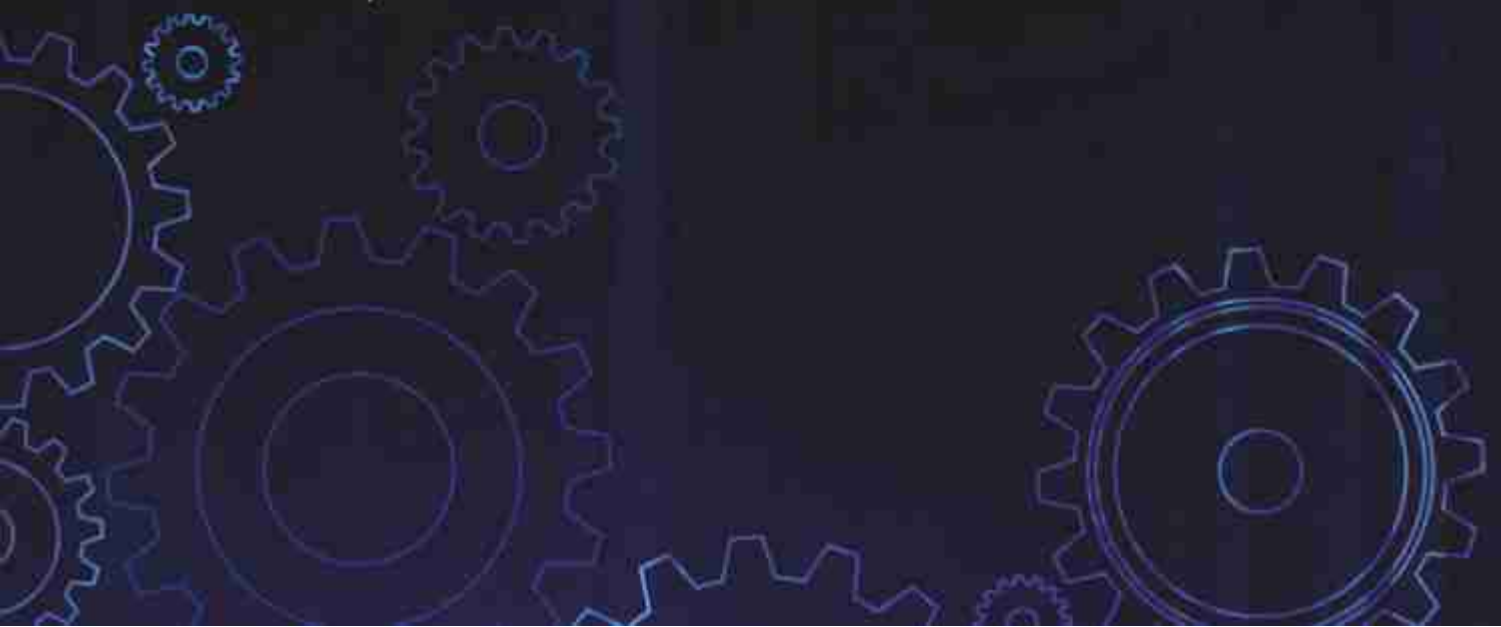
ASME also produces nearly 40 international conferences. These industry-leading events feature advanced research and technical content spanning a range of industries impacted by mechanical engineering, including energy production, energy sources, advanced manufacturing, and engineering sciences.

ASME India Private Limited is a wholly owned subsidiary of ASME Holdings, established in the Asia Pacific region to unite and recognize ASME members, volunteers, researchers, academic professionals, industry practitioners, and students passionate about advancing interdisciplinary engineering fields.

ASME India creates opportunities for these dedicated engineers to build communities focused on participative learning. By facilitating the presentation and exchange of new knowledge and ethical engineering practices, ASME India encourages members to showcase their research, practical work, and artistic endeavors. This approach supports both their professional development and the greater good of the community through technical workshops, conferences, and networking events, fostering innovation and collaboration.

In its role, ASME India advances ASME's mission by forming knowledge groups that ideate and collaborate on critical challenges in areas such as energy, sustainability, and healthcare. Members are encouraged to present and publish cutting-edge research and industry best practices, thereby enhancing knowledge within their communities of practice.

With a strong emphasis on leadership, mentorship, and skill enhancement, ASME India aligns with ASME's global mission to improve the quality of life through innovative engineering solutions for the benefit of society.



ABOUT IMECE

ASME's International Mechanical Engineering Congress & Exposition (IMECE) is the only event where research leaders from academia, government, and industry converge to make connections and share insights for innovation across engineering disciplines.

History was made on September 10, 2025, when ASME's International Mechanical Engineering Congress & Exposition (IMECE) opened its doors in India for the first time. IMECE India 2025 became the stage for a landmark moment in global engineering: the first time this prestigious congress ventured beyond American soil to embrace the vibrant engineering ecosystem of India.

IMECE INDIA has been curated to foster collaborations that engage stakeholders and partners from engineering communities of Academia, Industry, National Research Laboratories along with Government funded bodies. This broad forum with salient perspectives and knowledge-sharing on technical advances within mechanical engineering, is specially curated.

At IMECE India 2025, over four dynamic days, more than 2,000 professionals, researchers, students, and industry leaders gathered to share knowledge, spark innovation, and forge partnerships that will endure for years to come.



Why IMECE India 2026 Matters

As engineering continues to shape the future of economies, industries, and societies, the need for trusted technical knowledge, global collaboration, and a highly proficient workforce has never been greater. For more than a century, ASME has advanced the art, science, and practice of engineering through technical excellence, globally recognized standards, and platforms that enable engineers and organizations to address complex challenges with confidence.

ASME India's Role in Advancing Engineering Excellence

At ASME India, we believe that engineering progress is achieved when standards, innovation, research, learning, and industry application converge. Through our standards and certification programs, technical publications, learning and development initiatives, conferences, and professional communities, we work to strengthen engineering competence, promote safe and sustainable practices, and support the development of an ethical and future-ready engineering workforce.

IMECE India 2026: A Platform for Collaboration and Impact

IMECE India 2026 embodies this vision. It serves as a unique platform where researchers, industry leaders, policymakers, technology developers, educators, students, and entrepreneurs come together to exchange knowledge, share emerging insights, and explore solutions to critical engineering and industrial challenges. Such engagement is essential for accelerating innovation, advancing technology adoption, and translating research into practical outcomes that benefit society and industry alike.

Equally important, IMECE India creates pathways for meaningful collaboration across industry, academia, and research institutions. By bringing together diverse communities of practice, the conference enables the cross-pollination of ideas that drives engineering advancement and strengthens India's innovation ecosystem.

Creating Pathways for MSMEs, Students, Faculty, and Innovators

For India's Micro, Small and Medium Enterprises (MSMEs), the conference offers an invaluable opportunity to engage with cutting-edge research,

emerging technologies, and global engineering best practices. It provides a forum where MSMEs can interact with OEMs, technology licensors, infrastructure and plant operators, standards experts, and policymakers to enhance their capabilities, expand their capacity, improve competitiveness, and discover new avenues for growth and participation in advanced industrial value chains.

IMECE India also serves as an important bridge for students, faculty members, researchers, and hardware innovators. By connecting them with industry practitioners, technology leaders, and research communities, the conference helps create opportunities for mentorship, collaboration, knowledge exchange, and professional development. These interactions are instrumental in preparing the next generation of engineers to contribute meaningfully to technological progress and national development.

An Invitation to Shape the Future

As India advances its aspirations in manufacturing, energy, infrastructure, mobility, digital technologies, sustainability, and deep-tech innovation, engineering will remain at the center of this transformation. ASME is committed to supporting this journey by fostering technical excellence, promoting lifelong learning, facilitating knowledge sharing, and enabling collaborations that strengthen engineering capability across the entire ecosystem.

I invite you to join us at IMECE India 2026 to engage with the technologies, ideas, and partnerships that will define the future of engineering and industry. Your participation will help advance innovation, strengthen technical leadership, and contribute to a more sustainable, resilient, and prosperous future for India and the global engineering community.



Mr. Madhukar Sharma
President & Director
ASME India Pvt Ltd

MESSAGE FROM DY DIRECTOR, TEC & INDUSTRY EVENTS, ASME INDIA

"The future is not something we inherit; it is something we engineer. Through innovation, collaboration, and sustainability, we have the power to create a better world for generations to come."

The second edition of IMECE India marks an exciting milestone in a journey that began just a year ago as a bold vision. Our inaugural edition introduced a platform where ideas, expertise, and aspirations converged. Today, we return with greater purpose and momentum, moving decisively from ideas to impact.

IMECE India 2026 brings together thought leaders, industry pioneers, researchers, and emerging talent across four key engineering domains to explore the innovations shaping our world. Through technical sessions, focused discussions, and meaningful exchanges, we celebrate the transformative power of engineering to solve complex challenges and unlock new possibilities.

Guided by the theme "Engineering for a Sustainable Future," this edition underscores the responsibility and opportunity that engineers have in building a more resilient, inclusive, and sustainable tomorrow. From advancing breakthrough technologies to fostering cross-sector collaboration, every conversation at IMECE India is a step toward creating solutions that leave a lasting positive impact on society.

As we gather to share knowledge, inspire one another, and push the boundaries of innovation, let us remember that the greatest achievements begin with the courage to imagine what is possible. Together, we are not only shaping the future of engineering but also engineering the future itself.

I welcome you to IMECE India 2026 and encourage you to be part of this journey from vision to action, from innovation to impact, and from today toward a more sustainable tomorrow.



Ms. Jaya Jain

**Deputy Director, TEC & Industry Events
ASME India**



About TWI India

TWI India Pvt. Ltd. is a wholly owned subsidiary company of TWI Ltd. (TWI), a world-leading research and technology organisation. TWI provides industry with engineering and manufacturing solutions for structures and components, incorporating joining and associated technologies (surfacing, coating, additive manufacture, cutting, etc.) through information and technology transfer, consultancy and project support, generic research, contract R&D, training, qualification and professional society membership. It is the only single source of expertise in every aspect of joining technology for engineering materials - metals, plastics, ceramics, composites and electronic assemblies - from materials selection, through manufacture, to in-service performance. TWI offers a single, impartial source of service for joining engineering materials.

As the world's largest training organisation in welding, welding inspection and non-destructive testing, each year over 20,000 participants in more than 60 countries benefit from our expertise. Our courses and examinations are designed to service all key industry sectors, including oil and gas, aerospace, construction, power and automotive, with all courses supported by internationally recognised certification.

In India, other than delivering training and examinations towards internationally recognised certification in welding, painting, non-destructive testing and plant inspection, we offer bespoke training solutions, both for Industrial Member and non-member organisations.

Our Training Programmes

CSWIP Welding Inspection:

- Visual Welding Inspector Level 1
- Welding Inspector Level 2
- Senior Welding Inspector Level 3

BGAS - CSWIP Painting and Coatings Inspector:

- Painting Inspector Grade 2
- Painting Inspector Grade 1
- Site Coatings Inspector

CSWIP Conventional NDT Level 1/2/3: As per ISO 9712

- Liquid Penetrant Testing (PT)
- Magnetic Particle Testing (MT)
- Ultrasonic Testing (UT)
- Radiographic Interpretation (RI)
- Visual Testing (VT)
- Eddy Current Testing (EC)

CSWIP Advanced NDT Level 1/2/3: As per ISO 9712

- Phased Array Ultrasonic Testing (PAUT)
- Time of Flight Diffraction (ToFD)
- Automated Ultrasonic Testing (AUT)

Professional Training Course on IBR:

- Essentials of Indian Boiler Regulations (IBR)

Welder Training:

- SMAW / GTAW / GMAW

CSWIP Plant Inspection:

- Plant Inspector e-Learning Course

IOSH Safety Courses (e-Learning):

- Approved Working Safely

ASME ATP Courses:

- ASME Section IX (Welding qualifications) for Shop Engineers
- Essentials of ASME BPVC Section I, Power Boiler
- Essentials of ASME BPVC Section VIII Div.1, Unfired Pressure Vessels
- Appreciation of Basic NDT Techniques
- Basic Course on Welding Inspection

API Refresher Courses:

- API 510 - Authorised Pressure Vessel Inspector
- API 570 - Authorised Piping Inspector
- API 653 - Authorised Storage Tank Inspector

Other Courses:

- Lifting and Rigging
- Scaffolding

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About TWI India

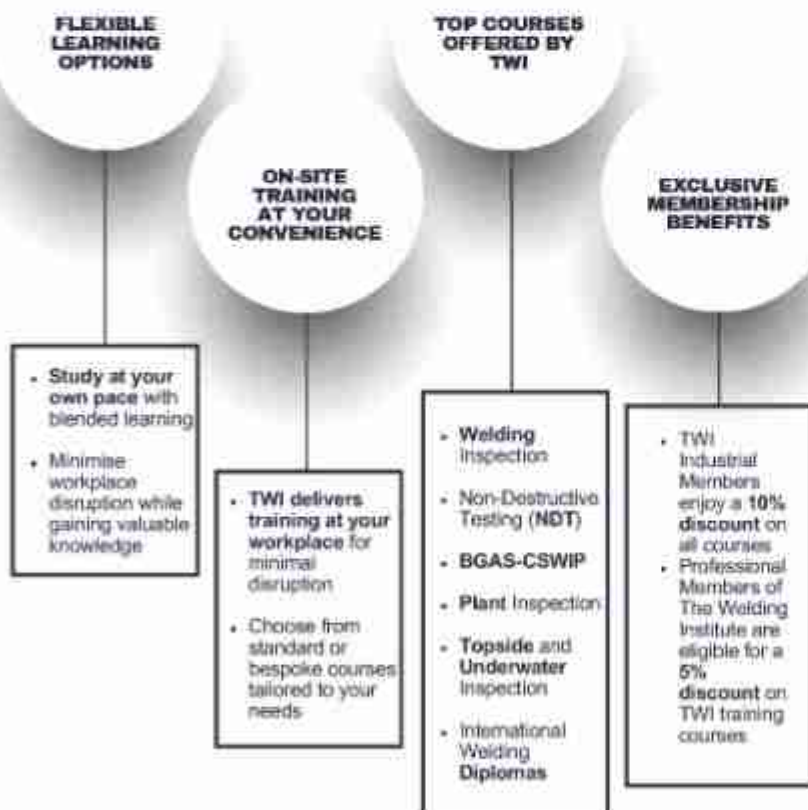
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Training & Examination Services:

TWI Training



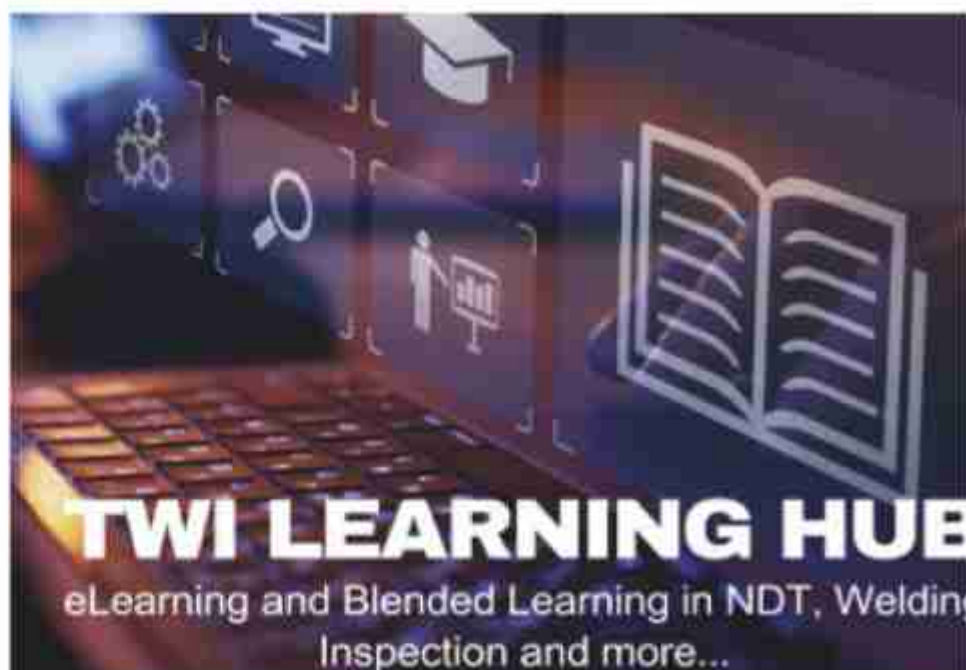
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- Nuclear
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Isgec Heavy Engineering is a diversified engineering leader across Manufacturing, Industrial Projects, and Sugar, trusted in 92 countries with eight state-of-the-art facilities.

In 2012, Isgec partnered with Japan, Kanadavia Corporation (formerly known as Hitachi Zosen Corporation) to form Isgec Hitachi Zosen Ltd., specializing in critical process equipment for refineries, fertilizer, petrochemical, and GTL industries. Its 200,000 sq. m. Dahej facility, equipped with a Ro-Ro jetty, handles demanding projects with precision.

In 2015, Isgec established Isgec Titan Metal Fabricators Pvt. Ltd., a joint venture with USA-based Titan Metal Fabricators, manufacturing exotic material equipment from Nickel Alloy, Titanium, Tantalum, Zirconium, and Niobium. These reactive alloy solutions serve chemical, petrochemical, refinery, fertilizer, mining, power, pharmaceutical, and steel industries, protecting against harsh operating environments.

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- Pressure Vessels: Columns, Separators, Decomposers, HP/LP Flash Columns

Key Power Plant Equipment:

- HP & LP Feedwater Heaters
- Surface Condensers
- Boiler Drums

Specialized Materials & Construction:

- Materials: Low Alloy Steel, Stainless Steels (Duplex/Super Duplex), High Nickel Alloys (Inconel, Hastelloy), Exotic Metals (Tantalum, Zirconium), Clad
- Construction: Solid, Lined, Explosion/Roll Clad, Weld Overlay

Value-Added Services:

- Site Fabrication & Equipment Installation
- In-situ Modification & Repair of Critical Equipment
- Supply and Installation of Internals
- Overhauling and Maintenance



MESSAGE FROM DY DIRECTOR, L&D BUSINESS DEVELOPMENT & OPERATIONS

Learning That Sparks curiosity and Ideas. Innovation That Creates Impact.

Engineering is undergoing a profound transformation. The engineers who will lead the future must not only master technical fundamentals but also develop the ability to innovate, collaborate across disciplines, adapt to emerging technologies, and solve increasingly complex challenges facing industry and society. Learning & Development at ASME India is all about making learning practical, engaging, and relevant to today's engineering challenges.

IMECE India 2026 has been designed as more than a conference. It is a learning ecosystem that brings together students, educators, researchers, innovators, industry practitioners, startups, MSMEs, and technology leaders to engage in meaningful knowledge exchange and professional growth. For undergraduate and postgraduate students, IMECE India offers opportunities to experience engineering beyond the classroom.

Through initiatives such as Brain Bolt, students apply creativity, technical knowledge, and teamwork to solve real-world engineering challenges while learning from industry experts and mentors. Through technical training, industry projects, workshops, hackathons, and experiential learning, we help students and professionals build future-ready skills. By embracing blended learning, flipped classrooms, and experiential learning, we encourage participants to learn by doing, collaborate effectively, and solve practical engineering problems. Our goal is to inspire curiosity, foster innovation, and prepare the next generation of engineers for a rapidly evolving world.

For faculty members and academic leaders, MEEd (Mechanical Engineering Education) provides a platform to explore evolving pedagogies, industry expectations, emerging technologies, and approaches that help prepare graduates for a rapidly changing engineering landscape.

Innovation Square showcases the innovation journey from idea to impact, enabling students, researchers, startups, and hardware innovators to demonstrate solutions, engage with practitioners, and gain valuable insights into technology commercialization, product

development, and entrepreneurship.

The conference's technical paper presentations and research-driven tracks create opportunities for young researchers and postgraduate students to present their work, exchange ideas with leading experts, receive constructive feedback, and strengthen their technical and scholarly capabilities. These experiences help cultivate the skills required for both advanced research and industrial practice.

Equally important are the dedicated MSME-focused sessions in plenaries on Clean Energy, Mobility & Hitech Manufacturing, Deep Sea Technologies and Digitalization which offer valuable exposure to manufacturing excellence, quality systems, emerging technologies, standards, innovation practices, and industrial best practices. For early-career engineers, these discussions provide practical insights into how engineering knowledge is translated into products, processes, infrastructure, and national competitiveness.

At ASME Learning & Development, we believe that learning extends far beyond formal education. It is a lifelong journey of curiosity, mentorship, experimentation, and continuous professional development. IMECE India 2026 reflects this belief by creating pathways through which learners at every stage, from students to experienced professionals, can acquire new perspectives, build meaningful connections, and develop the capabilities needed to contribute to India's engineering future.

We look forward to welcoming the next generation of engineers, researchers, educators, innovators, and industry professionals to IMECE India 2026 as we learn, grow, and shape the future of engineering together.



Mr. Hari Balachandran

**L&D Deputy Director, L&D Business
Development & Operations**

MESSAGE FROM DY DIRECTOR, ASME FOUNDATION INDIA

As India advances toward becoming a global innovation powerhouse, the role of engineering has never been more important. The challenges before us, from sustainable development and advanced manufacturing to climate resilience and inclusive growth, demand not only technical excellence but also creativity, empathy, and systems thinking.

At ASME Foundation India, we believe that the engineers who will shape tomorrow's solutions must be equipped with more than technical knowledge. They must be prepared to think across disciplines, solve complex problems and create meaningful impact within their communities and beyond.

Over the last two years, we have worked to strengthen this vision by building pathways that connect students, educators, industry leaders, and changemakers. Through our growing network of members, student sections, educational initiatives, and community-focused programs, we are helping create opportunities for the next generation of engineers to learn, lead, and contribute to society.

IMECE India 2026 represents the spirit of this mission. It brings together some of the brightest minds from academia, industry, government and the startup ecosystem to exchange ideas, challenge assumptions and explore the future of engineering. Equally important, it serves as a platform to inspire young innovators who will carry these conversations forward into the decades ahead.

As we look to the future, our commitment remains steadfast: To foster an engineering community that is technically outstanding, globally connected and driven by purpose. By investing in people, nurturing curiosity, and creating opportunities for innovation, we can build a future where engineering serves as a powerful force for progress and societal good.

Thank you for being part of this journey. Together, we are shaping not only the future of engineering, but the future of the communities and industries it serves.



Ms. Avni Malhotra
Deputy Director
ASME Foundation India



WE CARE

FOR A CONNECTED, PROSPEROUS AND SHARED FUTURE

Reliance Industries Limited, India's largest private corporation, touches the lives of over a billion people every day.

With operations spanning New Energy, Refining & Marketing, Petrochemicals, Exploration & Production, Retail, Digital Services, and Media & Entertainment, Reliance is driving sustainable and inclusive growth at the forefront of India's economy.

Reliance is among "Time100 Most Influential Companies" for 2024, ranking 45th on the Forbes Global 2000[®] list, and 88th on Fortune's Global 500[®] list for 2025.

Along with Reliance Foundation – India's largest corporate philanthropic organization, which has touched the lives of over 100 million people – the one common unifying thread that runs through everything we have ever done at Reliance is the spirit of care and empathy.

Because Reliance was founded as, and will always be, a corporate that cares.



Growth is Life

TRACK CHAIR

It gives me immense pleasure to welcome you to the **Additive Manufacturing and 3D Printing (AM3D) Track of IMECE-India 2026**.

The International Mechanical Engineering Congress and Exposition (IMECE) has long served as one of the premier forums for the mechanical engineering community, bringing together researchers, industry professionals, educators, and students to exchange ideas and showcase innovations. The successful launch of IMECE-India last year marked the beginning of an exciting new chapter, and the enthusiastic response from the community reaffirmed the need for such a vibrant platform in India. As we gather again this year, IMECE-India continues its journey toward becoming a landmark annual event that fosters technical excellence, meaningful collaborations, and impactful discussions.

The AM3D Track builds upon the strong foundation laid by the highly successful ASME AM3D Aerospace conferences held in 2022 and 2023. Additive Manufacturing has evolved from being a rapid prototyping technology to a transformative manufacturing paradigm that is reshaping product design, materials development, healthcare, aerospace, energy, and numerous other sectors. Reflecting this diversity, the technical program has been thoughtfully structured to cover the complete spectrum of additive manufacturing.

The track encompasses five major themes: **Current and Emerging Trends in Additive Manufacturing, Applications and Industrial Impact, Materials and Characterization for Additive Manufacturing, Modeling and Simulation of Additive Manufacturing, and Additive Manufacturing for Biomedical Applications.**

The inclusion of the biomedical theme this year recognizes the rapidly expanding role of additive manufacturing in personalized healthcare, medical devices, tissue engineering, and related domains. Together, these themes provide a balanced blend of fundamental research, technological innovations, and industrial applications, ensuring an enriching experience for all participants.

A notable strength of this track lies in its organizational team. Each technical theme is jointly coordinated by distinguished experts from academia and industry, ensuring that the conference maintains both scientific rigor and industrial relevance. This collaborative approach strengthens the review process, enriches technical discussions, and promotes meaningful interactions.

I extend my sincere gratitude to the authors, reviewers, track chairs, organizing committee members, sponsors, and volunteers whose dedicated efforts have made this technical program possible. Most importantly, I thank all the participants for being part of this exciting journey.

I encourage you to actively engage in the technical sessions, exchange ideas, build new collaborations, and contribute to making the AM3D Track a truly memorable and rewarding experience. I look forward to your enthusiastic participation and continued support in making IMECE-India 2026 a resounding success.



Dr. Suryakumar S.
IIT Hyderabad



GROUP CHAIR

It is my privilege and honour to extend a warm welcome to all delegates, speakers, and participants of IMECE India 2026 on behalf of the ASME Gas Turbine India Group. This conference stands as a significant convergence of minds from academia, industry, and research institutions, united by a shared commitment to advancing engineering excellence and addressing the pressing challenges of our time. It provides a vibrant platform to exchange knowledge, showcase innovation, and build collaborations that will shape the future of energy and propulsion systems.

The global energy landscape is undergoing a profound transformation, driven by the need for sustainability, decarbonization, and enhanced efficiency. In this context, gas turbine technology continues to play a crucial and evolving role. From enabling reliable grid stability in renewable-heavy power systems to advancing high-efficiency propulsion solutions in aviation and distributed energy systems, gas turbines remain at the forefront of engineering innovation. Emerging developments in hydrogen combustion, sustainable aviation fuels, hybrid energy systems, and digital twins are redefining the capabilities and applications of turbomachinery, opening new pathways toward a cleaner and more resilient future.

India is uniquely positioned to be a key contributor in this transformation. With its rapidly growing energy demand, strong manufacturing ecosystem, and expanding research capabilities, the country is poised to become a global hub for gas turbine innovation and deployment. Indian industries and startups are increasingly investing in advanced turbomachinery design, indigenous manufacturing, and digital engineering tools. At the same time, academic institutions and research organizations are producing high-quality work in areas such as aerodynamics, combustion, materials, and thermal systems. Government initiatives focused on self-reliance, clean energy transition, and infrastructure development further reinforce India's commitment to advancing next-generation energy technologies.

The ASME Gas Turbine India Group remains dedicated to fostering this growth by creating opportunities for collaboration, knowledge sharing, and professional development. Through conferences such as ASME IMECE India 2026, we aim to bridge the gap between research and real-world applications, encourage young engineers and researchers, and strengthen the ecosystem required to drive innovation in turbomachinery and energy systems.

As we gather here, I encourage each one of you to actively engage in discussions, challenge conventional thinking, and explore interdisciplinary solutions. The ideas exchanged and partnerships formed during this conference have the potential to influence not only technological progress but also the broader direction of sustainable energy development. Together, we can contribute to shaping a future where gas turbine technology continues to evolve as a cornerstone of efficient, reliable, and cleaner energy systems.

I wish you all an enriching, insightful, and inspiring experience at **ASME IMECE India 2026**.



Mr. Abdul Nassar
DESiM Innovations

TRACK CHAIRS

Welcome to the second edition of the ASME's International Mechanical Engineering Congress and Exposition (IMECE) India 2026. Overall, this conference covers topics of Mechanical design, manufacturing, materials, Artificial Intelligence and Machine Learning, robotics, cyber physical systems etc covering a range of product lines and machinery. One of the unique tracks is the 'Gas Turbine India 2026 Conference'. It is a privilege for us to serve as the Track Chairs for the Gas Turbine India track. This session represents more than just a collection of technical presentations; it is a vital forum for the brightest minds from the industry, academia and practitioners to converge, share insights, and debate the future of power generation, propulsion and Oil & Gas Exploration.

The gas turbine and propulsion industry stands at a pivotal junction. As we navigate the global imperative for energy transition and decarbonization, the demand for higher efficiency, greater operational flexibility, safe and efficient mobility, and sustainable fuel integration has never been more pressing.

This year's technical program reflects the remarkable evolution of our discipline. Our sessions span the full spectrum of the industry, covering state-of-the-art developments in land-based gas turbines, advanced jet engine architectures, and a wide array of specialized turbomachinery. Furthermore, this year's inclusion of Artificial Intelligence and Machine Learning, Cyber Physical Systems and space propulsion marks a transformative shift in our discipline and focus, in line with the emerging trends. The papers showcased in this year's track are a testament to our collective resilience and innovation. From the latest breakthroughs in high-pressure compressor design and turbine aero-thermal advancements to pioneering research in low-emission combustion systems, our contributors are pushing the boundaries of what is physically possible.

We are particularly proud of the diversity of expertise represented here, bridging the gap between fundamental research and practical, state-of-the-art industrial applications. We encourage all attendees to engage deeply with the authors, challenge current methodologies, and foster collaborations that will define the next generation of gas turbines, jet engines and turbomachinery technology.

We would like to express our sincere gratitude to the ASME India Organizing committee, session chairs and co-chairs, reviewers, most importantly, the presenters who have dedicated their time to advancing our field. We encourage all attendees to leverage this platform to foster cross-industry collaboration, challenge existing paradigms, and explore how these advancements can be scaled to meet our global energy and mobility needs. We trust that the insights exchanged here will serve as a catalyst for innovation long after the conference concludes.



Mr. Murugesan Seerangan
GE Vernova



Mr. Nagabhushana Rao
IIT Madras



GROUP CHAIR & TRACK CHAIR

It gives me immense pleasure to welcome you to the **Second Edition of IMECE India – "Where Engineering Disciplines Intersect & Innovation Begins."** Following the remarkable success of its inaugural edition, IMECE India has established itself as a premier platform that brings together leaders from industry, academia, research institutions, and government to exchange ideas, foster innovation, and collectively shape the future of engineering.

The coming decades present an unprecedented opportunity for **India to emerge as a global leader** in sustainable industrial growth, clean energy, and technological innovation. As the nation builds a resilient, energy-secure, and low-carbon future, engineering excellence will be the driving force that transforms ambitious goals into lasting progress. IMECE India, through its multidisciplinary approach encompassing **twelve specialized technical tracks**, continues to provide an exceptional forum for collaboration, knowledge sharing, and technological advancement across diverse engineering domains.

The **Advanced Clean Energy Systems** track is dedicated to exploring transformative technologies that will define the future of energy. Covering key areas such as **Green Hydrogen Technologies, Clean Energy Systems, and Nuclear Energy**, this track focuses on innovations that enhance energy security, improve efficiency, reduce carbon emissions, and accelerate the transition towards a sustainable and resilient energy ecosystem. I am delighted to share that this edition has attracted a diverse collection of high-quality technical papers and presentations, reflecting the growing momentum and research excellence in these critical fields.

The transition to clean energy is not merely an environmental imperative—it is a strategic necessity for achieving long-term economic growth, industrial competitiveness, and national energy independence. The discussions and technical deliberations during this conference will inspire innovative solutions, encourage interdisciplinary collaboration, and help bridge the gap between research, technology development, and industrial implementation.

I encourage every participant to make the most of this opportunity by actively engaging in technical sessions, exchanging ideas with experts, and building meaningful collaborations. The knowledge, partnerships, and innovations emerging from this conference have the potential to create lasting impact, not only for India but also for the global engineering community.

I extend my sincere appreciation to the organizing committee, authors, reviewers, session chairs, industry partners, and all participants for their invaluable contributions in making this conference a success.

I wish you an engaging, insightful, and rewarding conference experience.

Together, let us engineer a cleaner, greener, and more sustainable future.



Mr. Akhil Mehrotra
Pipeline Infrastructure Limited



TRACK CHAIRS

It gives me immense pleasure to extend a warm welcome to all delegates, authors, researchers, and industry professionals participating in IMECE India 2026, and in particular to those contributing to the Track on Offshore and Onshore Pipelines.

Pipelines remain the arteries of the global energy economy — the safest, most economical, and most environmentally responsible mode of transporting hydrocarbons over land and sea. In India, as the natural gas grid expands, product pipeline networks grow denser, and the nation advances towards its net-zero commitment, the pipeline community stands at a defining crossroads. The challenges before us are both exciting and demanding: repurposing existing natural gas infrastructure for hydrogen service, engineering dedicated CO₂ pipelines for carbon capture and storage, injecting compressed biogas and blending biofuels into our networks, and harnessing digital technologies — from advanced in-line inspection and predictive analytics to AI-enabled integrity management — to ensure that every kilometre of pipe operates safely throughout its life.

The technical papers assembled in this track reflect this breadth, spanning design, materials, construction, integrity management, fitness-for-service assessment, and the emerging frontiers of energy transition. I am confident that the deliberations at this conference will generate ideas of lasting value for practitioners, regulators, and academia alike, and will strengthen India's journey towards Atmanirbhar Bharat in pipeline technology.

I express my sincere gratitude to ASME and ASME India Pvt. Ltd. for their meticulous organisation, to the reviewers for their rigorous evaluation of submissions, and above all to the authors whose scholarship forms the heart of this conference.

I wish IMECE India 2026 resounding success, and all participants an intellectually enriching experience.



Dr. Saumitra Shankar Gupta
Centre for High Technology



Mr. Raj Kishore
EIL

GROUP CHAIR

It is my pleasure to welcome you to IMECE India 2026, where the engineering community comes together under the inspiring theme, "Engineering a Sustainable Future: Energy • Mobility • Manufacturing • Digitalization." This congress serves as a catalyst for innovation, collaboration, and the exchange of knowledge that will shape the future of engineering and society.

As Chair of the Pressure Vessels & Piping (PVP) India 2026 Group, I am proud to lead a community that is central to enabling safe, reliable, and sustainable industrial systems. The PVP discipline plays a critical role in supporting the energy transition, advancing modern manufacturing, strengthening infrastructure resilience, and embracing digital technologies that enhance safety, efficiency, and asset performance.

PVP India 2026 brings together researchers, industry professionals, technology developers, and thought leaders to explore emerging challenges and opportunities in pressure technology under the sub tracks Codes and Standards, Materials and Fabrication, Piping Engineering, Bolted Joints, Operations, Applications and Components, Welding Technology, Design and Analysis and Nondestructive Examination.

I encourage all participants to actively engage in the sessions, share ideas, challenge conventions, and build meaningful professional connections. The breakthroughs of tomorrow will emerge from the collaborations we forge today.

I look forward to welcoming you to PVP India 2026 and to the impactful discussions that will help shape the future of engineering.



Dr. Dipak Chandiramani
Independent Consultant

TRACK CHAIR

Dear Delegates, Guests, Authors, and Colleagues:

It is my pleasure to welcome you to the second edition of the Pressure Vessels and Piping (PVP) Conference at ASME IMECE India 2026 in Chennai. This year's theme, "Engineering for a Sustainable Future," reflects our shared commitment to harnessing emerging technologies to address industry, environmental, and societal challenges.

The PVP Division, established in 1966, celebrates 60 years of advancing pressure-boundary containment technology. In India, our growing community of engineers, technologists, and scientists is working to strengthen the sector, engage with regulatory authorities, and inspire future professionals. With India's rising energy demand and economic growth, the opportunities—and responsibilities—for PVP professionals have never been greater.

Over the next three days, the conference will feature nearly 70 peer-reviewed papers, technical presentations across eight sub-tracks, keynote addresses from distinguished industry leaders, and an exhibition showcasing innovations. This platform is designed to foster collaboration, share knowledge, and spark new ideas.

Such an event is possible only through the dedication of many volunteers, reviewers, speakers, sponsors, and the ASME India team. I extend my heartfelt thanks to all who contributed to making this conference a reality.

I encourage you to engage actively, connect with peers, and take inspiration from the discussions. May this gathering lead to lasting partnerships and meaningful innovations for the future.

Thank you for being part of PVP India 2026. I wish you an engaging and memorable experience.



Mr. Parthapratim Brahma

TWI India Ltd.

GROUP CHAIR

It is my distinct privilege and pleasure to welcome you all to the second edition of the International Mechanical Engineering Congress & Exposition (IMECE) India 2026, hosted by American Society of Mechanical Engineers (ASME) in Chennai, India.

This distinguished conference offers a rare and powerful forum where thought leaders from academia, industry and research organizations come together to exchange ideas, foster collaborations, and build lasting connections. As the Group Chair for Structures, Structural Dynamics, and Materials (SSDM) in India, I truly grateful to be part of this landmark conference that serves nourishing innovation across not only mechanical but also all the engineering domains.

At SSDM track we envisage showcasing structures, structural dynamics, and materials technical advancements in this growing sector. The program is designed to not only showcase the latest research but also encourage meaningful dialogue in a dynamic setting. We have lined up talks, presentations, poster sessions on each of these three sub tracks – Structures, Structural Dynamics, and Materials.

The whole program promises an exciting interaction, learning, collaboration etc. On behalf of the Congress Committee, I extend my heartfelt gratitude to our presenters, volunteers, group chairs, track chairs, organizers, sponsors, and ASME staff for their dedication and tireless efforts in bringing this event to fruition.

We look forward to a truly inspiring and productive IMECE India 2026, and especially the trailblazing innovations within SSDM Track.



Dr. Kishora Shetty

L&T Precision Engineering and Systems

TRACK CHAIR

It is a great honour for me to serve as the **Track Chair for the Structures, Structural Dynamics and Materials (SSDM) Track at ASME IMECE India.**

To me, ASME IMECE India is one of the country's most impactful engineering conferences—not only for its scale, but more importantly for the sheer quality of its technical engagement. It brings together industry leaders, experts and specialists, academia, startup leaders, researchers, and students on a common platform to exchange ideas, build collaborations, and explore the latest tech advancements in engineering.

What makes this conference truly unique is its cross-industry perspective, enabling participants to discover state-of-the-art technologies and emerging trends from other industries, often inspiring the next wave of innovation.

I warmly invite the engineering community to join us at the **SSDM Track** to present, learn, network, and contribute to meaningful technical discussions. I look forward to welcoming you to ASME IMECE India for an enriching exchange of ideas that will help shape the future of engineering.



Mr. Jaya Raju Namala

Airbus



GROUP CHAIR

It gives me great pleasure to share this message as the Cyber Physical Systems (CPS) Group Chair for ASME in India. We are at a very interesting point in engineering. Products today are not just mechanical, electrical or software systems by themselves. Increasingly, they are becoming a thoughtful combination of all these areas, working together with intelligence. That, to me, is the real promise of Cyber Physical Systems.

Cyber Physical Systems connect the physical world with computation, sensing, control, connectivity and data. Industrial AI adds another important layer to this. It helps these systems learn from real-time data, detect patterns, predict failures, improve quality and support better decisions on the shop floor, in products and across supply chains. In simple terms, CPS gives machines and processes the ability to sense and act, while Industrial AI helps them become more intelligent and adaptive. This is no longer a faraway idea. It is already becoming an important foundation for safer, cleaner and more efficient engineering solutions.

What is also encouraging is the kind of innovation we are now seeing from India's startup ecosystem. Many deep-tech startups are showing that India can do more than adopt technologies from elsewhere. We can also create advanced engineering solutions here. One example is the work on software-defined, magnet-free motors by Indian startup Vimag Labs. By combining power electronics with smart control algorithms, such technologies point to a future where electric mobility and industrial motion systems can become more efficient, scalable and less dependent on rare-earth materials.

Another inspiring example comes from India's private space sector. Skyroot Aerospace's Vikram-S mission marked India's first private rocket launch, and it showed what can happen when strong engineering capability meets startup energy. Space systems are among the best examples of Cyber Physical Systems in action, where structures, propulsion, avionics, software, simulation, telemetry and control must all work together with very high reliability.

For engineers, industry leaders, researchers and students, there is a simple message here. The future will belong to people who can think across domains. Mechanical engineers will need to be comfortable with software, data and AI. Software engineers will need to understand physical behaviour, safety and reliability. AI specialists will need to appreciate engineering constraints, domain knowledge and real-world operating conditions. And system designers will need to build solutions that are not only intelligent, but also resilient, sustainable and useful to society.

As ASME in India continues to bring together professionals, academia, industry and young innovators, the Cyber Physical Systems Workgroup has an important role to play. We can create more conversations, share knowledge, encourage standards and support collaboration across sectors. If we do this with consistency and purpose, India can contribute meaningfully to the next generation of intelligent products and processes for the world.

I congratulate everyone associated with this Souvenir Book and thank the ASME community for its continued commitment to engineering excellence. Let this platform remind us that innovation is not only about new technology, but also about courage, curiosity and the willingness to solve real world problems. Together, let us inspire young engineers, support bold ideas and help build a future where Cyber Physical Systems make technology more purposeful, reliable and impactful for India and for the world.



Mr. Rajkumar Sadanandam
Tata Consultancy Services

TRACK CHAIRS

Mechanical engineering has always been the discipline of the physical. What has changed, and changed rapidly, is that almost every asset we design now carries a computational shadow: sensors, models, networks, and increasingly, algorithms that learn from what they observe and act on it. The Cyber Physical Systems + AI/ML track exists for the engineering that happens at that boundary — where computation, communication and control are designed together with the machine rather than bolted on afterwards.

That boundary is where the difficult problems now sit. A model that is accurate on a benchmark must stay trustworthy on a plant floor. A network that connects a compressor to a cloud service also connects it to a threat surface. An algorithm that recommends a maintenance action must earn the confidence of the engineer who signs the work order. These are mechanical engineering problems in a new form, and they demand the same rigour we have always applied to stress, flow and fatigue.

The papers selected for this track reflect a field that has moved well past demonstration. Digital twins appear throughout the programme as working instruments rather than showpieces. A second strong current is physics-informed machine learning, from turbulence closures embedded stably within RANS solvers to physics-preserved dataset scaling for high-speed compressible flows: a welcome sign that the community is insisting its models respect the governing equations.

Diagnostics and prognostics remain the workhorse application, spanning milling tools, centrifugal pumps, precision grinding, excavators, aircraft landing gear and full flight data recorder streams. Alongside these sit the newer arrivals — generative and agentic AI applied to conceptual design synthesis, product cost optimisation, PFMEA and non-conformity management — together with an encouraging emphasis on evaluating such systems rather than merely deploying them. Security and interoperability are treated with the seriousness they deserve, through quantitative risk assessment for wireless condition monitoring, IT–OT interface design for battery energy storage, and cybersecurity in the downstream oil and gas sector. All this happening while the Human is in full view.

The range of application domains is itself telling: aerospace, oil and gas, mining, manufacturing, agriculture, energy storage and healthcare all feature. So does the healthy mix of industry and academic authorship — a reminder that this field advances fastest where the two meet. We invite you to attend the sessions, question the assumptions, and carry the conversations into the corridors — that, in our experience, is where the most useful engineering begins.



Dr. V Venkateswara Rao
Tata Consultancy Services



Mr. Unnat Mankad
Baker Hughes

TRACK CHAIRS

It is my pleasure to welcome you to the Advances in Thermal Technology Track of the ASME IMECE India 2026. Thermal sciences are at the forefront of enabling next-generation technologies, addressing challenges spanning AI-driven data centers, advanced semiconductor and electronics cooling, battery thermal management for electric mobility, clean and renewable energy systems as well as fundamental domains of multiphase heat transfer, energy storage, IC Engines and HVAC systems. This track provides a platform for students, researchers, academic and industry leaders, and practitioners to present cutting-edge developments, exchange ideas, and discuss emerging solutions that bridge fundamental research with technology adoption. The strong participation from industry underscores the growing importance of collaborative innovation in accelerating the translation of thermal science into impactful engineering solutions. I encourage all participants to engage actively in the technical sessions, foster interdisciplinary collaborations, and explore opportunities that will shape the future of thermal engineering. My sincere appreciation goes to the authors, reviewers, session organizers, industry partners, and delegates for their invaluable contributions to the success of this track.

Innovating for a Sustainable and Efficient Future with advances in Thermal Sciences.

Welcome to the Advances in Thermal Technology track at IMECE India 2026. As we convene to share our latest research and insights, the role of thermal engineering has never been more critical to solving global challenges.

This year's track highlights the incredible momentum in our field, focusing on the intersection of foundational thermodynamics, heat transfer, and cutting-edge applications. From thermal management in high-density electronics and EV batteries to breakthroughs in renewable energy systems, decarbonization, and advanced manufacturing, the research presented here represents the forefront of engineering innovation.

We have curated a diverse and rigorous program that reflects the multi-disciplinary nature of modern thermal sciences. Attendees can look forward to:

- **Pioneering Research:** Presentations on novel thermal materials, multiphase flows, and nanoscale heat transfer.
- **Sustainable Solutions:** A strong emphasis on energy efficiency, waste heat recovery, and green technologies driving the transition to a net-zero future.
- **Collaborative Discussions:** Opportunities to bridge the gap between academic research and industrial application.

I want to extend my deepest gratitude to the authors for submitting their outstanding work, the reviewers for their meticulous feedback, and my fellow Track Chairs for their collaboration in shaping this program.

We hope this track sparks new ideas, fosters meaningful collaborations, and inspires the next generation of thermal engineers. Enjoy the sessions and the vibrant technical exchanges!



Mr. Abhishek Vyas

Airbus / India



Mr. Anandaroop Bhattacharya

IIT Kharagpur



Mr. Narendran Balan

Boeing



Dr. Sanjay Vijayaraghavan

GE Aerospace

TRACK CHAIRS

Our association with IMECE has been a truly enriching experience. Beyond the technical sessions and scholarly discussions, I have learned the importance of interdisciplinary collaboration, professional integrity, teamwork, and the spirit of service. The conference has demonstrated that engineering is not merely about developing technologies, but about creating sustainable solutions that positively impact industries and communities. Every interaction, discussion, and collaborative effort has strengthened my belief in continuous learning and collective progress.

We are deeply grateful for the opportunity to contribute to the success of IMECE. The experience has reinforced my commitment to advancing manufacturing research, nurturing young talent, and promoting meaningful partnerships between academia and industry. The values of dedication, inclusiveness, and excellence that IMECE embodies will continue to guide my professional journey.

As we look ahead, we remain committed to serving the organization in every possible capacity. I will continue to contribute my time, knowledge, and efforts toward strengthening the IMECE community and supporting initiatives that benefit the broader manufacturing fraternity. Together, let us continue to innovate, collaborate, and shape a future where engineering excellence drives sustainable industrial growth and societal well-being.

The field of advanced manufacturing continues to evolve at a remarkable pace, driven by innovations in additive manufacturing, smart and connected factories, precision machining, sustainable production systems, and the integration of artificial intelligence and digital twins into manufacturing processes. This track brings together researchers, engineers, and industry leaders from around the world to share cutting-edge research, exchange ideas, and explore the technologies that are shaping the future of manufacturing.

This year's track features a diverse program of technical sessions, panel discussions, and networking opportunities covering topics such as:

- Additive and hybrid manufacturing processes
- Manufacturing automation, robotics, and Industry 4.0/5.0
- Sustainable and energy-efficient manufacturing
- Micro- and nano-manufacturing
- Materials processing and characterization
- Digital manufacturing, AI, and machine learning applications
- Quality control, metrology, and process monitoring

I want to extend my sincere gratitude to the session organizers, reviewers, and authors whose dedication and expertise have made this track possible. Your contributions are what make IMECE a premier forum for advancing the state of the art in mechanical engineering and manufacturing. I encourage all attendees to actively participate in discussions, ask questions, and build connections with fellow researchers and practitioners. The exchange of ideas that happens here often sparks the collaborations and innovations of tomorrow. I look forward to an engaging and productive conference.



Mr. J Ramkumar
IIT Kanpur



Mr. Palani Iyamperumal Anand
IIT Indore

TRACK CHAIRS

It is a privilege to be associated with the Robotics & Automation Track of IMECE India 2026, which brings together researchers, academicians, students, and practitioners to exchange ideas shaping the future of robotics. The technical deliberations this year reflect an exciting transition from conventional robot design and control towards intelligent, autonomous, adaptive and human centric robotic systems.

The contributions spanning UAVs, autonomous navigation, AI/ML and deep learning, digital twins, human robot collaboration, medical robotics, soft and bio inspired robotics, humanoids and legged systems demonstrate both the breadth and rapidly evolving nature of the field.

Looking forward, we believe the next frontier lies in embodied/physical AI, learning control integration, trustworthy autonomy, bio inspired intelligence and robots capable of safely perceiving, reasoning, learning, and acting in uncertain and unstructured environments. Conferences such as IMECE have an important role not merely in presenting completed research, but in stimulating fundamental questions and identifying research directions for the years ahead.

We sincerely hope that the interactions and ideas initiated at IMECE India 2026 lead to meaningful collaborations and inspire us to explore research beyond established pathways.



Mr. Ramalingam Venkatesan
Caterpillar India



Dr. Shital Chiddarwar
VNIT Nagpur

TRACK CHAIRS

The **Vibrations, Dynamics & Control (VDC)** track reflects a vision of bridging traditional mechanical engineering and next-generation digital and autonomous systems. The track provides a global stage to turn complex mathematical physics into industrial solutions that maximize safety, comfort, and efficiency. The three major pivots for this track are as follows:

- 1. Intelligent Automation:** Transitioning from passive vibration control to active, real-time control, researchers are aggressively deploying machine learning and sensor analytics to predict system behaviour, moving towards truly autonomous machinery.
- 2. Engineering Asset Management:** Structural Health Monitoring (SHM) is now moving towards using advanced vibration and acoustic data with a vision to enable machinery, like wind turbines or high-speed rail, to diagnose their own structural fatigue before a failure occurs.
- 3. Architected Materials:** Moving beyond standard materials, VDC extensively explores wave propagation in metamaterials and architected structures, enabling engineers to design products that naturally direct or cancel out destructive vibrations.

This track integrates well with other core tracks, such as Cyber-Physical Systems and AI/ML, Structures and Advanced Materials, and Gas Turbine Technology. We hope to provide a high-impact platform for young researchers and students to gain exposure to real-world industrial hardware challenges by connecting academic research hubs with industry giants through paper presentations and interactions.



Mr. P. Chandramouli
IIT Madras



Mr. Arul Kirubakaran
Baker Hughes

TRACK CHAIRS

It gives us great pleasure to welcome you to the **Advanced Materials Track at ASME-IMECE India 2026**.

This track brings together researchers, engineers, academics, industry professionals, and technology leaders to explore how advances in materials science are enabling the next generation of engineering systems. The programme has been designed to showcase the breadth and depth of contemporary research—from fundamental understanding and advanced characterization to computational modelling, artificial intelligence, manufacturing, performance evaluation, and real-world applications.

Over the course of the track, participants can expect stimulating presentations covering advanced materials characterization and testing; materials modelling and AI/ML; materials degradation under extreme environments; energy materials; polymer, ceramic, bio- and hybrid composites; biomaterials; automotive lightweighting; advanced surface engineering and coatings; aerospace and defence materials; metamaterials; multifunctional materials; sensors and actuators; and semiconductor thin films and devices.

A particular strength of the programme is its interdisciplinary character. Experimental investigations are carried out alongside computational approaches, while fundamental materials research connects with challenges in energy, mobility, healthcare, aerospace, defence, and sustainable manufacturing. We hope these diverse perspectives will encourage meaningful technical discussions, new collaborations, and opportunities for translating research into engineering solutions.

We invite you to actively engage with the speakers, exchange ideas, challenge established thinking, and use the track as a platform for building lasting professional and research connections.

We look forward to welcoming you and to three days of inspiring discussions, innovative ideas, and exciting advances in materials engineering.

Prof S Sankaran and Prof Nagamani Jaya Balila
Track Chairs, Advanced Materials Track

ASME-IMECE India 2026



Ms. Nagamani Jaya Balila
IIT Bombay



Mr. Sankaran S
IIT Madras



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GUEST OF HONOUR & KEYNOTE

3 September 2026 | 9:00 AM



Mr. Vivek Lall

CEO - General Atomics Global Corporation

Dr. Vivek Lall is an internationally recognized aerospace and security executive whose work spans unmanned aircraft, advanced sensing, fusion energy, high temperature materials, directed energy, and electromagnetic systems. He is CEO of General Atomics Global Corporation, supporting United States and allied partners on five continents. He has held senior leadership roles at Boeing and Lockheed Martin and has advised the United States government on global aviation policy and strategic technology.

Dr. Lall is frequently called on by allied governments, industry, and financial institutions for guidance on defense, energy, and national security. He serves on multiple international advisory boards, and is a Distinguished Visiting Fellow at Stanford University's Hoover Institution as well as a Visiting Fellow at the University of Cambridge. He holds an MS in Aerospace Engineering from Embry Riddle, an MBA, and a PhD in Aerospace Engineering from Wichita State University.

ASME IMECE India 2026 matters because engineering is where big ideas are transformed into real world capability. This conference creates the kind of forum where serious people come together to discuss how innovation, industry, and national priorities move forward and converge in practical ways. That is a critical conversation, and India is a key place to have it.

GUEST OF HONOUR & KEYNOTE

4 September 2026 | 9:00 AM



Mr. Ajit Prabhu

Co-Founder & CEO - Quest Global

Ajit Prabhu is the co-founder and CEO of Quest Global, one of the world's fastest-growing engineering services firms whose purpose is to be the most trusted partner for the world's hardest engineering problems. It is a company recognized for building long-term sustainable partnerships and providing innovative end-to-end solutions for customers in the aerospace and defense, automotive, energy, hi-tech, medical devices, rail and semiconductor industries.

Ajit is a mission-centric entrepreneur dedicated to the premise that culture is as impactful as business strategy, a belief that has driven him to build an organization that will be a force for positive change as a centenary company. He is also a visionary leader firmly rooted in the principles of aspiration, humility, and hunger on which he founded Quest Global, principles that are at the heart of its success and growth from a two-person operation in 1997 to a global market leader employing over 23,000 extraordinary engineers in 20 countries across Asia, Europe, and the Americas.

As a lifelong learner, he believes education has the infinite capacity to shape future for the better, so he contributes generously to his alma mater, which has earned him a place of distinction as a member of the Livingston W. Houston Society of Patrons; provides ongoing financial support to adopted government schools in Bangalore and Hubli, India; and has given his personal pledge for the college tuition expenses of 1,000 underprivileged students by 2035.

Over the years, Ajit has been honoured and humbled by the recognition he has received from an assortment of meritorious industry bodies and universities for his achievements. Ajit holds a BS in Mechanical Engineering; an MS in Mechanical Engineering; and an MS in Biomedical Engineering. When he is not engaged in business enterprises or community service activities, Ajit enjoys the serenity of under-water life as an advanced scuba diver and life on land at his home in Singapore.

SPOTLIGHT SPEAKERS



Mr. C Joseph Vijay

Chief Minister, Tamil Nadu



Mr. Thiru P Mothan Raja

Government/public office



Mr. Hansraj Verma

IAS Director.



Mr. Pradeep Yadav

Deptt of MSME, Govt of TN



Dr. Atul Anand

ACS, IT Dept, Govt of TN



Dr. R Kumar

Minister of AI, Govt of TN



Mr. Bharat Khara

MSME Secretary,
Govt of India



**Mr. Duddilla
Sridhar Babu**

Cabinet Minister, Govt
of Telangana



**Mr. Thiru Rajendra
Vishwanath Arlekar**

Governor of Tamil Nadu



Mr. Thomas Costabile

Executive Director & CEO, ASME



Ms. Janis Terpenney

President, ASME



Mr. Anand Sethupathy

CSO, ASME



Mr. Ashish Khara

President & CEO,
Allied Engineer



Mr. Biju Gopinath

ED, BPCL



Mr. Ramesh Ram

ED, HPCL



Mr. Akhil Mehrotra

Managing Director, PII

SPOTLIGHT SPEAKERS



Mr. Ajit Prabhu
CEO, Quest Global



**Mr. Seenivasan
Balasubramanian**
CEO, IAMPL, Rolls-Royce



Mr. Alok Mishra
MD, Westinghouse



**Mr. Seenivasan
Balasubramanian**
CEO, Rolls-Royce



Mr. Krish P Singh
CEO, Holtec International



Mr. Venkatesh S
Chief Executive, Valves, L&T



**Mr. Arun K
Subramaniyan**
Articul8



Mr. Cameron Martin
westinghouse



Mr. T S Kathayat
COO, WELSPUN



Mr. Rajiv Agarwal
Director, Engineers India Ltd



Mr. Jeyamani Doss
CTO, GE Vernova India



Mr. Adwait D Paranjpe
Head -Operations,
Ratnamani Metals & Tubes



Mr. Narendra Rao
Director, Nuclear Business,
TEMA



Mr. Anjan Ghosal
Business Head, TEAL



Dr. Balaji Ramakrishnan
Director, NIOT



Mr. Uma Magesh
Director,
LSI Mech Engineers

SPOTLIGHT SPEAKERS



Ms. Lakshmi Manikandan

Q&A Director,
Aruna Alloy Steels Pvt Ltd



Mr. Vinoth Kumar

Head of Quality,
Ruhrpumpen



Dr. Rajesh Katyal

Director, National Institute
of Wind Energy



**Mr. Balaji
Ramakrishnan**
NIOT



Mr. Amar Variawa

Vestas Wind Technology
India Pvt Ltd



Mr. H. V. Ramesh

Indian Registry of Shipping



Mr. Raj Kishore

GM, EIL



Mr. V K Panwar

CGM, EIL



Mr. Santosh Kumar

GM, IOCL



Mr. S Jayachandran

Senior VP, RIL



Mr. Joy Manjaly

VP, Reliance Industries Ltd



Mr. Tushar Mukherjee

VP, Reliance Industries Ltd



Mr. Vikram Sehgal

Larsen & Toubro



Dr. Kishora Shetty

Joint GM, L&T



Mr. Anil Srivastava

CEO & Founder,
Vegazya Group



Mr. Hardik Someshwar

CEO, Aeroduf Nexus

SPOTLIGHT SPEAKERS



Dr. S S Gupta
Advisor, CHT



Mr. Babu Santhana Gopalakrishnan
Associate Fellow, Baker Hughes



Mr. Aditya Konduri
IISc



Mr. Nagabhushana Rao Vadlamani
Aerospace Engineering



Dr. Shailaja Donempudi
Distinguished Scientist,
Govt of India



Ms. Gayatri Karnik
Nuclear Industry Analyst,
Anthropocene Institute



Dr. Nitendra Singh
IYNS Research Foundation



Dr. Saptarshi Sasmal
Chief Scientist, CSIR



Mr. Ragesh Sathiyar
Suzlon



Mr. Col Suresh Rao (Retd)
Founder, ELSN Systems



Mr. Ashok Verghese
Hindustan University



Mr. Rishi Relan
Head of Engineering,
Siemens Energy



Mr. Mukul Sharma
Honeywell Technologies



Mr. Yathiraj Kasal
Wipro 3D



Mr. N. Vedachalam
NIOT



Mr. S. B. Pranesh
NIOT



Mr. Subramanian Ullal
SASMOS Grp of
Companies

TECHNOLOGY, SERVICES, PRODUCTS

Deep Ocean Resource Exploration

Minerals & gas hydrates

Seafloor coating

In-situ soil testing

Marine living resources

Ocean thermal energy conversion

Ocean surface mapping

Technology Development for Harvesting Deep Ocean Resources

Autonomous underwater vehicles

Remotely operable vehicles

Flexible riser systems

Hyperbaric test facility

Submersibles integration

Integrated underwater mining machine

Development of Niche Technologies

Manned & unmanned underwater vehicles

Transducers / sensors / imaging systems for underwater applications

Acoustic systems for ocean applications

Underwater drifters / profilers

Underwater acoustic test / calibration facility

Manned submersible simulator facility

Infrastructure Development and Industry Sponsored Projects

NIOT campus at Chennai

*ACOSTI campus at Sri Vijaya Puram, Andaman

Seafloor facility at Andhra Pradesh

Ballast water test facility at seafloor

Coastal processes & management

Marine environment monitoring / conservation

Service to Society, Renewables / Sustainable Alternatives

Coastal protection and shoreline conservation

Desalination *LTDD-shore based and offshore floating platforms

Solar based desalination

Open sea cages for marine farming

Sustainable harnessing of marine living resources

Current / tidal / wind energy

Operational Programs

Weather and climate advisory services

Ocean observation network-moored data buoys

Tsunami buoy network

*HF radar/ tide gauge network

NIOT fleet of research vessels

Seabed mapping (*EEZ)

ACOSTI - Atal Center for Ocean Science and Technology for Islands, LTDD - Low Temperature Thermal Desalination, HF - High Frequency, EEZ - Exclusive Economic Zone



National Institute of Ocean Technology

Ministry of Earth Sciences, Govt. of India.

Velachery - Tambaram Main Road.

Pallikaranai, Chennai - 600 100, INDIA.

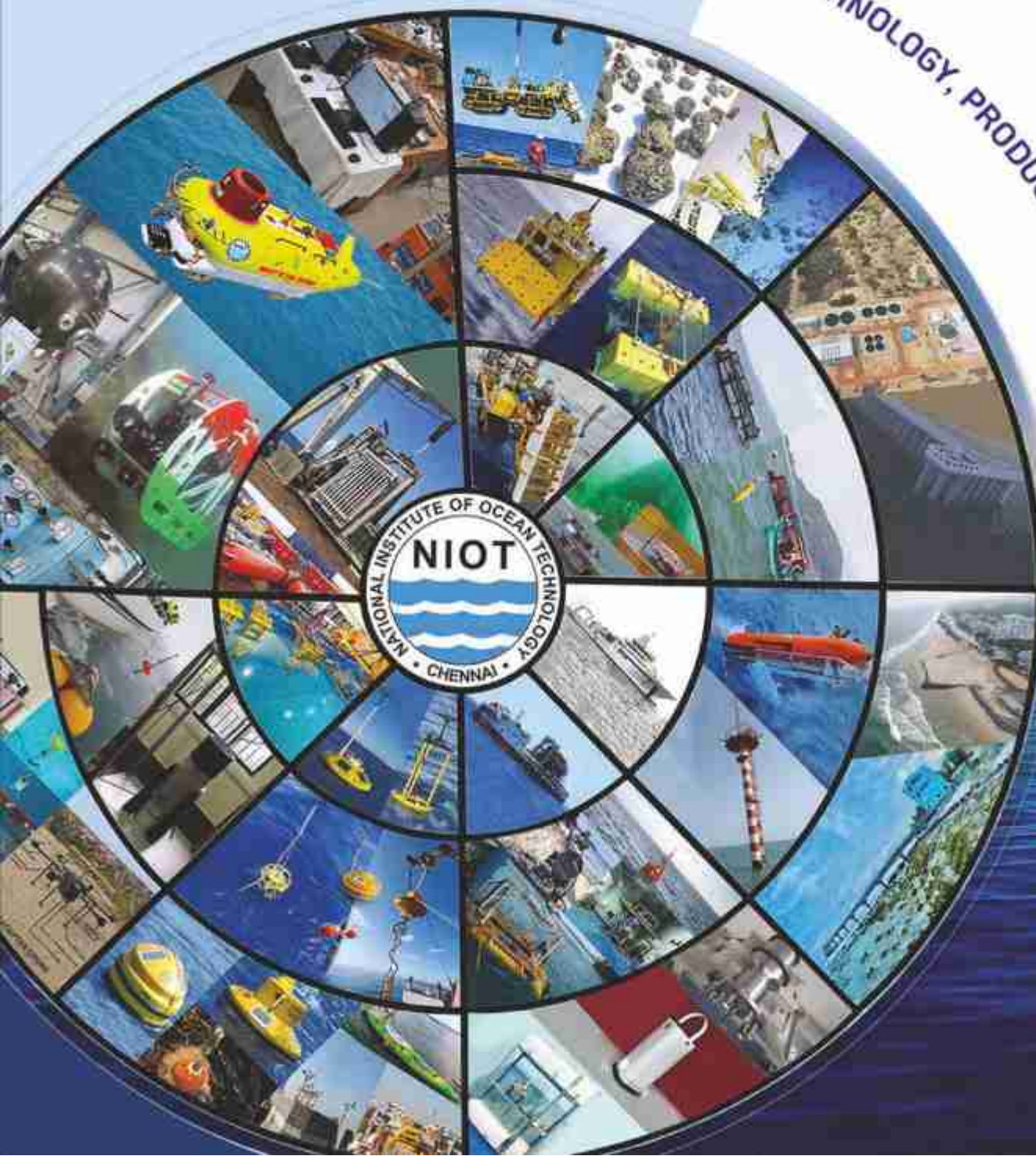
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NATIONAL INSTITUTE OF OCEAN TECHNOLOGY

Ministry of Earth Sciences, Govt. of India.

TECHNOLOGY, PRODUCTS, SERVICES & FUNCTIONS



NATIONAL INSTITUTE OF OCEAN TECHNOLOGY

Ministry of Earth Sciences, Govt. of India.

India's EEZ, covering more than 2 million square kilometers, offers potential for both living and non-living marine resources that can drive economic growth and fulfill society's essential requirements - food, water and energy. The challenges of changing climate, urge for sustainable harnessing of marine resources constantly pushes for innovative solutions in ocean technologies. With a large coastal population vulnerable to hazards, India needs suitable engineering infrastructure, warning systems, and conservation of environment, safeguarding ecosystem. It is pertinent to develop niche technologies that suit unique tropical dynamics and improve existing capabilities to harness these resources and ensure safety, including underwater vehicles and marine instrumentation for offshore operations.

The UN has declared the decade from 2021 to 2030 as the decade of ocean science for sustainable development and hence NIOT has a substantial role to play through the various activities in line with Blue Economy sectors conforming to the Sustainable Development Goals (SDGs). Sustainability is the key which is to be taken care of and the Ministry of Earth Sciences (MoES) through National Institute of Ocean Technology (NIOT), Government of India, is at the forefront of developing niche technologies to harness the living and non-living resources and ensure safety, including underwater vehicles and marine

instrumentation for offshore operations in the last two and half decades and significant milestones have been reached.

The Deep Ocean Mission, launched by the Ministry of Earth Sciences (MoES), aligns with Sustainable Development Goal 14 (SDG 14) - Life Below Water, focusing on ocean conservation and sustainable resource use. It aims to enhance scientific research, build marine technology capacity, and explore ocean resources through innovative designs and operational platforms for deep-sea exploration. A major objective is developing technologies for mining mineral resources from depths up to 6000 metres, led by the NIOT, which advances subsea engineering and environmental research. Ocean-based renewable energy is another priority, including harnessing wave, current, thermal, and wind energy.

India's ocean research follows international benchmarks in data collection, coastal surveys, and marine environment monitoring. With cutting-edge research vessels and ocean observation platforms, efforts are underway to build climate-resilient coastal protection systems and develop advanced technologies like genome mining algorithms. These initiatives pave the way for a sustainable future driven by ocean-based science, technology, and resource management.

SUSTAINABLE ENGINEERING TO CONNECT SPHERES OF EARTH

The unique nature of NIOT activities encompasses design and development of engineering solutions connecting all spheres of the Earth (Hydrosphere, Lithosphere and Atmosphere) and strives towards sustainable utilisation of marine resources (Biosphere), perfectly aligning with nature.

Exploration for Non-living Resources

Mineral and Marine
Renewable Energies

Deep Ocean Research and Observations, Hazard Detection Desalination Energy Coastal Protection

Underwater Acoustics
Communications &
Data Centre



Observations

Drones & Innovations
Arctic & Antarctic
Coastal Radars
Deep Ocean Lidars
Sensor Development

Exploration for Living Resources

Seaweed
Aquaculture
Biofuel
Marine Microbes

NIOT FOOTPRINT



NIOT
Chennai



ACOSTI
Sri Vijayapuram



CHITTEDU
Andhra Pradesh



PAMANJI
Andhra Pradesh

100

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TRACK HIGHLIGHTS

03 SEPTEMBER 2026, THURSDAY

TIME	TRACK	HALL	SESSION	SPEAKER(S)
11:00 AM - 11:20 AM	India Oil & Gas Pipeline Conference 2026	CH1	Inaugural Keynote	TBA
11:20 AM - 11:40 AM	India Oil & Gas Pipeline Conference 2026	CH1	Keynote	Mr Rajiv Agarwal Director-Technical, EIL
11:00 AM - 11:40 AM	Gas Turbine India 2026 Conference	CH2	Keynote	Mr Jeymani Doss CTO, GE Vernova
11:00 AM - 11:40 AM	Pressure Vessels & Piping India 2026	CH3	Keynote	Mr Uma Magesh Director, LSI Mech Engineers Pvt Ltd
11:00 AM - 11:20 AM	Advanced Clean Energy Systems	CH5	Keynote	Akhil Mehrotra MD, PIL
02:00 PM - 04:00 PM	Structures, Structural Dynamics & Materials	CH13	Keynote Towards developing self-sensing structure through engineering materials at nano/micro scales	Dr Saptarshi Sasmal Chief Scientist, CSIR
05:50 PM - 06:30 PM	India Oil & Gas Pipeline Conference 2026	CH1	Panel Discussion Codes & Regulations (Pipeline Regulatory Aspect)	Chair : Dr SS Gupta Advisor, CHT Mr Santosh Kumar GM, IOCL Mr Ashish Khara President & CEO, Allied Engineer Mr Raj Kishore GM, EIL Mr T S Kathayat COO, WELSPUN

TRACK HIGHLIGHTS

04 SEPTEMBER 2026, FRIDAY

TIME	TRACK	HALL	SESSION	SPEAKER(S)
11:00 AM - 11:20 AM	India Oil & Gas Pipeline Conference 2026	CH1	Invited Talk New Generation Pipelines--The Future of Pipeline Transportation	Mr S Jayachandran Sr. Vice President, Reliance Industries Limited
11:00 AM - 11:40 AM	Gas Turbine India 2026 Conference	CH2	Invited Talk	Dr Rishi Relan Head Of Engineering, Siemens Energy
11:00 AM - 11:20 AM	Advanced Clean Energy Systems	CH5	Keynote	TBA
12:20 PM - 01:00 PM	Robotics & Automation	CH10	Keynote	TBA
02:00 PM - 02:40 PM	India Oil & Gas Pipeline Conference 2026	CH1	Panel Discussion Era of New Generation Pipelines & Associated Geohazard Risk	Chair : Mr Manish Botke / IOCL Representative ED, IOCL Mr VK Panwar CGM, EIL Mr Ramesh Ram ED, HPCL Mr Biju Gopinath ED, BPCL
05:50 PM - 06:30 PM	Pressure Vessels & Piping India 2026	CH3	Panel Discussion	TBA

TRACK HIGHLIGHTS

05 SEPTEMBER 2026, SATURDAY

TIME	TRACK	HALL	SESSION	SPEAKER(S)
08:30 AM - 9:10 AM	Gas Turbine India 2026 Conference	CH2	Invited Talk	Mr Babu Santhana Gopalakrishnan Associate Fellow, Baker Hughes
11:00 AM - 11:40 AM	Additive Manufacturing & 3D Printing India 2026	CH4	Invited Talk	TBA
04:30 PM - 06:30 PM	Gas Turbine India 2026 Conference	CH2	Invited Talk Axial Compressor Design: From meanline analysis to engine ready hardware	Dr Chetan Mistry Assistant Professor, IIT Kharagpur
04:30 PM - 06:30 PM	Gas Turbine India 2026 Conference	CH15	Invited Talk Application of AI/ML in Gas Turbine Design & Operations	Prof Aditya Konduri Prof Nagabhushana Rao Vadiamani

BUILDING INDIA'S NUCLEAR SUPPLY CHAIN FOR A 100-GW FUTURE

ASME IMECE INDIA 2026

Energy Plenary: Building India's Nuclear Supply Chain for a 100-GW Future

[3rd September] CTC Chennai | Hall 5

Building policy, standards and an export-ready domestic supply chain for India's nuclear expansion

Time	Session / Focus	Speaker / Organization
11:00 AM – 11:50 AM	Inaugural Session — Introduction & Welcome Address	
	ASME India Address	Mr Madhukar Sharma President, ASME
	Opening Address	Mr H R Verma IAS, Director, DG COSIDC
	Industry Speaker	Mr Cameron Martin Executive, Global Product Management & Growth – Outage Maintenance and Services, Westinghouse Electric Company
	MSME Address	Madan Raja Minister of MSME, Government of Tamil Nadu
		S Keerthana Minister for Industries, Govt of TN
11:50 AM – 12:15 PM	Session 1: Policy and Regulation Policy direction, state-level industrial facilitation, regulatory pathways and enabling frameworks for nuclear build.	Shri Hansraj Verma (Chair) IAS, Director, General COSIDICI & Chairman, ITCOT
		Ms Gayatri Karnik (Moderator) Nuclear Finance Specialist, Anthropocene Institute
	Participating State Infrastructure and Industry Councils*	Tamil Nadu; Andhra Pradesh; Uttar Pradesh; Bihar; Goa; Karnataka; Odisha; Telangana
12:15 PM – 1:15 PM	Session 2: Opportunities and Pathways for MSMEs in a Robust Nuclear Supply Chain Domestic and global projects, procurement practices, nuclear safety culture, quality doctrine and supplier qualification.	Dr Alok Mishra (Session Moderator) Managing Director, Westinghouse India
		Mr Joy Manjaly Vice President, Nuclear Business, Reliance Industries Limited
		Dr Nitendra Singh Founder, SUK-M & ITER
		Mr Vikram Sehgal Head, Design Competency Center, Larsen & Toubro Heavy Engineering
		Mr Rajiv Agarwal Director – Technical, Engineers India Limited
		Mr Soumendra Banerjee Director, New Energy Initiatives, Honeywell Technologies
1:15 PM – 2:00 PM	Networking Lunch	
2:00 PM – 2:45 PM	Session 3: Becoming Nuclear-Ready Supplier stories on readiness, reality checks and staying qualified.	
	Castings	Ms Lakshmi Manikandan QA Director, Aruna Alloy Steels Pvt. Ltd.
	Piping	Mr Adwait D Paranjpe Operations Head, Ratnamani Metals & Tubes Ltd.
	Tubular Exchangers	Mr Narendra Rao Director – Nuclear Business, TEMA India Pvt. Ltd.
2:45 PM – 3:45 PM	Session 4: Nuclear Standards & Certification Standards, certification support, supplier development and an export-ready manufacturing ecosystem.	Tushar Mukherjee (Session Chair) Vice President & Head, Inspection – Projects Procurement, Reliance Industries
		Vikram Sehgal JGM – Design Engineering & Project Management, Larsen & Toubro
		Anand D. Bagdare AVP – QA, Godrej & Boyce
		Mayur Brijlani Founder & Director, ING Technik Pta. Ltd.
3:45 PM – 4:00 PM	Keynote Address Challenges and opportunities in remaking India's nuclear sector for transformative growth and rapid expansion.	Dr Kris P. Singh (online) Chairman & CEO, Holtec International, USA

ENGINEERING THE BLUE ECONOMY: OFFSHORE, SUBSEA AND DEEP OCEAN TECHNOLOGIES FOR A SUSTAINABLE FUTURE.

ASME IMECE INDIA 2026

Offshore, Subsea & Deep Ocean Engineering Symposium (OSDOE)

3rd September 2026 | CTC Chennai | CH15

Theme: Engineering the Blue Economy: Offshore, Subsea and Deep Ocean Technologies for a Sustainable Future

Time	Topic	Speaker/In-charge
11.00 AM - 11.05 AM	Welcome & Introduction	Master of Ceremony (ASME)
11.05 AM - 11.10 AM	Introduction of Distinguished Speakers	Session Chair & Co-Chair (Dr. S. Ramesh/Dr. D. Sathyanarayanan)
11.10 AM - 11.35 AM	Keynote Address on Future Beneath the Oceans:- A Technology Perspective	Prof. Dr. Balaji Ramakrishnan (Director, National Institute of Ocean Technology)
11.35 AM - 11.40 AM	Q & A Session	Session Chair & Co-Chair
11.40 AM - 11.55 AM	Technical Talk 1 on Navigating Floating Offshore Wind Potential in India - Under Seismic Loads and Vibration Induced Shut Down	Prof. Dr. Nilanjan Saha (Indian Institute of Technology Madras)
11.55 AM - 12.00 PM	Q & A Session	Session Chair & Co-Chair
12.00 PM - 12.15 PM	Technical Talk 2 on Additive Manufacturing for Offshore, Subsea & Deep Ocean: From Prototype to Production-Grade Components	Mr. Yathiraj Kasal (General Manager & Business Head - Wipro 3D, Wipro Enterprises Pvt. Ltd.)
12.15 PM - 12.20 PM	Q & A Session	Session Chair & Co-Chair
12.20 PM - 12.35 PM	Technical Talk 3 on Hydraulic Design and Ruhrpumpen Pumping Solutions for a Barge-Mounted Desalination Plant	Mr. Vinothkumar (Head of Quality, Ruhrpumpen India Pvt. Ltd.) & Mr. Rajkumar Ramasamy (Deputy General Manager - Project Head, Ruhrpumpen India Pvt. Ltd.)
12.35 PM - 12.40 PM	Q & A Session	Session Chair & Co-Chair
12.40 PM - 12.55 PM	Technical Talk 4 on Engineering Pathways to the Blue Economy	Dr. Ragesh Sathiyar (Head of Department - Design Towers Internals & Detailed Design Structure, Suzlon Energy Limited, Chennai)
12.55 PM - 12.58 PM	Q & A Session and Closing Remarks	Session Chair/MC
12.58 PM - 01.00 PM	Brief About Afternoon Session	Master of Ceremony (ASME)

Theme: From Ocean Potential to Blue Economy: Opportunities, Challenges and the Way Forward

Time	Topic	Incharge/Panelists
02:00 PM - 02:05 PM	Welcome & Introduction	Master of Ceremonies (ASME)
02:05 PM - 02:15 PM	NIOT Corporate Video/MATSYA 6000 Animation/Wet Test Highlights	Master of Ceremonies (ASME)
02:15 PM - 02:20 PM	Interactive Quiz Based on the Videos	Coordinator (NIOT)
02:20 PM - 02:30 PM	Introduction to the Panel Discussion Theme	Moderator (Dr. N. Vedachalam/Dr. S. B. Pranesh, NIOT)
02:30 PM - 02:40 PM	Introduction of Panel Members	Moderator
02:40 PM - 03:00 PM	Opening Remarks by Panelists (5 minutes each x 4 panelists)	1. Dr. Rajesh Katyal (Director, National Institute of Wind Energy) 2. Amar Variawa (Vice President & Country Head, Vestas Wind Technology India Pvt. Ltd.) 3. Cmde Srinivas Chikkerur (Head PMG Submarine Projects, Larsen & Toubro Limited) 4. H. V. Ramesh (Head - Technical and Chief Surveyor & Senior Vice President, Indian Register of Shipping)
03:00 PM - 03:30 PM	Moderated Panel Discussion	Moderator & All Panelists
03:30 PM - 03:45 PM	Jaya	ASME OSDOE - Offshore Subsea and Deep Ocean Engineering India Group - Pre-launch Kick off
03:45 PM - 03:55 PM	Closing Remarks	Moderator
03:55 PM - 04:00 PM	Vote of Thanks	Master of Ceremonies (ASME)

MANUFACTURING AND MOBILITY: AEROSPACE, DEFENCE AND HI-TECH MANUFACTURING

ASME IMECE INDIA 2026		
Manufacturing and Mobility Plenary: Aerospace, Defence & Hi-Tech Manufacturing Build		
4th September 2026 CTC Chennai Hall 5		
Advancing India's aerospace, defence and high-tech manufacturing ecosystem		
Time	Session / Focus	Speaker / Organization
11:00 AM – 11:45 AM	Session Inauguration & Address	
	ASME India Address	Madhukar Sharma President, ASME India
	Special Address	Dr Dwarkanath Director General, Aerospace India Association
	MSME Address	Pradeep Yadav IT Secretary, Government of Tamil Nadu
	Minister Address	Srinivas Kondapalli Minister, MSME – Government of Andhra Pradesh
11:45 AM – 1:00 PM	OEM Technology Roadmaps & Supplier Opportunities Creating Value Beyond Production. From Build-to-Print to Build-to-Spec: Advancing India's Aerospace & Defence Manufacturing Capabilities	
		Ms Shilpa Gupta COO, GE Aerospace
		Mr Seenivasan B CEO, IAMPL / Rolls-Royce
		Mr Anjan Ghosal Associate Vice President & Business Head – Aerospace & Defence, TEAL
		Arun Subramanian Founder, Articulis
		Hardik Someshwar Founder & CEO, AeroDef Nexus
1:00 PM – 2:00 PM	Networking Lunch	
2:00 PM – 2:30 PM	Policy, Industrial Ecosystem & Enabling Frameworks Strengthening India's Aerospace, Defence & Hi-Tech Industrial Base	
		Mr Laurent Gonnet World Bank
		Wg Cdr Madusudhan TIDCO
		Mr Anburaj Regional Director, SIDBI
2:30 PM – 3:30 PM	Industry From Precision Manufacturing to Systems Leadership: The Evolution of India's Aerospace Value Chain	
		Dr Naresh Palta Principal Adviser – Aerospace & Aviation, JK Maini Global Aerospace Ltd.
		Subramanya Ullal Board Member, Sasmos Group of Companies
		Ashok Verghese Hindustan University
		Colonel Suresh Rao (Retd.) Founder & Director, ELSN Systems
3:30 PM – 3:45 PM	Conference Summarisation & Recommendations for Next Steps	Dr Kishore Shetty Joint General Manager – Aerospace; Head, Aerospace Design and Development Center, L&T Precision Engineering Systems
4:00 PM – 4:30 PM	Networking Break	
4:30 PM onwards	Structured B2B Supplier Connect	OEM Procurement Teams

ENGINEERING THE INTELLIGENT FUTURE - DIGITALIZATION & AI

ASME IMECE INDIA 2026		
Digitalization Plenary: Digitalization & AI for Mechanical Engineering		
5th September 2026 CTC Chennai Hall 5		
Practical digitalization, AI, trusted systems and workforce transformation for engineering		
Time	Session / Focus	Speaker / Organization
10:00 AM – 10:20 AM	Opening Remarks & Strategic Context Why digitalization and AI are transformative for India's engineering and manufacturing future	
	ASME Address:	Hari Balachandran
	Secretary's Address	Atul Anand IT Secretary, Government of Tamil Nadu
10:20 AM – 11:00 AM	SG and Its Impact on Industrial Automation and Robotics Building global competitiveness in advanced manufacturing	KPMG; Jio; Airtel
11:00 AM – 12:15 PM	Executive Panel 1: AI & Digital Twins Transforming Industry Design, simulation, manufacturing, predictive maintenance, robotics and asset performance	Mr Sashikumar Muthuswamy Head of Engineering, Collins Aerospace
		Mr Ayyappan Siemens Digital Industries
		Ms Renuka Srinivasan Education Sales Director, Dassault Systèmes
		Head of Engineering, Autodesk
		Mukul Sharma Honeywell Aerospace
		Mr Anil Srivastava Founder & CEO, Vagazva Group
12:15 PM – 12:50 PM	Executive Panel 2: Trusted AI, Standards & Future Workforce Responsible AI, cybersecurity, engineering standards, governance and AI-ready talent	
		Mr Pradeep Articul8
		IISC Representative
		Kiran Khanna Honeywell Technologies
		Dr Satyanarayanan Vice Chancellor, DSU
12:50 PM – 1:00 PM	Closing Synthesis & Call to Action Key takeaways, collaboration opportunities and priority actions	Anand Nagarajan; Unnat Mankad CPS (Airbus + Baker Hughes)



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TECHNICAL SESSION SCHEDULE

THURSDAY, 3RD SEPTEMBER 2026

AM3D1.1 - Current and Emerging Trends in AM

9/3/2026

11:00 AM to 1:00 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Mariappan R - Honeywell

Presentations:

Cold Spray Additive Manufacturing of Copper-Graphene 2d Metal Matrix Composite Micro-Fins on Aluminium Heat Spreaders, [IMECE-India2026-187549]

Technical Paper Publication

AKHIL TEJA SONABOYINA - Indian Institute of Technology Ropar

Saiful Wali Khan - Indian Institute of Technology Ropar

Varun Kumar - Indian Institute of Technology Ropar

Vinay Gidla - University of Turku

Navaneeth Km - Indian Institute of Technology Ropar

Harpreet Singh - Indian Institute of Technology Ropar

Optimization of Wire Arc Additive Manufacturing (Wam) by Machine Learning Techniques, [IMECE-India2026-187927]

Technical Paper Publication

Pramodkumar Kataraki - REVA University

Mahesh L - REVA University

Ahmad Baharuddin Abdullah - Universiti Sains Malaysia

Farrah Noor Ahmad - Universiti Teknologi MARA

Ahmad Faiz Zubair - Universiti Teknologi MARA

Harsha Kusnoorkar - Oakland University

Aulia Ishak - Universitas Sumatera Utara

Geometry Controlled Process Planning for Single-Layer Inconel 617 Wire Arc Additive Manufacturing Using a Bpnn, [IMECE-India2026-188205]

Technical Paper Publication

V v D Praveen Kalepu - Indian Institute of Information Technology Design and Manufacturing Kurnool

Ravi Kumar Mandava - Indian Institute of Information Technology Design and Manufacturing Kurnool

Assessment of Flux Recyclability in Submerged Arc Additive Manufacturing of E18 Structural Steel, [IMECE-India2026-188433]

Technical Paper Publication

Inamul Haq Dar - IIT Jammu

Danish Ashraf Bhat - IIT JAMMU

Shiva Sekar - IIT JAMMU

Prateek Saxena - IIT Mandi

Angshuman Kapil - IIT Jammu

Wire Arc Additive Manufacturing: Optimization and Implementation Challenges, [IMECE-India2026-190513]

Technical Presentation Only

Vyas Mani Sharma - Indian Institute of Technology (BHU) Varanasi

Metal Additive Manufacturing for Sustainable Recycling of Waste Metallic Powders, [IMECE-India2026-187522]

Technical Presentation Only

Malkeet Singh - Thapar Institute of Engineering and Technology

Saiful Wali Khan - Indian Institute of Technology Ropar

Harpreet Singh - Indian Institute of Technology Ropar

Suresh Palanisamy - Swinburne University of Technology

Ameey Anupam - University West

ATT1.1 - New and Renewables

9/3/2026

11:00 AM to 1:00 PM - CH12

Chair: Sanjay Vijayaraghavan - GE Aerospace

Presentations:

Numerical Investigation of Transient Thermal Behaviour of a Box-Type Solar Cooker Without a Reflector, [IMECE-India2026-187863]

Technical Paper Publication

Satish Kumar Dewangan - National Institute of Technology, Raipur

Neelam Dewangan - National Institute of Technology Raipur

Pooja Sahu - National Institute of Technology Raipur

Devesh Kumar Baghel - TATA Technologies Limited

Thermophilic Anaerobic Digestion of Naoh-Pretreated Rice Straw: Experimental Evaluation and Rsm-ann Based Process Optimization, [IMECE-India2026-187934]

Technical Paper Publication

Sathish Sivasubramanian - Hindustan Institute of Technology & Science

John Presin Kumar A - Hindustan Institute of Technology & Science

Rajeswari P - Jaipur National University

Purushothaman S - Jaipur National University

Karthikayan S - Mohan Babu University

Geetha Selvarani A - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Uma Devi A - St. Joseph's College of Engineering

Parthiban A - Vels Institute of Science, Technology and Advanced Studies (VISTAS)

Karthik Raja G - Hindustan Institute of Technology & Science
Seralathan S - Hindustan Institute of Technology & Science

A Comparative Study of Machine Learning Models for Prediction of Tubular Solar Still Productivity, {IMECE-India2026-187968}

Technical Paper Publication

Satish Kumar Dewangan - National Institute of Technology, Raipur
Neelam Dewangan - National Institute of Technology, Raipur
Nayan Patel - National Institute of Technology, Raipur
Chudamani Sahu - National Institute of Technology, Raipur
Arunesh Raj - National Institute of Technology, Raipur
Vikas Banjare - National Institute of Technology, Raipur

Development of a Small-Scale Biomass Power Unit Using Fluidized Bed Gasification and Dual-Fuel CI Engine Operation, {IMECE-India2026-188118}

Technical Paper Publication

Ramarao M - Bharath Institute of Higher Education and Research
Sathish Sivasubramaniyan - Hindustan Institute of Technology & Science
Raja Yateesh Yadav - Shri Madhwa Vadiraja Institute of Technology and Management
Punitha N - St. Joseph's College of Engineering
Rajeswari P - Jaipur National University
Purushothaman S - Jaipur National University
Challa Parvathi Rudesh - Amity University
Sivasankar Arumugam - Hindustan Institute of Technology & Science
Vellanki Ajay - Hindustan Institute of Technology & Science
Parthiban A - Vels Institute of Science, Technology and Advanced Studies (VISTAS),

Sustainable Co-Gasification of Drek Wood (Melia Azaderach) Blended With Pineapple and Jackfruit Peel Waste: An Fesem-Edx Investigation Into Agglomeration Tendencies, {IMECE-India2026-189175}

Technical Paper Publication

Mohammed Mustapha - Indian Institute of Technology Ropar
Indramani Dhada - Indian Institute of Technology Ropar
Ranjan Das - National Institute of Technology Agartala

ACES1.1 - Green Hydrogen Production, Storage, and Integrated Hydrogen Energy Systems and ACES2.1 - Emerging Technologies – Clean Energy

9/3/2026

11:00 AM to 1:00 PM - CH05

Chair: Ankur Mullick - PIL

Chair: Pradeep Chauhan - Pipeline Infrastructure Ltd.

Presentations:

Two-Dimensional Cfd Modelling of Two-Phase Sodium Chlorate Electrolysis With Electrophoresis and Local Current-Dependent Hydrogen Generation, {IMECE-India2026-189228}

Technical Paper Publication

Sandhya P Gopal - Model Engineering College Thrikkakara, APJ Abdul Kalam Technological University, Thiruvananthapuram, Kerala, India

Rajesh V G - Government Model Engineering College Thrikkakara, Kochi, Kerala, India

Performance Evaluation of Large Format Prismatic Lithium Ion Cell Under Varying Discharge Rates and Cooling, {IMECE-India2026-189593}

Technical Paper Publication

Rahul Balaji Chintamani - Mahindra University, Hyderabad, India
Saneeth Suthari - Mahindra University, Hyderabad, India
Abhishek M - Mahindra University, Hyderabad, India
Manish Kumar Agrawal - Mahindra University, Hyderabad, India
Bhaskar Tamma - Mahindra University, Hyderabad, India
Sreedhar Madichetty - Mahindra University, Hyderabad, India

Exploring Energy Utility of Waste Cooking Oil: Automotive Application Perspective, {IMECE-India2026-189362}

Technical Paper Publication

Ketan Warghat - Indian Institute of Technology Hyderabad
Ahmed Abdul Khan - Lords College of Engineering and Technology, Hyderabad
Pankaj Kolhe - Indian Institute of Technology, Hyderabad

Performance Evaluation of Hydrogen Fuel Cell Systems for Aerospace and Space Applications With Integrated Water Recovery, {IMECE-India2026-190005}

Technical Paper Publication

Arpita Dutta - Amity Institute of Aerospace Engineering
Sambhav Jain - Amity Institute of Aerospace Engineering
Cynthia Rai - Amity Institute of Aerospace Engineering
Uttam Gupta - Amity Institute of Renewable and Alternative Energy
Challa Parvathi Rudesh - Amity Institute of Aerospace Engineering
Sanal Kumar VR - Amity Institute of Aerospace Engineering

Design and Modelling of Primitive Lattice Architectures for Encapsulated Phase Change Storage, {IMECE-India2026-189242}

Technical Paper Publication

Kartik Jain - Indian Institute of Technology, Jodhpur
Sachin Singh - Indian Institute Of Technology, Jhodhpur
Shobhana Singh - Indian Institute of Technology, Jodhpur

CPSAIML 1.1-Digital Twins, Diagnostics, Process Monitoring & Virtual testing

9/3/2026

11:00 AM to 1:00 PM - CH06

Chair: Unnat Mankad - Baker Hughes

Presentations:

Knowledge Guided Building of Computational Digital Twins: An Ontology-Guided Framework for Requirements Completion, {IMECE-India2026-187983}

Technical Paper Publication

Nagesh Kulkarni - TCS Research, Tata Consultancy Services Ltd
Himanshu Nirgudkar - TCS Research
Himanshu Sharma - TCS Research
Pravin Kumar - TCS Research, Tata Consultancy Services Ltd
Arpit Vishwakarma - TCS Research, Tata Consultancy Services Ltd
B P Goutham - TCS Research

Digital Twin-oriented Thermal Stress Evaluation of Coke Drum Skirts: Using Fea-Calibrated Pinn Surrogate, {IMECE-India2026-188083}

Technical Paper Publication

Balaji Srinivasan - ENGINEERS INDIA LIMITED
Srinivasan V - IITD

Virtual Do-160 Power Interrupt and Voltage Spike Testing Using Digital Twin Technology, {IMECE-India2026-188929}

Technical Paper Publication

Shanthakumar M - Collins Aerospace
Pradeep Kumar V - Collins Aerospace

Attention-Guided Deep Learning Framework for Intelligent Fault Diagnosis of Centrifugal Pumps Using Vibration Signals, {IMECE-India2026-187587}

Technical Paper Publication

Ayush Kumar - Indian Institute of Technology Kharagpur
Arun Kumar Samantaray - Indian Institute of Technology Kharagpur
Abhijit Guha - Indian Institute of Technology Kharagpur

AI-Driven Monitoring of Sustainable Milling Conditions for Additively Manufactured Al-Si-10mg Alloys via Signal-to-Image Transformation and Deep Learning, {IMECE-India2026-197341}

Technical Presentation Only

SMIT PANCHOLI - Opole University of Technology

Fault-Aware Adaptive Warehouse Routing Using LSTM-Based Predictive Maintenance and Double Deep Q-Networks, {IMECE-India2026-195918}

Technical Presentation Only

Bhumika Rachepalli - Amrita Vishwa Vidhyapeetham
Dr. Rishi Kumar - Amrita Vishwa Vidhyapeetham Chennai Campus

GT9.1 - AIML in Gas Turbine Design, Operation and Maintenance

9/3/2026

11:00 AM to 1:00 PM - CH02

Chair: Harshal Akolekar -

Chair: Sundar Krishnaswamy -

Presentations:

Similarity-Based Multi-Sensor Degradation Analysis for Aero-Engine Remaining Useful Life Prediction Under Varying Operating Conditions, {IMECE-India2026-187342}

Technical Paper Publication

Sagar Bansal - Defence Institute of Advanced Technology
Bharath Ramkrishna - Defence Institute of Advanced Technology

Adaptive ML Technique to Predict Gas Turbine Performance Solver Guesses, {IMECE-India2026-188515}

Technical Paper Publication

Md Shahzad Hasan - Honeywell Aerospace India Private Limited
Bommaian Balasubramanian - Honeywell Aerospace India Private Limited
Itshak Chattopadhyay - Honeywell Aerospace India Private Limited
Surabhi Sahney - Honeywell Aerospace India Private Limited

A Machine-Learning-Assisted Geometry Optimization Pipeline for Wake Loss Reduction in Low-Pressure Turbine Cascades, {IMECE-India2026-188854}

Technical Paper Publication

Saransh Meena - Indian Institute of Technology Jodhpur
Rushil Patel - Columbia University
Talib Ansari - Indian Institute of Technology Jodhpur
Harshal Akolekar - Indian Institute of Technology Jodhpur

Neural Network-Based Prediction of Leading-Edge Film Cooling Effectiveness for Gas Turbine Nozzle Guide Vanes, {IMECE-India2026-189743}

Technical Paper Publication

Krish Sadana - Indian Institute of Petroleum and Energy (IIPE)
Dsrj Tejesh - Indian Institute of Petroleum and Energy (IIPE)
Arun Kumar Pujari - Indian Institute of Petroleum and Energy (IIPE)
Santosh Kumar Senapati - Indian Institute of Petroleum and Energy (IIPE)

PVP4.1 Materials & Fabrication

9/3/2026

11:00 AM to 1:00 PM - CH03

Chair: Athreya Sadasivam - Independent Consultant

Chair: Parthapratim Brahma -

Chair: Rajesh Madnani -

Presentations:

Evaluation of 2.25 Cr - 1 Mo Welding Consumables at lower PWHt temperature for Pressure Vessels operating at high temperature and pressure, {IMECE-India2026-188236}

Technical Paper Publication

Gitartha Dev Sarmah - L&T Heavy Engineering
Ritesh Patel - L&T Heavy Engineering
Parth Bhandarkar - L&T Heavy Engineering
Tushar Dharaviya - L&T Heavy Engineering

An Assessment of the Failure of Austenitic Stainless Steel Material in Chloride Enriched Environments, {IMECE-India2026-188093}

Technical Paper Publication

Anil Kumar - Praj Industries

Mitigating Fabrication-Induced Degradation in Austenitic Stainless Steels: A Call for Enhanced Astm Specifications, [IMECE-India2026-188431]

Technical Paper Publication

Paresh Haribhakti - TCR Advanced Engineering Pvt Ltd.,

Experimental study on heat treatment optimization of grade T91 Weld Joints, [IMECE-India2026-185058]

Technical Paper Publication

Anand Relekar - TKIL Industries Private Limited

Nishant Kumar - TKIL Industries PVT LTD

SSDM1.1 - Structures

9/3/2026

11:00 AM to 1:00 PM - CH07

Chair: Shahul Nazar - Technical Specialist, Airbus

Chair: Joseph J Kakkassery - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Presentations:

Impact on Structural Strength Due to Presence of Circular Hole in Corner Radius, [IMECE-India2026-187745]

Technical Paper Publication

Dharshan M D - Collins Aerospace Pvt. Ltd.

Deepak Deshpande - Collins Aerospace Pvt. Ltd.

Effects of Gaps and Shim Migration on Fastener Bearing Load Transfer in Shimmed Structural Bolted Joints, [IMECE-India2026-187524]

Technical Paper Publication

Partha Dey - The Boeing Company

Karthikeyan Vairavan - The Boeing Company

Athreya Raveesha - The Boeing Company

Imperfection Sensitive Nonlinear Buckling and Post-Buckling Assessment Using Machine Learning, [IMECE-India2026-188910]

Technical Paper Publication

Saravanan Saravanan - Collins Aerospace

Augmenting the Progressive Failure Response of Composite T-Joints Using Z-Pinning, [IMECE-India2026-184972]

Technical Paper Publication

Naveen Sagar Jarugumalli - Airbus India

Vidhya Sagar Kota - Airbus India

Failure Investigation and Structural Optimization of a Centrifugal Pump Casing Using Finite Element Analysis, [IMECE-India2026-189716]

Technical Paper Publication

Ramana Podugu - Anurag Engineering College, Kodad

Raghu Kumar - K S Institute of Technology, BANGALORE

A Methodology for Lifting and Transportation Driven Structural Modification of Industrial Steam Turbines, [IMECE-India2026-188465]

Technical Paper Publication

Amruta Kulkarni - BAKER HUGHES

Dipendra Mishra - BAKER HUGHES

Andrea Paggini - BAKER HUGHES

Schivai Walter - BAKER HUGHES

RA1.1: Robotics & Automation- UAV/Drone Systems & Control

9/3/2026

11:00 AM to 1:00 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Catterpillar India

Presentations:

A Model Predictive Control Architecture for Optimal Motion Planning of Autonomous Uav, [IMECE-India2026-189763]

Technical Paper Publication

Srivardhan S - Department of Mechanical Engineering Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Rathish Hariharan K - Department of Computer Science(AIE) Amrita School of Computing, Amrita Vishwa Vidyapeetham, Chennai, India

Suryaa N - Department of Computer Science(AIE) Amrita School of Computing, Amrita Vishwa Vidyapeetham, Chennai, India

Abhishek Jha - Department of Mechanical Engineering Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Soumyendra Singh - Department of mathematics Amita vishwa vidyapeetham Chennai campus 601103

Design and Development of Multilingual Voice Controlled Drone Through Stationed Communication, [IMECE-India2026-188924]

Technical Paper Publication

Hemnath Anandan Kumar - Amrita Vishwa Vidyapeetham, Chennai campus

Rishi Radhakrishnan - Amrita Vishwa Vidyapeetham, Chennai campus

Comparative Study of Quadrotor Uav Designs Using Fea Analysis, [IMECE-India2026-189913]

Technical Paper Publication

Devi Bhagwat - banasthali vidyapith

Vibhu Sharma - Defence institute of advanced technology

Soumya S - Defence institute of advanced technology

Durgeshwar Majhi - Defence institute of advanced technology

Design and Development of Battery Swapping and Recharging Station for Multi-Rotor Drones, [IMECE-India2026-187707]

Technical Paper Publication

Yusuf Kalsekar - Fr. C. Rodrigues Institute of Technology, Vashi

Afzal Ansari - Fr. C. Rodrigues Institute of Technology, Vashi
Jobin Jacob - Fr. C. Rodrigues Institute of Technology, Vashi
Zainulabidin Hamdulay - Fr. C. Rodrigues Institute of Technology, Vashi
Manish Kadam - Fr. C. Rodrigues Institute of Technology, Vashi

Hierarchical Control of Cooperative Quadrotor Payload Transport, [IMECE-India2026-189485]

Technical Paper Publication

Arkaprabha Sinha Ray - Indian Institute of Technology Hyderabad
Rehbar Khan - Indian Institute of Technology Hyderabad
Vikram Kumar Anand - Indian Institute of Technology Hyderabad
Prasanth Kumar R - Indian Institute of Technology Hyderabad
Ashok Kumar Pandey - Indian Institute of Technology Hyderabad

Fiducial Marker Based Visual Servo Control for Uav Landing on Moving Platform, [IMECE-India2026-188709]

Technical Paper Publication

Ingale Tejas Dilip - Indian Institute of Technology, Jodhpur
Rosalind Margaret Paulson - Indian Institute of Technology Jodhpur
Riby Abraham Bobby - Indian Institute of Technology

IOGP1.1 - Pipeline Design and Engineering for Sustainable Development in India

9/3/2026

11:00 AM to 1:00 PM - CH01

Chair: Saumitra Shankar Gupta - CHT

Chair: Raj Kishore - Engineers India Ltd.

Chair: Nivedita Sarma Bhattacharyya - Ex EIL , NAPCORR ENGINEERING CONSULTANCY

Presentations:

Sustainable Pipeline Engineering: Challenges, Innovations, and Future Directions, [IMECE-India2026-188504]

Technical Paper Publication

Raj Kishore - Engineers India Limited
Sundanya Chandra - CSIR-National Environmental Engineering Research Institute (NEERI)
Vikas Kumar - Central University of Haryana
Sunil Kumar - CSIR-National Environmental Engineering Research Institute (NEERI),

Targeted Hic Assessment of Jco-Formed Line Pipe Based on Forming-Induced Strain Mapping Simulation, [IMECE-India2026-188270]

Technical Paper Publication

Satendra Kumar - Welspun Corp Limited
Atul Srivastava - Welspun Corp. Limited
Dilipkumar Rath - Welspun Corp Limited
Narendra Patidar - Welspun Corp Limited

Review on Co2 Transportation System for Carbon Capture and Storage (Ccs) Projects, [IMECE-India2026-187720]

Technical Paper Publication

Sathyaranyana Appa - Adhiyamaan College of Engineering

Cyclic Axial Behavior of Buried Steel Pipelines: A Three-Dimensional Numerical Study, [IMECE-India2026-188074]

Technical Paper Publication

Sandeep Raj - Indian Institute of Technology Bhubaneswar
Chaidul Haque Chaudhuri - Indian Institute of Technology Bhubaneswar
Khalid Bashir - Indian Institute of Technology Roorkee

VD&C1.1 - Linear and non-linear dynamics and control

9/3/2026

11:00 AM to 1:00 PM - CH11

Chair: Nidish Narayanaa Balaji -

Chair: Dr. Anoop A M -

Presentations:

Contact-Based Fault Classification Using Machine Learning and Deep Learning Techniques, [IMECE-India2026-187663]

Technical Paper Publication

Ashu Kumar - IIT Kharagpur
Kiran Vijayan - IIT Kharagpur
Amal Jose - VariPhi Gen Innovation

Interface Topology Optimization of Lap Joints Under Manufacturing Variability, [IMECE-India2026-187926]

Technical Presentation Only

Aalokepama Dhar - Rice University
Matthew R W Brake - Rice University

Optimisation of Dynamic Transmission Error in Spur Gear Systems With Nonlinear Effects, [IMECE-India2026-188921]

Technical Paper Publication

Naufal N S - Indian Institute of Space Science and Technology, Thiruvananthapuram
Sanjeev Kumar Lal Das - Gas Turbine Research Establishment, Bangalore
I R Praveen Krishna - Indian Institute of Space Science and Technology, Thiruvananthapuram
Amarnath M - Indian Institute of Information Technology Design and Manufacturing, Jabalpur
Benny Thomas - Gas Turbine Research Establishment, Bangalore

Vibroacoustic Analysis on a Highly Flexible Beam Structure, [IMECE-India2026-189439]

Technical Paper Publication

Neha Vara - Indian Institute of Space Science and Technology
Praveen Krishna i.r - Indian Institute of Space Science and Technology

Dynamic Stability Analysis of Hypersonic Re-Entry Vehicles Using Physics-Informed Neural Networks, [IMECE-India2026-189765]

Technical Paper Publication

Jenifer Beg - Amity University Noida
Cynthia Rai - Amity University Noida

MT1.1 - Energy beam based welding and joining process

9/3/2026

11:00 AM to 1:00 PM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology Indore

Chair: Janakarajan Ramkumar - Indian institute of technology Kanpur, India

Chair: Sivanandam Aravindan - Indian Institute of Technology Delhi

Presentations:

Feasibility of Microwave Post-Processing of Aluminium Alloy 7075 Nanocomposites for Strength Enhancement, [IMECE-India2026-188215]

Technical Paper Publication

Salman Ansari - Indian Institute of Technology Delhi

Ravi Kumar Digavalli - Indian Institute of Technology Delhi Abu Dhabi

Sivanandam Aravindan - Indian Institute of Technology Delhi

Controlled Laser Welding of Highly Reflective Copper Through Adjustable-Mode Beam Shaping and Dynamic Beam Oscillation, [IMECE-India2026-187959]

Technical Paper Publication

Rukaiya Azma - Indian Institute of Technology Delhi

Abhishek Das - Indian Institute of Technology Delhi

Diffusion Bonding of Ti-6Al-4V and AISI 304 Stainless Steel: Effect of Bonding Time on Interfacial Microstructure, [IMECE-India2026-187833]

Technical Paper Publication

Rajnish Kumar Singh - INDIAN INSTITUTE OF TECHNOLOGY DELHI

Aravindan Sivanandam - INDIAN INSTITUTE OF TECHNOLOGY DELHI

Joining of Transparent Substrates Through a Combination of Laser-Induced Forward Transfer and Laser Micro-Welding, [IMECE-India2026-189779]

Technical Paper Publication

Santosh Kumar Sahoo - Indian Institute of Technology Hyderabad

Vipul Kumar Sinha - Indian Institute of Technology Hyderabad

Anurup Datta - Indian Institute of Technology Hyderabad

Study of Microstructural and Mechanical Integrity of Friction Stir Spot Welded Aluminium Alloy 7075 and Polyamide 6 Polymer Composite, [IMECE-India2026-189388]

Technical Paper Publication

Abhinav Panwar - Indian Institute of Technology Delhi

Aravindan Sivanandam - Indian Institute of Technology Delhi

A Qualitative and Quantitative Assessment of Artificial Intelligence Applications in Solid-State Welding Processes, [IMECE-

India2026-189031]

Technical Paper Publication

Mustafa Haider Abidi - Indian Institute of Technology-Ropar

Harpreet Singh - Indian Institute of Technology-Ropar

Anupam Agrawal - Indian Institute of Technology-Ropar

Usama Umer - King Saud University

SSDM2.1 - Structural Dynamics, Modelling & Simulation

9/3/2026

11:00 AM to 1:00 PM - CH13

Chair: Krishnamurthy GS - Royal Enfield

Chair: Abhijit Chaudhuri - Airbus

Presentations:

Experimental Validation of Equivalent Radiated Power as Noise Indicator for Wind Turbine Gearbox Structures, [IMECE-India2026-187667]

Technical Paper Publication

Tamilvendhan Jayaraman - Amrita Vishwa Vidyapeetham

Saravanamurugan S - Amrita Vishwa Vidyapeetham

Philip Becht - ZF Wind Power Antwerpen NV

Dharun Balaji G V - ZF Wind Power Coimbatore Pvt Ltd

Factor-of-Safety Based Weighted U-Pooling for Finite Element Model Uncertainty Validation at Failure Critical Loading, [IMECE-India2026-188741]

Technical Paper Publication

Tarun Sundaramurthy Raju - Boeing India Engineering & Technology Center, Bengaluru

Harendra Baghel - Boeing India Engineering & Technology Center, Bengaluru

Prediction of Room Temperature Vulcanizing (Rtv) Gasket Sealing Performance Using a Cohesive Zone Modeling-based FEA Approach, [IMECE-India2026-189324]

Technical Paper Publication

Shivkumar Samshette - AAM Auto Component (India) Private Limited

Swapnil Shimpi - AAM Auto Component (India) Private Limited

Ajay Guddeti - AAM Auto Component (India) Private Limited

Abhijit Nilangekar - AAM Auto Component (India) Private Limited

Anupom Sharma - Dauch Corporation (formerly American Axle & Manufacturing)

Yogesh Mehta - Dauch Corporation (formerly American Axle & Manufacturing)

Ashfaq Mohammad - Dauch Corporation (formerly American Axle & Manufacturing)

David Miller - Dauch Corporation (formerly American Axle & Manufacturing)

Jim Borowiak - Dauch Corporation (formerly American Axle & Manufacturing)

Triaxiality-plastic Strain Based Fracture Locus Method for Ultimate Torsion Assessment of Aluminum Axle Housings, [IMECE-India2026-189391]

Technical Paper Publication

Ishwer Kumar - AAM Auto Component (India) Private Limited
Ajay Guddeti - AAM Auto Component (India) Private Limited
Abhijit Nilangekar - AAM Auto Component (India) Private Limited
Yogesh Mehta - DAUCH Corporation (formerly American Axle & Manufacturing)
Anupam Sharma - DAUCH Corporation (formerly American Axle & Manufacturing)
Ashfaq Mohammed - DAUCH Corporation (formerly American Axle & Manufacturing)

Analysis of the Impact of Various Parameters on the Ultimate Load Capacity of Axle Assembly Beaming, [IMECE-India2026-189498]

Technical Paper Publication

Aditya Muley - AAM Auto Component (India) Private Limited.
Ajay Guddeti - AAM Auto Component (India) Private Limited
Abhijit Nilangekar - AAM Auto Component (India) Private Limited
Yogesh Mehta - Dauch Corporation (formerly American Axle & Manufacturing)
Anupam Sharma - Dauch Corporation (formerly American Axle & Manufacturing)
Ashfaq Mohammed - Dauch Corporation (formerly American Axle & Manufacturing)
Toby Padfield - Dauch Corporation (formerly American Axle & Manufacturing)
Robert Langer - Dauch Corporation (formerly American Axle & Manufacturing)

Analytical Fatigue Life Prediction of a Case Carburized Drive Pinion Stem Using a Shear-Based Approach, [IMECE-India2026-188901]

Technical Paper Publication

VIKRAM SHEDGE - AAM Auto Component (India) Private Limited.
Ajay Guddeti - AAM Auto Component (India) Private Limited.
Abhijit Nilangekar - AAM Auto Component (India) Private Limited.
Yogesh Mehta - Dauch Corporation
Anupam Sharma - Dauch Corporation
Ashfaq Mohammed - Dauch Corporation

AM5.1 - Composite materials – polymer, ceramic, bio- and hybrid composites

9/3/2026

11:00 AM to 1:00 PM - CH08

Chair: A. deepa -

Chair: Amol Bhanage -

Presentations:

Development of a Hybrid Impact Resistant Armour Panels With Non-Newtonian Fluid Encapsulated in an Auxetic Lattice and Natural Fibre Incorporation, [IMECE-India2026-189849]

Technical Paper Publication

Dakshina Gopi - Anna University, CEG Campus
Keerthana S - Anna University, CEG Campus

Nithesh Sk - Anna University, CEG Campus
Varshini K - Anna University, CEG Campus
Veda Varshini R - Anna University, CEG Campus
Visalakshi V - Anna University, CEG Campus
Jeevamalar J - Anna University, CEG Campus
Ezhilmaran V - Anna University, CEG Campus

Development and Characterization of Sustainable Jute Fiber Reinforced Polymer Composites for Medical Applications, [IMECE-India2026-189432]

Technical Paper Publication

Reshmi Basak - Department of Mechanical and Automobile Engineering, CHRIST University
George S Zacharia - Department of Mechanical and Automobile Engineering, CHRIST University
Sudharshan Royal - Department of Mechanical and Automobile Engineering, CHRIST University

Ballistic Impact Performance of the Stf Infused Carbon-Fibreglass Intra-Ply Hybrid Composite., [IMECE-India2026-189435]

Technical Paper Publication

Ashna Thomas - Hindustan Institute of technology and Science
Aparna H - Hindustan Institute of Technology
Nivasree C P - Hindustan Institute of Technology and Science
Chandrasekar Muthukumar - Hindustan Institute of Technology and Science

Design and Development of Banana-Bamboo Bio-Composite Fibre Based Automotive Helmet Shell, [IMECE-India2026-187129]

Technical Paper Publication

Gnanasekaran K - Hindustan Institute of Technology and Science, Chennai
Selvaganapathy R - Hindustan Institute of Technology and Science, Chennai
Mohammad Royan Shaik - Hindustan Institute of Technology and Science, Chennai
Hariram V - Hindustan Institute of Technology and Science, Chennai
Ragul V - Hindustan Institute of Technology and Science, Chennai

Higher-Order Analysis of Free Vibrations in Fgm Plates Under Varied Porosity Distributions, [IMECE-India2026-187778]

Technical Paper Publication

Smruti Ranjan Sahoo - Indian Institute of Technology Kharagpur
Bhriku Nath Singh - Indian Institute of Technology Kharagpur

Effect of Crystallinity on the Tensile Behaviour of Polypropylene-carbon Nanotube Nanocomposites: Insights From Molecular Dynamics, [IMECE-India2026-188770]

Technical Paper Publication

Saswati Mallick - INDIAN INSTITUTE OF TECHNOLOGY, MANDI
Dheeraj Prakashchand Dube - INDIAN INSTITUTE OF TECHNOLOGY, MANDI
Kishor Easwaran - VELLORE INSTITUTE OF TECHNOLOGY,

ANDHRA PRADESH

Ambuj Sharma - VELLORE INSTITUTE OF TECHNOLOGY,
ANDHRA PRADESH

IOGP1.2 - Pipeline Design and Engineering for Sustainable Development in India and IOGP2.1 - Project Management and Execution in Indian Pipeline Projects and IOGP3.1 - Construction Innovations and Challenges in Diverse Indian Terrains

9/3/2026

2:00 PM to 4:00 PM - CH01

Chair: Suranjan Ghosh - Engineers India Limited

Presentations:

Design Optimization of High-Pressure Multistage Pumps for Long-Distance Crude Oil Pipelines, {IMECE-India2026-189725}

Technical Presentation Only

Jayakumar Balasubramanian - Flowserve India controls PVT Limited

Leveraging Large Language Models to Develop a Data-Driven Safety and Execution Framework for Indian Pipeline Projects, {IMECE-India2026-190023}

Technical Paper Publication

Mohammed Shareeq Ali Khan - Vasavi College of Engineering
Lakshmi Shanmukha Valli Mankala - Vasavi College of Engineering

Naman Khetan - University of Stuttgart

Jayant Nema - IIT Madras

Hydrogen Input, Diffusion Behaviour, and Cracking Susceptibility in Stick-Electrode Welded Joints: A Multi-Part Experimental Evaluation, {IMECE-India2026-189670}

Technical Presentation Only

Abhishek Vyas - voestalpine Bohler Welding India Pvt Ltd

Kamal Shah - voestalpine Bohler Welding India Pvt Ltd

Khantil Gurjar - voestalpine Bohler Welding India Pvt Ltd

Non-Intrusive Pipeline Obstruction Localization Using Acoustic Reflectometry for an Lpg Pipeline, {IMECE-India2026-190108}

Technical Paper Publication

Pranab Narayan Jha - Bharat Flow Analytics Pvt Ltd

Sanjay B - Bharat Flow Analytics Pvt Ltd

Ujwal Gandhi - Bharat Flow Analytics Pvt Ltd

Nilay Jaitare - Bharat Flow Analytics Pvt Ltd

Root Cause Analysis of Hdd Crossing Failure in Pipeline, {IMECE-India2026-187042}

Technical Paper Publication

Gaurav Bhende - PROTTON SYNERGY PVT. LTD.

Pinat Shah - ASSESS ROOT & FORENSICS CONSULTANTS PVT. LTD.

Qualification of L450me (X65me) Grade Pipe for High-Pressure Hydrogen Service, {IMECE-India2026-189329}

Technical Paper Publication

Mayank Sharma - Ratnamani Metals & Tubes Ltd.

Hiral Makvana - Ratnamani Metals & Tubes Limited

Dhruvil Chauhan - Ratnamani Metal & Tubes Ltd

RA2.1: Robotics & Automation- Digital Twin & Industry 4.0/5.0

9/3/2026

2:00 PM to 4:00 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Catterpillar India

Presentations:

Physics-Informed Bi-Directional Digital Twin for Ev Battery Rul Estimation and Active Thermal Management, {IMECE-India2026-189769}

Technical Paper Publication

Kavin Hariharamahadevan Pillai - Amrita Vishwa Vidyapeetham

Naveen Santhanaperumal - Amrita Vishwa Vidyapeetham

Rishi Kumar - Amrita Vishwa Vidyapeetham

An Industry 4.0 Approach to Smart Manufacturing: Real-Time Digital Shadow Modeling for Performance Monitoring and Process Optimization, {IMECE-India2026-189104}

Technical Paper Publication

Bhumika Rachepalli - Amrita Vishwa Vidyapeetham

Dr. Rishi Kumar - Amrita Vishwa Vidyapeetham

Digital Twin-Based Central Traffic Control and Smart Routing for Autonomous Agv Fleets in Industry 4.0 Manufacturing Environments, {IMECE-India2026-190022}

Technical Paper Publication

Joishankar A - Amrita Vishwa Vidyapeetham

Rishi Kumar - Amrita Vishwa Vidyapeetham Chennai Campus

Fabribat: A Safety-Integrated Autonomous Mobile Robot for Hazard Monitoring and Intelligent Tool Logistics in Industry 5.0 Manufacturing, {IMECE-India2026-188280}

Technical Paper Publication

Bharath V K - AMRITA VISHWA VIDYAPEETHAM, CHENNAI CAMPUS.

Navyasree Lingamallu - AMRITA VISHWA VIDYAPEETHAM, CHENNAI

Dr.Sanchanna Ganesan - AMRITA VISHWA VIDYAPEETHAM CHENNAI CAMPUS

Real-Time Digital Twin Synchronization for Autonomous Robotic Soccer Using Aruco-Based Pose Estimation, {IMECE-India2026-189375}

Technical Paper Publication

Aathavan R K - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India.

Kavish V - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India.

Vishal Purushothama - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India.

Rishi Kumar - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India.

A Cloud-Based Digital Twin Framework for Accurate Localization and Semantic Perception of Autonomous Mobile Robots, [IMECE-India2026-186807]

Technical Paper Publication

Musab Badr Ahmed - Indian Institute of Technology - Madras

Steven Jahn - Indian Institute of Technology - Madras

Tere Rajesh Babu - Indian Institute of Technology - Madras

Samuel G L - Indian Institute of Technology - Madras

Niketh S - Indian Institute of Technology - Madras

ACES1.2 - Green Hydrogen Production, Storage, and Integrated Hydrogen Energy Systems and ACES2.2 - Emerging Technologies - Clean Energy

9/3/2026

2:00 PM to 4:00 PM - CH05

Chair: Ankur Mullick - PIL

Chair: Pradeep Chauhan - Pipeline Infrastructure Ltd.

Presentations:

Experimental Investigation of Zero-Gap Anion Exchange Membrane (Aem) Electrolyzer With Composite Current Collectors, [IMECE-India2026-189872]

Technical Paper Publication

Vidhan Thakore - Pandit Deendayal Energy University

Nanji Hadia - Pandit Deendayal Energy University

Anurag Mudgal - Pandit Deendayal Energy University

Drag Force on a Non-Spherical Plastic Pellet in a Gasifying Environment: A Perturbation Method-Based Analysis, [IMECE-India2026-189062]

Technical Paper Publication

Shahul V Hameed - National Institute of Technology Calicut

Sumer B Dirbude - National Institute of Technology Calicut

Adaptive AI-Based Framework for Real-Time Solar Panel Defect Detection Under Resource Constraints, [IMECE-India2026-189931]

Technical Paper Publication

Archana Pallakonda - National Institute of Technology Warangal

Padmavathy R - National Institute of Technology Warangal

From Data to Failure Mechanisms: Explainable AI for Thermal Runaway Classification in Lithium-Ion Batteries, [IMECE-India2026-187787]

Technical Paper Publication

Chaitanya Bhagat - Indian Institute of Technology Madras

Kanupriya Mittal - Verdojah Technologies Private Limited

Mayank Mittal - Indian Institute of Technology Madras

Numerical Study of Interdigitated Pmfic Flow-Field Channels Fabricated Using Electromagnetic Forming, [IMECE-India2026-189032]

Technical Paper Publication

Mohammed Abdul Kadar Rahiman - Anna University

Jeno Salethraj - Anna University

Nallisaiamizhthu Tha Vaa - University College of Engineering, BIT Campus

Balamurugan Chinnasamy - Anna University

Shanmuga Sundaram Karibeeran - Anna University

Role of Bentonite Clay in Porous Sediments on Methane Hydrate Formation and Dissociation, [IMECE-India2026-188430]

Technical Paper Publication

Ajit Kumar Jha - IIT KANPUR

Hrithik Upadhyay - IIT KANPUR

E Ajul - IIT, KANPUR

M. K. Das - IIT KANPUR

P. K. Panigrahi - IIT KANPUR

ATT2.1 - Advances in IC Engines

9/3/2026

2:00 PM to 4:00 PM - CH12

Chair: Dhananjay Srivastava -

Presentations:

Implementation of Direct Injection Technology in a Small-Bore Gasoline Engine: Study of In-Cylinder Flow-Fields and Mixture Distribution, [IMECE-India2026-187827]

Technical Paper Publication

Soumyanil Nayek - Indian Institute of Technology Madras

Shlok Gandhi - Indian Institute of Technology Madras

Mayank Mittal - Indian Institute of technology Madras

Impact of Fuel Spray Angle and Nozzle Hole Modifications in an Electronic Injector on the Combustion Characteristics of a Single-Cylinder Stationary Diesel Engine, [IMECE-India2026-187905]

Technical Paper Publication

Tamilvanan Ayyasamy - Kangu Engineering College

Anand Krishnasamy - Indian Institute of Technology - Madras

Wavelet-Based Characterization of Cycle-to-Cycle Combustion Variations in a Spark-Ignition Engine Under Low-Load Operation Fueled With Methane and Biogas, [IMECE-India2026-187936]

Technical Paper Publication

Ravi Velugula - Dayananda Sagar University

Nikhil Kumar Choudhary - Indian Institute Of Technology - Madras

Mayank Mittal - Indian Institute Of Technology - Madras

Optimization of Fuel Injection Angle for Ppci Operation in a Single-Cylinder Stationary Diesel Engine, [IMECE-India2026-188346]

Technical Paper Publication

Lakshmigant K - College of Engineering Guindy, Anna University, Chennai-25

Adhikesavan C - College of Engineering Guindy, Anna University, Chennai-25

Pre-Ignition Behaviour and Mitigation Strategies for Enabling High Hydrogen Fractions in a Cng-Fuelled Retrofitted SI Engine, {IMECE-India2026-189052}

Technical Paper Publication

P. Sandeep Varma - Indian Institute of Technology Madras

Mayank Mittal - Indian Institute of Technology Madras

Computational Analysis of Coatings in Ic Engines, {IMECE-India2026-189223}

Technical Paper Publication

Sivanath E - Coimbatore institute of technology

Dhanushram S - Coimbatore institute of technology

Ramesh Kannan J - Coimbatore institute of technology

Siva R - Coimbatore institute of technology

Sam Solomon D P - Coimbatore Institute of Technology

PVP4.2 Materials & Fabrication

9/3/2026

2:00 PM to 4:00 PM - CH03

Chair: Athreya Sadasivam - Independent Consultant

Chair: Parthapratim Brahma -

Chair: Rajesh Madnani -

Presentations:

Numerical Characterization of Anomalous Temperature and Strain-Rate Effects in Steel Alloys, {IMECE-India2026-189855}

Technical Paper Publication

Agna Rose Binoy - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

M K Rahgul Poopathi - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Siva Prasad A v S - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Mariyappan Arul Kumar - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Pradeepraj Kannadhasan - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Advancing Welding Techniques for Quenched and Tempered Steel in LcO2 Vessels, {IMECE-India2026-189405}

Technical Paper Publication

Deepak Acharya - INOX INDIA LIMITED

Partha Sinha - INOX INDIA LIMITED

SAGAR SHOUCHE - INOX INDIA LIMITED

Design and Qualification of Crevice-Free Rear-Face Tube-to-Tubesheet Joints for Heat Exchanger Applications, {IMECE-India2026-187345}

Technical Paper Publication

Premkumar A - Honeywell UOP

Erik Johnson - Honeywell UOP

Prasanna Velpula - Honeywell UOP

Vengataramanan R - Honeywell UOP

Ensuring Notch Toughness Properties on Nuclear Components, {IMECE-India2026-185626}

Technical Presentation Only

Raja Rethinam Philip - L&T Construction, Mumbai

Sustainable Use of Stainless Steel in Static Equipment, {IMECE-India2026-197431}

Technical Presentation Only

Claes Tigerstrand - Outokumpu Stainless AB

Analysis on Welding Defects, {IMECE-India2026-189072}

Technical Presentation Only

Rakesh Subramanian N Nagarajan - TWI INDIA PVT LTD

SSDM1.2 - Structures

9/3/2026

2:00 PM to 4:00 PM - CH07

Chair: Unnikrishnan Sreenivasan - Boeing India

Chair: Shashidhar Shivarudrappa - COLLINS AEROSPACE

Presentations:

Advanced Fatigue Life Prediction of Airframe Structures, {IMECE-India2026-191806}

Technical Presentation Only

Shahul Nazar - Airbus India Private Limited

Mohd Hamzah Hamdani - Airbus India Private Limited

Design and Evaluation of an Ultra-Compact Niti Actuator for Weight-Critical Aerospace Applications, {IMECE-India2026-187508}

Technical Paper Publication

Huzef Ur Rahman - Birla Institute of Technology and Science, Pilani

Sanjana Nimmagadda - Birla Institute of Technology and Science, Pilani

Pardha Saradhi Gurugubelli Venkata - Birla Institute of Technology and Science, Pilani

Amit Kumar Gupta - Birla Institute of Technology and Science, Pilani

Santhanam Ranganathan - Defence Research and Development Laboratory (DRDL)

Experimental Investigation of Cyclic Recoverability in Solid and Auxetic Metallic Plates Fabricated From Niti, Stainless Steel, and Mild Steel, {IMECE-India2026-189126}

Technical Paper Publication

N Veera Manikanta - Birla Institute of Technology and Science, Pilani

Bhuvaneswaran Sukumar - Birla Institute of Technology & Science, Pilani

Brajesh Kumar Ponigrahi - Birla Institute of Technology and Science, Pilani

Amit Kumar Gupta - Birla Institute of Technology and Science, Pilani

Sabareesh Geetha Rajasekharan - Birla Institute of Technology and Science, Pilani

Physics-Based Digital Twin for Uncertainty-Aware Thermo-Mechanical Analysis of Cryogenic Pipeline-Support Structures, [IMECE-India2026-187895]

Technical Paper Publication

Tejas Kulkarni - BITS Pilani

Nagesh Kulkarni - TCS Research

Architectural Decoupling of Force Response and Energy Absorption in Iso 3471-Compliant Roll-Over Protective Structures Using Functionally Graded Auxetics, [IMECE-India2026-188391]

Technical Paper Publication

Rajesh Kumar - BITS Pilani K K Birla Goa Campus

Iniyar Thiruselvam - BITS Pilani K K Birla Goa Campus

Kiran Mali - BITS Pilani K K Birla Goa Campus

Balaji M - Bull Machines Pvt Ltd

Probabilistic Consolidation of Multiple S-n Curves for Managing Steel Using Weibull Modeling and Monte Carlo Simulation, [IMECE-India2026-189825]

Technical Paper Publication

Dr. Srinath R - Dayananda Sagar University

Dr. K. Sudha Deepthi - Dayananda Sagar University

dr.kartik S Tandel - Dayananda Sagar University

Dr. Inamul H Hasan - Ramaiah Institute of Technology, Bangalore

Dr. Cm Vigneshwaran - Ramaiah Institute of Technology

SSDM2.2 - Structural Dynamics, Modelling & Simulation

9/3/2026

2:00 PM to 4:00 PM - CH13

Chair: Krishnamurthy GS - Royal Enfield

Chair: Abhinav Ravindra Dehadrai -

Presentations:

State of the Art of Transient Dynamic Simulations at Airbus for Assessment of Structural Integrity for Impacts and Crashworthiness of Aircraft Structures, [IMECE-India2026-188588]

Technical Presentation Only

Abhijit Chaudhuri - Airbus

Enhancing Thermohydraulic Performance via Hybrid Evolutionary Optimization of Vortex Generators, [IMECE-India2026-189402]

Technical Paper Publication

Dr. Srinath R - Dayananda Sagar University

Deeksha R - Dayananda Sagar University

Harshith A L - Dayananda Sagar University

Aadarsha M Reddy - Dayananda Sagar University

Vaibhavi Vinaykumar Ghotge - Dayananda Sagar University

Rakshit S Hulkund - Dayananda Sagar University

Kartik S Tandel - Dayananda Sagar University

Dr. K. Sudha Deepthi - Dayananda Sagar University

Influence of Preload and Support Prying Moments on the Frequency Response of Transversely Loaded Beams With Two Supports, [IMECE-India2026-189847]

Technical Paper Publication

Ilanchezhian Velloichamy - Boeing India Private Limited

Kuralanban Ramu - Boeing India Private Limited

Advanced Computational Frameworks for Predictive Modeling of Fatigue Crack Propagation in Composite Fuselage Panels, [IMECE-India2026-189369]

Technical Paper Publication

Gahana V - Dayananda Sagar University

Shreenivasamurthy R N - Dayananda Sagar University

Shiva Kumar N - Dayananda Sagar University

Kartik Tandel - Dayananda Sagar University

Dr. K. Sudha Deepthi - Dayananda Sagar University

Dr. Srinath R - Dayananda Sagar University

MT3.1 - Smart and circular manufacturing, sustainable production strategies

9/3/2026

2:00 PM to 4:00 PM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology Indore

Chair: Sivanandam Aravindan - Indian Institute of Technology Delhi

Chair: Janakarajan Ramkumar - Indian institute of technology Kanpur, India

Presentations:

A Machine Learning Approach Toward Smart and Sustainable Manufacturing on Micro Drilling, [IMECE-India2026-189380]

Technical Paper Publication

G Jaganmohan Naidu - University College of Engineering Narasaraopet, JNTUK

I Sri Phani Sushma - University College of Engineering Narasaraopet, JNTUK

S Niketh - IIT Madras

G L Samuel - IIT Madras

Integrating Lean Manufacturing and Circular Economy in Paper Mills: A Case Study of Cardboard Box Production From Waste Sludge, [IMECE-India2026-188266]

Technical Paper Publication

Indranil Aich - IIST Shibpur

Santanu Sarder - Indian Institute of Engineering Science and Technology (IIST) Shibpur

Apurba Das - IIST Shibpur

Experimental Evaluation of Specific Energy Consumption in Laser

Directed Energy Deposition, {IMECE-India2026-189839}
Technical Paper Publication
Avinash Gunturu - Indian Institute of Technology Hyderabad
Suryakumar S - Indian Institute of Technology Hyderabad

Development of a Data-Driven Predictive Maintenance Framework
for Smart Manufacturing Systems, {IMECE-India2026-190000}
Technical Paper Publication
Tanish Gujarathi - MIT World Peace University, Pune
Snehal Kolekar - MIT World Peace University

Toward Holistic Engineering of Medical Devices: A Multi-
Perspective Design and Evaluation Framework, {IMECE-
India2026-189502}
Technical Paper Publication
Yogesh Kumar Bhanu - University School of Design & Innovation,
Guru Gobind Singh Indraprastha University, New Delhi
Tiju Thomas - University School of Design & Innovation, Guru
Gobind Singh Indraprastha University, New Delhi

From Inspection to Assurance: A Systems-Based Framework for
Front-Loaded Quality in Manufacturing, {IMECE-India2026-
190540}
Technical Presentation Only
Aravindhan P T - Ruhrpumpen India

CPSA/IML 2.1 - Aerospace & Propulsion Health

9/3/2026

2:00 PM to 4:00 PM - CH06

Chair: Dr Rishi Relan -
Presentations:

A Data-Driven Machine Learning Framework for Multisystem
Anomaly Detection Using Real Flight Data Recorder
Measurements, {IMECE-India2026-187964}
Technical Paper Publication
Mohini Shukla - Global Academy of Technology
Deepesh Raj - Indian Institute of Technology Kharagpur
Ankit Kumar Mishra - Indian Institute of Aeronautical Engineering
Sarwati R Suryawanshi - National Institute of Vedic Sciences

Predictive Safety Foresight Using Aircraft System Data and
Operational History, {IMECE-India2026-186643}
Technical Paper Publication
Kamalesh Thangam - The Boeing Company
Meghana Yeju - The Boeing Company
Saravana Kumar Thangaraju - The Boeing Company
Anjali Shaju - The Boeing Company

Design and Implementation of Fault Detection and Health
Monitoring System for Aircraft Landing Gear Using a Cyber -
Physical Architecture, {IMECE-India2026-189544}
Technical Paper Publication
Tejas A S - Dayananda Sagar University

Prachiti Patil - Dayananda Sagar University
Qasim Johar - Dayananda Sagar University
Srinath R - Dayananda Sagar University
Kartik Tandel - Dayananda Sagar University
Sudha Deepti K - Dayananda Sagar University

A Multimodal AI Cyber Physical Framework for Pilot Aircraft
Structure Interaction, {IMECE-India2026-189558}
Technical Paper Publication
Nagasudhan N - Collins Aerospace

Diagnostic Modelling of Oil Hiding in Gas Turbine Engines,
{IMECE-India2026-189159}
Technical Presentation Only
Aishwarya S - Rolls-Royce India Pvt Ltd
Malolan Sreedharan - Rolls-Royce India Private Limited
Devanshi Singh - Rolls-Royce India Private Limited
Suganya Srinivasan - Rolls Royce India Private Limited

Prediction of Oil Leak in Gas Turbine Engines, {IMECE-India2026-
189437}
Technical Presentation Only
Aishwarya S - Rolls-Royce India Private Limited
Devanshi Singh - Rolls-Royce India Private Limited
Malolan Sreedharan - Rolls-Royce India Private Limited
Suganya Srinivasan - Rolls-Royce India Private Limited

VD&C7.1 - Dynamics and Wave propagation in architected materials and adaptive engineering structures

9/3/2026

2:00 PM to 4:00 PM - CH11

Chair: I R Praveen Krishna -
Chair: Dr Pranesh Roy -
Presentations:

Non-Linear Wave Propagation of Origami Metamaterial,
{IMECE-India2026-187478}
Technical Paper Publication
Alok Kumar Tiwari - IIT Roorkee
S H Upadhyay - Indian Institute of Technology Roorkee, IIT
Roorkee
T. Mukhopadhyay - University of Southampton

Micron Scale Interface Effects on Damping and Transmissibility in
Additively Printed and PLA-Infiltrated Ph-17 Lattices, {IMECE-
India2026-188639}
Technical Paper Publication
Manish Kumar - NIT Warangal
Anuruddha Majumder - 3D Engineering Automation LLP
Adepu Kumar - NIT Warangal

Dynamic Characterization and Comparison of Trms Lattices for
Vibration Isolation and Energy Absorption, {IMECE-India2026-
188804}

Technical Paper Publication

Siva Nagi Reddy Pichhala - Visvesvaraya National Institute of Technology Nagpur

Jagan Mohan Gunda - Visvesvaraya National Institute of Technology Nagpur

Ajinkya Baxy - Visvesvaraya National Institute of Technology Nagpur

Rajan Prasad - Indian Institute of Technology Delhi

Peridynamics Shell Theory With Damping: Application to Wave Isolation in Mechanical Metasurfaces, [IMECE-India2026-188863]

Technical Paper Publication

Nilesh Choudhary - Indian Institute of Technology (Indian School of Mines) Dhanbad

Tanuj Gupta - Indian Institute of Technology, Kanpur

Ankur Dwivedi - Indian Institute of Technology, Kanpur

Bijaya Bikram Samal - Indian Institute of Technology, Kanpur

Pranesh Roy - Indian Institute of Technology (Indian School of Mines) Dhanbad

Rahul Bhartiya - Indian Institute of Technology (Indian School of Mines) Dhanbad

Bishakh Bhattacharya - Indian Institute of Technology, Kanpur

Amplitude-Dependent Bandgap Formation in a Locally Resonant Beam With a Nonlinear Defect, [IMECE-India2026-189778]

Technical Paper Publication

Senthil Murugan - IIT Madras

Abhik Misra - IIT Madras

Strongly Coupled Resonant-bragg Bandgaps in Solid-void Phononic Crystals for Broadband Vibration Isolation, [IMECE-India2026-190318]

Technical Presentation Only

Pavel Galich - Technion - Israel Institute of Technology

Ilaie Nadejde - Technion - Israel Institute of Technology

AM3D2.1 - Applications and Impact

9/3/2026

2:00 PM to 4:00 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Investigation on Laser Shock Peening and Laser Nitriding of Wire Arc Additive Manufactured NiTi Shape Memory Alloy, [IMECE-India2026-190081]

Technical Paper Publication

Shaik Thanveer Desai - IIT Indore

Anshu Sahu - SRM University AP

Himanshu Sen - IIT Indore

Jayant Khede - Institute of Engineering & Technology DAVV

Suvarna Torgal - Institute of Engineering & Technology DAVV

Iyamperumal Anand Palani - IIT Indore

Process Limitations and Optimization Strategies in Glow Based Wire Arc Additive Manufacturing of Titanium, [IMECE-India2026-188378]

Technical Paper Publication

N Satya Siva Kumar - Jawaharlal Technological University, Hyderabad

Anjaneeya Prasad B - Jawaharlal Technological University Hyderabad

Investigation of High Temperature Dry Sliding Wear Mechanism of Additively Manufactured In625, [IMECE-India2026-189158]

Technical Paper Publication

Simson Daniel - Indian Institute of Technology Palakkad

Shaik Arshad - Indian Institute of Technology Palakkad

Kanmani Subbu S. - Indian Institute of Technology Palakkad

Investigation on Large Area Laser Cleaning of Oxide Layer From Stainless Steel, [IMECE-India2026-189643]

Technical Paper Publication

Vishnu Varma Kamanuri - INDIAN INSTITUTE OF TECHNOLOGY INDORE

Nandini Patra - INDIAN INSTITUTE OF TECHNOLOGY INDORE

Polani Ia - INDIAN INSTITUTE OF TECHNOLOGY INDORE

Effect of Surface Texturing on Residual Stresses and Tribological Properties of Laser Cladded Components, [IMECE-India2026-187852]

Technical Presentation Only

Sriram S - Indian Institute of Technology Madras

Samuel g.l - Indian Institute of Technology Madras

Investigation of Microstructure and Mechanical Properties of S317 Fabricated Using Wire Arc Additive Manufacturing, [IMECE-India2026-189155]

Technical Presentation Only

Prajwal Goyal - Collins Aerospace

AM3.1 - Materials Degradation - Fatigue, Creep, Corrosion, Wear and Failure Analysis

9/3/2026

2:00 PM to 4:00 PM - CH08

Chair: Jitendra Kumar Katiyar -

Chair: Dhiraj Mahajan -

Presentations:

High Temperature Degradation Mechanisms in Steam Methane Reformer Pigtail Tubes, [IMECE-India2026-188008]

Technical Paper Publication

Maheswari Nandakumar - Alleima India Private Limited

Jyoti Shankar Jha - Alleima India Private Limited
Deepak Hans - Alleima India Private Limited

Problem Route Cause and Elimination (Rcpe) of Adblue Injector Failures- Commercial Vehicle Application, {IMECE-India2026-187256}

Technical Paper Publication

Ramesh P - ASHOK LEYLAND

Mr. Sivakumar G K - ASHOK LEYLAND

Dr. Koorella Krishna - ASHOK LEYLAND

Kaviraja M - ASHOK LEYLAND

Ms. Vincy Rupini M - ASHOK LEYLAND

Failure and Route Cause Analysis of Oil Cooler Module. {Ice}, {IMECE-India2026-187017}

Technical Paper Publication

Ramesh P - ASHOK LEYLAND

Ms. Vincy Rupini M - Ashok Leyland

Kaviraja M - ASHOK LEYLAND

Dr Koorella Krishna - ASHOK LEYLAND

Sivakumar Gk - ASHOK LEYLAND

Effect of Wire Diameter, Heat Treatment, and Testing Conditions on the Tensile Behavior of Ni-Ti Shape Memory Alloy Wires, {IMECE-India2026-187849}

Technical Paper Publication

Akash Dwivedi - Birla Institute of Technology & Science, Pilani Hyderabad Campus

Amit Kumar Gupta - Birla Institute of Technology & Science, Pilani Hyderabad Campus

Pardha Saradhi G V - Birla Institute of Technology & Science, Pilani Hyderabad Campus

Pradeep Kumar - U R Rao Satellite Centre (URSC), ISRO

Corrosion Behaviour of Bi, Sb, and Sr Modified AZ91d Magnesium Alloys in Salt-Laden Environments, {IMECE-India2026-188255}

Technical Paper Publication

A. Gnanavelbabu - College of Engineering Guindy, Anna University Chennai

Vinothkumar E - Anna University Chennai

Prahadeeswaran M - Anna University Chennai

Multi-Criteria Optimization of Tribological Properties in Hbn-Reinforced Copper Composites Fabricated by Microwave and Muffle Sintering, {IMECE-India2026-188264}

Technical Paper Publication

Gnanavelbabu A - Anna University Chennai

Prahadeeswaran M - Anna University Chennai

Vinothkumar E - Anna University Chennai

GT9.2 - AIML in Gas Turbine Design, Operation and Maintenance and GT2.1 - Turbines

9/3/2026

2:00 PM to 4:00 PM - CH02

Chair: Harshal Akolekar -

Chair: Mr. RD Bharatan -

Chair: Rajesh Ranjan -

Chair: Sundar Krishnaswamy -

Presentations:

Turbo-Pinn: A Mesh-Free Machine Learning Framework for Low-Reynolds-Number Turbine Blade Flow Prediction, {IMECE-India2026-187087}

Technical Paper Publication

Prashant Kumar - Indian Institute of Technology Kanpur

Smrutiranjana Nayak - Indian Institute of Technology Kanpur

Rajesh Ranjan - Indian Institute of Technology Kanpur

Physics-Informed Neural Networks for Predicting Laminar Flame Characteristics of Variable Composition Biogas, {IMECE-India2026-187808}

Technical Paper Publication

Harish Abubaker - Muthoot Institute of Technology and Science

Saleel Ismail - National Institute of Technology Calicut

Machine Learning-based Prediction of Natural Frequencies of Cantilever Compressor Blades for Frequency Tuning, {IMECE-India2026-188754}

Technical Paper Publication

Amit Kumar Tripathi - Siemens Energy

Distribution-Free Uncertainty Quantification in Operator Inference-Based Reduced Order Models for Gas Turbine Components, {IMECE-India2026-189573}

Technical Presentation Only

Karthick Gudiwada - IIT(ISM) Dhanbad

Aniketh Kalur - IIT Madras

Segmented Stage 1 Nozzle Support for Improved Stability in Gas Turbines, {IMECE-India2026-188191}

Technical Paper Publication

Sachin Joshi - Baker Hughes

Manoharan Sambandam - Baker Hughes

Robustness of Turbine Components Through Root Shot Penning, Spin Test and Under Cuts Feature, {IMECE-India2026-189387}

Technical Paper Publication

Pawan Kumar - Siemens energy India Ltd

Saurabh Gorai - Siemens energy India Ltd.

Fathi Ahmad - siemens energy India Ltd.

Radan Radulovic - siemens energy India Ltd.

Debdulal Das - siemens energy India Ltd.

IOGP3.2 - Construction Innovations and Challenges in Diverse Indian Terrains and IOGP4.1 - Non-CONVENTIONAL PIPELINES and IOGP5.1 - Pipeline Integrity Management

9/3/2026

4:30 PM to 6:30 PM - CH01

Chair: Saumitra Shankar Gupta - CHT

Chair: Raj Kishore - Engineers India Ltd.

Chair: Ashish Khera - Allied Engineers

Chair: Shiv Verma -

Presentations:

Oil and Gas Pipeline Coating for Deepwater Exploration, (IMECE-India2026-197421)

Technical Presentation Only

Chanchal Dasgupta - Borouge International

From Hydraulic Analysis to Holistic Pipeline Operations: Enhanced Use of Pipeline Application Software, (IMECE-India2026-186711)

Technical Presentation Only

Swarup Roy - Pipeline Infrastructure Limited

Mr. Bhim Singh Tamar - Pipeline Infrastructure Limited

Repurposing Oil & Gas Pipelines for Ammonia Transport, (IMECE-India2026-186215)

Technical Paper Publication

Saumitra Shankar Gupta - CENTRE FOR HIGH TECHNOLOGY

Detection and Critical Assessment of Parting Along Erw Longitudinal Seam in Decade-Old Underground Lpg Transmission Pipelines: The Paradigm Shift in In-Line Inspection Technology and Advanced Remediation Strategies, (IMECE-India2026-189557)

Technical Presentation Only

Smit Pradipbhai Shah - GAIL (INDIA) LTD

Gopal Lal Kumawat - GAIL (INDIA) LTD

RA3.1: Robotics & Automation- AI/ML & Deep Learning in Robotics

9/3/2026

4:30 PM to 6:30 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Catterpillar India

Presentations:

Fine-Tuned Deep Learning Models for Automated Detection and Localization of Surface Defects in Mechanical Components, (IMECE-India2026-188556)

Technical Paper Publication

Bollimuntha Kavya Sai - Amrita Vishwa Vidyapeetham, Chennai

Dev Kunwar Singh Chauhan - Amrita Vishwa Vidyapeetham, Chennai

From Reward Maximization to Uncertainty Minimization: A Unified Framework for General AI, (IMECE-India2026-189770)

Technical Paper Publication

Umar Bin Muzzafar - Dayananda Sagar University

Pramod Kumar - Dayananda Sagar University

Rupam Bhaduri - Dayananda Sagar University

Sudha Deepthi - Dayananda Sagar University

Explainable Ai (Xai) for Predictive Maintenance in Legacy Hydraulic Systems: A Non-Invasive Acoustic-Pressure Signature Fusion Approach, (IMECE-India2026-189917)

Technical Paper Publication

Srujan V - Dayananda Sagar University

Bhuvanesh H - Dayananda Sagar University

S Bharath Kumar - Dayananda Sagar University

Shashank . - Dayananda Sagar University

Pramod Kumar Naik - Dayananda Sagar University

K Sudha Deepthi - Dayananda Sagar University

Puneeth N - Dayananda Sagar University

Learning-Based Image Reconstruction and Segmentation Using Yolov11, (IMECE-India2026-189947)

Technical Paper Publication

Diya Gowde - Defence Institute of Advanced Technology, DIAT-DRDO, Pune, India

Rajeev Rajan Astha - Defence Institute of Advanced Technology, DIAT-DRDO, Pune, India

Dr. Soumya S. - Defence Institute of Advanced Technology, DIAT-DRDO, Pune, India

Real-Time Defect Detection in Robotic Welding of Aluminium 5083 Integrating Predictive Analytics and Machine Learning, (IMECE-India2026-189753)

Technical Paper Publication

Aman Nohwal - Indian Institute of Technology Delhi

Narendra Kaler - Indian Institute of Technology Delhi

Sivanandam Aravindan - Indian Institute of Technology Delhi

Sunil Jha - Indian Institute of Technology Delhi

A Comparative Study & Evaluation of Mdcnnet and Yolo11 Architectures for Real-Time Welding Defect Monitoring, (IMECE-India2026-187795)

Technical Paper Publication

Pranay Dhongde - Visvesvaraya National Institute of Technology (VNIT), Nagpur

Vinod Barlikar - Visvesvaraya National Institute of Technology (VNIT), Nagpur

Shital Chiddarwar - Visvesvaraya National Institute of Technology (VNIT), Nagpur

ACES1.3 - Green Hydrogen Production, Storage, and Integrated Hydrogen Energy Systems and ACES2.3 - Emerging Technologies – Clean Energy

9/3/2026

4:30 PM to 6:30 PM - CH05

Chair: Ankur Mullick - PIL

Chair: Pradeep Chauhan - Pipeline Infrastructure Ltd.

Presentations:

Effect of Exhaust Flap Opening and Flow Control on the Behavior of Catvap®-Based Emission Control in Mechanically Governed Diesel Engines, [IMECE-India2026-189919]

Technical Paper Publication

Premnath D - IIITDM Kancheepuram

Boda Meenamrutha - IIITDM Kancheepuram

N Rino Nelson - IIITDM Kancheepuram

Optimization of Chordwise Rectangular Vortex Generator Placement for Enhanced Hydrodynamic Performance of Symmetric Naca 0012 Hydrofoil, [IMECE-India2026-189083]

Technical Paper Publication

Pradeep Ojha - PDPM IIITDM JABALPUR (M. P.)

Sujoy Mukherjee - PDPM, IIITDM, Jabalpur

Parikshit Kundu - IEST, Shibpur

Fabrication of Bipolar Plate Using Electromagnetic Forming and Performance Analysis of Proton Exchange Membrane Fuel Cell, [IMECE-India2026-189481]

Technical Paper Publication

Jagan Kumar K - Anna University - MIT Campus

Azeez Mahaboob Bijili S - Anna University - MIT Campus

Pooja K - Anna University - MIT Campus

Dhanush Kumar S M - Anna University - MIT Campus

Pavithra E - Anna University - MIT Campus

Mohammed Abdul Kadar Rahiman - Anna University - CEG Campus

Shanmugasundaram Karibeeran - Anna University - CEG Campus

Influence of Aspect Ratio on the Convection-Driven Melting of Phase Change Material in a Square Enclosure, [IMECE-India2026-189267]

Technical Paper Publication

Sachin Singh - Indian Institute of Technology Jodhpur

Shobhana Singh - Indian Institute of Technology Jodhpur

Rishi Purohit - Indian Institute of Technology Jodhpur

Computational Analysis of a Novel Parabolic-Bladed Savonius Style Wind Turbine for Off-Shore Applications, [IMECE-India2026-187980]

Technical Paper Publication

Mohsin Azam - Indian Institute of Technology Guwahati

Nur Alom - National Institute of Technology Meghalaya

Parag K. Talukdar - Assam down town University

Ujjwal K. Saha - Indian Institute of Technology Guwahati

A Computational Fluid Dynamics-Based Synthetic Micro-Computed Tomography Simulation Framework for Virtual Imaging Demonstration, [IMECE-India2026-189076]

Technical Paper Publication

Subhankar Ray - Indian Institute of Technology Bhubaneswar

Kamaljit Singh - Heriot-Watt University, Edinburgh

Prasenjit Rath - Indian Institute of Technology Bhubaneswar

Swarup Kumar Mahapatra - Indian Institute of Technology Bhubaneswar

ATT3.1 - Thermal Systems Optimization

9/3/2026

4:30 PM to 6:30 PM - CH12

Chair: Prashant Kumar -

Presentations:

Condition Based Predictive Maintenance Strategy for Fire Main Pump Used in Ships, [IMECE-India2026-188000]

Technical Paper Publication

Sriramesh Narayanan - Hindustan Institute of Technology and Science, Padur, Chennai

Hariram V - Hindustan Institute of Technology and Science, Padur, Chennai

Physics-Aligned Modelling and Multi-Objective Fitness Function Development for Design Optimization of a Batch Reverse Osmosis System, [IMECE-India2026-188872]

Technical Paper Publication

Rahul Deharkar - Pandit Deendayal Energy University

Rasesh Nair - Pandit Deendayal Energy University

Ayush Singh - Pandit Deendayal Energy University

Optimization of Carbon Capture and Hydrogen Production in Mcfc Systems Using 600 Kw Marine Diesel Engine Exhaust Data and Aspen Plus Simulation, [IMECE-India2026-189625]

Technical Paper Publication

Raghavendra Reddy Gurram - national institute of technology, warangal

Veeresh Babu Aluru - National Institute of Technology, Warangal

Ravikumar Puli - National Institute of Technology, Warangal

Temperature Profile and Residence Times of Iron Ore Fines in a Laboratory-Scale Flash Ironmaking Furnace Calculated Using Cfd Modelling, [IMECE-India2026-189777]

Technical Paper Publication

Subham Ranjan - IIT Kanpur

SHUBHAM JAISWAL - Indian Institute of Technology Kanpur

Devendra Narna - IIT Kanpur

Rahul Sarkar - IIT Kanpur

Laltu Chandra - IIT Kanpur

Lightweight Composite Heater Using Graphite Heat Spreader for Freeze Protection Applications, [IMECE-India2026-189201]

Technical Presentation Only

Nitesh Kumar Jha - Collins Aerospace
Gururaja Bambila - Collins Aerospace
Selvaraj Sugumaran - Collins Aerospace

PVP4.3 Materials & Fabrication and PVP7.1 Piping Engineering

9/3/2026

4:30 PM to 6:30 PM - CH03

Chair: Athreya Sadasivam - Independent Consultant

Chair: Parthapratim Brahma -

Chair: Rajesh Madhani -

Chair: GAURAV BHENDE - PROTTON SYNERGY PVT. LTD.

Chair: Ramkumar Salem Gururajan - KBR

Presentations:

Frp/grp Piping Systems: An Engineering Perspective, [IMECE-India2026-187327]

Technical Paper Publication

Avijit Ashesh - KBR Inc.

Dinesh Jain - KBR Inc.

Mrinmoy Ghosh Choudhury - KBR Inc.

Optimized Support Strategies for Safe Handling of Non-Metallic & Metallic Pipes, [IMECE-India2026-187047]

Technical Paper Publication

Yuqing Liu - Bechtel Energy, Inc.

Rajneesh Kumar Tripathi - Bechtel Manufacturing and Technology

A Review of Slide Plate Systems and Other Approaches for Friction Reduction at Pipe Supports in Oil & Gas Refineries, [IMECE-India2026-187763]

Technical Paper Publication

SUKHJINDER SINGH DARGAN - KBR

Himanshu Seth - KBR

Mrinmoy Ghosh - KBR India Pvt limited

Resolving Hydrotest Ambiguity for Tied Universal Expansion Joints—code Requirements, [IMECE-India2026-187762]

Technical Paper Publication

Sukhjinder Singh Dargan - KBR India Pvt limited

Harisanker S - KBR

Mrinmoy Ghosh - KBR

Comparative Approaches to Equipment Layout Using Oisd, Ge Gap, Pip, and Shell Dep Standards, [IMECE-India2026-187572]

Technical Paper Publication

Vijita Nigam - KBR Inc.

Mrinmoy Ghosh Chaudhary - KBR Inc.

Vikrant Lende - KBR Inc.

Vikas Budakoti - KBR Inc.

Addressing Cost-Driven Vulnerabilities: Preventive Design Approach Against Hisc in Fpso Splash Zone, [IMECE-India2026-

185872]

Technical Paper Publication

Sanjaynath Subramanian - independent researcher

Chiranjeevi Geddani - independent researcher

Srinadh Pamula - independent researcher

SSDM1.3 - Structures

9/3/2026

4:30 PM to 6:30 PM - CH07

Chair: Shashidhar Shivarudrappa - COLLINS AEROSPACE

Chair: Shahul Nazar - Technical Specialist, Airbus

Presentations:

Data-Driven Prediction of Structural Response in Cantilever Beams With Circular Discontinuities Using Physics-Based Simulations, [IMECE-India2026-197385]

Technical Presentation Only

Sahil Sura - Ansys Software Pvt. Ltd.

Thermo-Mechanical Behaviour of Non-Asbestos Organic (Nao) Brake Pad Composites Under Sub-Critical Thermal Ageing: A Phenomenological Modelling Approach, [IMECE-India2026-189791]

Technical Paper Publication

Susmitha P U - Government Engineering College Barton Hill, TVM

Akshay S S - Government Engineering College Barton Hill, TVM

Naupal N S - Indian Institute of Space Science and Technology

Study on the Optimized Design of Interstage Structure With Closely Stiffened, Orthogrid and Isogrid Configurations, [IMECE-India2026-189108]

Technical Paper Publication

Hitesh Arvindan R - Human Space Flight Centre, ISRO

Prasun Kumar Nag - Liquid Propulsion Systems Centre, ISRO

S. Anup - Indian Institute of Space Science and Technology

Reinforcement Learning-based Design Optimization of a Piezoelectric Cantilever Beam Vibration Energy Harvester, [IMECE-India2026-187435]

Technical Paper Publication

Abel George Abraham - Indian Institute of Information Technology Kottayam

Meagan Mathew - Indian Institute of Information Technology Kottayam

Minu A Pillai - Indian Institute of Information Technology Kottayam

Exploring Hybrid Functional and Temporal Neural Architectures Based on Kan and Gru for Damage Detection in Guided Wave-Based Shm, [IMECE-India2026-189336]

Technical Paper Publication

Goutham K B - Indian Institute of Space Science and Technology

Bijudas C R - Indian Institute of Space Science and Technology

Buckling Analysis of Functionally Graded Material Plates Using

Non-Polynomial Higher-Order Shear Deformation Theory, {IMECE-India2026-187442}

Technical Paper Publication

Smruti Ranjan Sahoo - Indian Institute of Technology Kharagpur

Surendra Verma - Indian Institute of Technology (BHU) Varanasi

Bhriagu Nath Singh - Indian Institute of Technology Kharagpur

Nonlinear Bending-torsion Coupling and Internal Resonance in Slender Structures With Cross-Sectional Variability, {IMECE-India2026-188913}

Technical Paper Publication

Agam Porwal - Indian Institute of Space Science and Technology

M. S. Aswathy - Indian Institute of Space Science and Technology

Anish Kumar - Indian Institute of Space Science and Technology

SSDM2.3 - Structural Dynamics, Modelling & Simulation

9/3/2026

4:30 PM to 6:30 PM - CH13

Chair: Abhijit Chaudhuri - Airbus

Chair: Abhinav Ravindra Dehadrai -

Presentations:

Design, Modeling, and Testing of Air-Propelled Cargo Hyperloop Transportation System, {IMECE-India2026-197611}

Technical Presentation Only

Bijaya Bikram Samal - Indian Institute of Technology Kanpur

S Adarsh - Indian Institute of Technology Kanpur

Suraj Kumar Mishra - Indian Institute of Technology Kanpur

Jefin T Jacob - Indian Institute of Technology Kanpur

Ajeet Bharti - Indian Institute of Technology Kanpur

Sanu Chakraborty - Indian Institute of Technology Kanpur

Rajesh Ranjan - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Interpretable Nonlinear Dynamics of Composite Beams in Flow: μ -Metric Regime Detection and Pinn-Constrained Reduced-Order Modeling, {IMECE-India2026-189232}

Technical Paper Publication

Kartik Tandel - Dayananda Sagar University

Rammohan B - RV University

Harish KR - RV University

Tejashree H - Dayananda Sagar University

Ayan Samanta - Dayananda Sagar University

Rishab Badiger - Dayananda Sagar University

Srinath R - Dayananda Sagar University

Sudha Deepthi - Dayananda Sagar University

Integrated Vibro-Acoustic Simulation of an Internal Combustion Engine Using Modal and Frequency Response Methods, {IMECE-India2026-188808}

Technical Paper Publication

Krishnamurthy Gs - Amrita Vishwa Vidyapeetham, Coimbatore

Srihari S - Amrita Vishwa Vidyapeetham, Coimbatore

Saravanamurugan S - Amrita Vishwa Vidyapeetham, Coimbatore

Numerical Investigation of a Coanda-Based Uav for Enhanced Aerodynamic Performance, {IMECE-India2026-189365}

Technical Paper Publication

Dr. Srinath R - Dayananda Sagar University

Vaibhavi Vinaykumar Ghatge - Dayananda Sagar University

Aadarsha M Reddy - Dayanada Sagar University

Harshith AL - Dayanada Sagar University

Rakshit S Hulkund - Dayananda Sagar University

Deeksha R - Dayanada Sagar University

Dr. K. Sudha Deepthi - Dayanada Sagar University

Kartik S Tandel - Dayananda Sagar University

Topology Optimization of 250cc Bike Engine Mounting Using Design Simulation, {IMECE-India2026-189864}

Technical Paper Publication

Revant Kumar - Dayananda Sagar University, Bengaluru

Ananda Krishnan - Dayananda Sagar University, Bengaluru

Harsha B K - Dayananda Sagar University, Bengaluru

Lokendra Singh - Dayananda Sagar University, Bengaluru

Naseem Khayum - Dayananda Sagar University, Bengaluru

Topology Optimization Through Whole-Field Photoelasticity: An Experimental Validation Study, {IMECE-India2026-186959}

Technical Paper Publication

Avilasha Bg - Dayanandasagar College of Engineering Bangalore

Ramakrishna Ds - JNNCE

MT8.1 - Traditional and hybrid machining processing

9/3/2026

4:30 PM to 6:30 PM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology Indore

Chair: Sivanandam Aravindan - Indian Institute of Technology Delhi

Chair: Janakarajan Ramkumar - Indian institute of technology Kanpur, India

Presentations:

Experimental Investigation and Optimization of Kert Angle in Abrasive Water Jet Machining of Inconel 939 Alloy, {IMECE-India2026-190092}

Technical Paper Publication

Praveen Jayapalan - Hindustan Institute of Technology and Science, Padur

Rajesh Munusamy - Hindustan Institute of Technology and Science, Padur

Sandhya Jayakumar - Hindustan Institute of Technology and Science, Padur

Hariram V - Hindustan Institute of Technology and Science, Padur

Electrochemical Diamond Grinding as a Hybrid Finishing Technique for Additively Manufactured Metallic Components, {IMECE-India2026-188043}

Technical Paper Publication

Naisarg Sagathiya - Indian Institute of Technology Kanpur
Vyom Sharma - Indian Institute of Technology Dharwad
Janakarajan Ramkumar - Indian Institute of Technology Kanpur

Deep Learning Application in Dry, Wet, and Cryogenic (lco2) Assisted High Speed Turning of Inconel-718 Using Ceramic and Carbide Tool, (IMECE-India2026-189395)

Technical Paper Publication

Shubhanshi Mishra - Institute of Infrastructure Technology Research and Management (IITRAM)

Aastha Maheta - Institute of Infrastructure Technology Research and Management (IITRAM)

Navneet Khanna - Institute of Infrastructure Technology Research and Management (IITRAM)

Friction Crush Welding of Aisi 304 Steel Corner Joints: Process Parameter Analysis, (IMECE-India2026-186869)

Technical Paper Publication

Ashu Kumar - University of Petroleum and Energy Studies, Dehradun

Gurinder Singh Brar - National Institute of Technology Uttarakhand

Experimental Validation and Ann-Based Simulation of Optimized Punch Entry, (IMECE-India2026-188268)

Technical Paper Publication

Girish Dhote - Yeshwantrao Chavan College of Engineering

Avinash Thakre - Visvesvaraya National Institute of Technology

Monali Dhote - Yeshwantrao Chavan College of Engineering

Comparative Study of Cryogenic Co₂ and Mql Machining of Inconel 625 Using Micro-Textured Tools, (IMECE-India2026-188627)

Technical Paper Publication

Reegan Sagayadevan - College of Engineering Guindy, Anna University

Pradeep Kumar Murugesan - College of Engineering Guindy, Anna University

Arunprakash Natarajan - College of Engineering Guindy, Anna University

Mohammed Abdul Kadar Rahiman - College of Engineering Guindy, Anna University

Junolin Sharon S - College of Engineering Guindy, Anna University

CPSAIML3.1 - Mine Safety, Aerial & Field Autonomy

9/3/2026

4:30 PM to 6:30 PM - CH06

Chair: Lalit Kumar -

Presentations:

Design and Development of a Modular FEA-Optimized Autonomous UAV with Real-Time Obstacle Avoidance, (IMECE-India2026-186192)

Technical Paper Publication

Ambar Roy - SRMIST-KTR

Partha Roy - IIT (ISM) Dhanbad

Sagar Mall - VIT Vellore

Yogesh Tripathi - IIT Guwahati-TIDF

Santosha K. Dwivedy - IIT Guwahati

Cis-Swarm: A Bio-Inspired Cognitive Immune System for Fault-Tolerant, Ew-Resilient Autonomous Drone Swarms, (IMECE-India2026-188223)

Technical Paper Publication

Rochana Deshpande - Dr. Vishwanath Karad MIT World Peace University, India

Ananya Shetty - Dr. Vishwanath Karad MIT World Peace University, India

Advay Shinde - Dr. Vishwanath Karad MIT World Peace University, India

Mangesh Bedekar - Dr. Vishwanath Karad MIT World Peace University, India

Localizesort: Localization-Based Stationary Object Tracking in Precision Agriculture, (IMECE-India2026-185702)

Technical Paper Publication

Srihari Vemuru - Iowa State University

Kumar Ankit - Indian Institute of Science

Sarvesh Prasanth - Indian Institute of Science (Bengaluru)

Debasish Ghose - Indian Institute of Science (Bengaluru)

Shishir Kolathaya - Indian Institute of Science (Bengaluru)

Ras-Based Intelligent Mining Safety System Using Multi-Sensor Fusion, Cognitive Digital Twin and AI-Driven Hazard Prediction, (IMECE-India2026-189137)

Technical Paper Publication

Dhanush N - Dayananda Sagar University

Gracey Dugar - Dayananda Sagar University

Disha S Jain - Dayananda Sagar University

Cognitive Cyber-Physical-Human Framework for Predictive Safety and Environmental Intelligence in Coal Mines, (IMECE-India2026-189893)

Technical Paper Publication

Anandhappriya S - Amrita Vishwa Vidyapeetham Chennai Campus

Hirshik Balaji C - Amrita Vishwa Vidyapeetham Chennai

Piyush Pratap S - Amrita Vishwa Vidyapeetham Chennai Campus

Abhishek Jha - Amrita Vishwa Vidyapeetham Chennai Campus

Autoblast: A Cyber-Physical Agv Framework for Predictive and Safe Underground Mining Operations, (IMECE-India2026-189911)

Technical Paper Publication

Anandhappriya S - Amrita Vishwa Vidyapeetham

Hirshik Balaji C - Amrita Vishwa Vidyapeetham Chennai

Piyush Pratap Singh - Amrita Vishwa Vidyapeetham Chennai Campus

Abhishek Jha - Amrita Vishwa Vidyapeetham Chennai Campus

*Chair: Arul Kirubakaran - Baker Hughes**Chair: Sakale Bharath -**Presentations:*

Impact Analysis of Spring Foil Compliance on the Dynamic Behavior of Gas Foil Bearing-Supported Rotors, [IMECE-India2026-187826]

Technical Paper Publication

Harikrishnan C I - Indian Institute of Space Science and Technology

Praveen Krishna I R - Indian Institute of Space Science and Technology

Sudhakar Gantasala - Independent Researcher

Seismic Analysis of Sodium Pump in Fast Breeder Reactor, [IMECE-India2026-187929]

Technical Presentation Only

Ranjit Jovin Cyriac - Indira Gandhi Center for Atomic Research

S. K. Pandey - Indira Gandhi Center for Atomic Research

S. D. Sajish - Indira Gandhi Center for Atomic Research

A Residual Hybrid In Situ Balancing Procedure Employing the Augmented Trial-Weights Technique on a Flexible Rotor Levitated by Active Magnetic Bearings, [IMECE-India2026-188261]

Technical Paper Publication

Bala Murugan S - Indian Institute of Technology Guwahati

R K Behera - National Institute Of Technology Rourkela

Finite Element-based Torsional Critical Speed and Resonance Mitigation of a Multistage Centrifugal Pump Gear Train, [IMECE-India2026-189480]

Technical Paper Publication

Ramana Podugu - Anurag Engineering College, Kodad

Raghu Kumar - K S Institute of Technology, BANGALORE

Rotor Dynamic Assessment of High-Speed Process Pumps for Oil & Gas Applications, [IMECE-India2026-189708]

Technical Presentation Only

Jayakumar Balasubramanian - Flowserve India Controls Private Limited

Integrated Quasi-Dynamic and Finite Element Modelling for Dynamic Analysis of Bearing Faults in Roller Bearings, [IMECE-India2026-190079]

Technical Paper Publication

Vishal Salunkhe - Fr. C. Rodrigues Institute of Technology, Vashi

Prathmesh Bhoir - Fr. Conceicao Rodrigues Institute of Technology, Vashi

Ayush Surwade - Fr. C. Rodrigues Institute of Technology, Vashi

Manish Watere - Fr. C. Rodrigues Institute of Technology, Vashi

Vedang Surve - Fr. C. Rodrigues Institute of Technology, Vashi

S. M. Khot - Fr. C. Rodrigues Institute of Technology, Vash

*Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad**Chair: Navneet Khanna - IITRAM**Chair: ANKUR GUPTA - IIT Jodhpur**Chair: Boopathy Saravanan - COLLINS AEROSPACE**Chair: Mariappan R - Honeywell**Presentations:*

Homogeneous Joining of Additively Manufactured Polymers Using Friction Spin Techniques With Consumable Tool Pin, [IMECE-India2026-187653]

Technical Paper Publication

Kushagra Patel - Pandit Deendayal Energy University

Raj Pandya - Pandit Deendayal Energy University

Parth Apamathi - Pandit Deendayal Energy University

Megh Raval - Pandit Deendayal Energy University

Deepan Shah - Pandit Deendayal Energy University

Vishvesh Badheka - Pandit Deendayal Energy University

Torsional Properties of Fdm 3d-Printed Pla-Cf: The Effect of Build Orientation, [IMECE-India2026-188058]

Technical Paper Publication

Zaid Rathod - Pandit Deendayal Energy University

Megh Raval - Pandit Deendayal Energy University

Deepan Shah - Pandit Deendayal Energy University

Raj Pandya - Pandit Deendayal Energy University

Vishvesh Badheka - Pandit Deendayal Energy University

Development and Characterization of Novel Additively Manufactured Nanocomposites With Tunable Microstructures, [IMECE-India2026-189197]

Technical Paper Publication

Jayaram Pothnis - Ramaiah Institute of Technology

Abhilash Mungaravalli Nagaraja - Guerin Technologies Pvt Ltd

Syedeen Khan - Ramaiah Institute of Technology

Rammohan Bhanumurthy - R V University

Multi-Layer Continuous Fiber Reinforced Steel Matrix Composite Fabrication Through Wire Arc Additive Manufacturing Technique, [IMECE-India2026-189209]

Technical Paper Publication

Sathesh Raja V - IIT Guwahati

Umesh Melkani - IIT Guwahati

Udit Kumar - IIT Guwahati

Sojan Kapil - IIT Guwahati

Nelson Muthu - IIT Palakkad

Comparative Assessment of Machine Learning Models With Emphasis on Generalization for Flow Stress Prediction of Additively Manufactured Al2024 Alloy, [IMECE-India2026-188342]

Technical Paper Publication

Mohanraj M - Indian Institute of Technology Madras
Polaniappan Ramu - Indian Institute of Technology Madras
Jayaganthan Rengaswamy - Indian Institute of Technology Madras

Experimental Evaluation of Overhang Angle-Induced Strength Reduction in Fdm-Printed Pla, [IMECE-India2026-197148]

Technical Presentation Only

Syed Muzzammil - Boeing India
Anirudh Srikanth Vasist - Boeing India
Kumara M Krishnappa - Boeing India
Saketh Behara - Boeing India

AM9.1 - Materials for (strategic sectors) Aerospace and Defense applications

9/3/2026

4:30 PM to 6:30 PM - CH08

Chair: Prof. R. Santhanam -

Presentations:

Transient Thermal Analysis of a Metal-ceramic Functionally Graded Flight Vehicle Nose Section Under Aerodynamic Heating Using Finite Element Modeling, [IMECE-India2026-189536]

Technical Paper Publication

Harsh Verma - Defence Institute of Advanced Technology (DIAT)
R Santhanam - Defence Research and Development Laboratory (DRDL)

Inverse Design of Mechanical Metamaterials Using Neural Surrogates and Meta-Heuristic Optimization, [IMECE-India2026-187552]

Technical Paper Publication

Dheeraj S Nair - Indian Institute of Information Technology, Design and Manufacturing, IIITDM Kancheepuram
Rajnish Mallick - Indian Institute of Information Technology, Design and Manufacturing, IIITDM Kancheepuram

Effect of Laser Assisted Doping on Piezoresistance of Semi-Insulating 4h-Silicone Carbide, [IMECE-India2026-188784]

Technical Paper Publication

SREE HARSHA CHOUTAPALLI - INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Daisuke Nakamura - Kyushu University

Jayaganthan R - Indian Institute of Technology Madras

Nilesh J Vasa - INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Numerical Investigation of a Mechanical Metamaterial Based Continuous Camber and Twist Morphing Wing, [IMECE-India2026-189613]

Technical Paper Publication

Deepak Kumar - National Institute Of Technology Karnataka
Pratheek Bandigedi - National Institute of Technology Karnataka
Naisha Kishore - National Institute of Technology Karnataka
Goutham Sunil - National Institute of Technology Karnataka

Theoretical Investigation of Laser Shock Peening on Fatigue Performance of Hard Anodized Aa 7075 Alloy, [IMECE-India2026-189212]

Technical Paper Publication

J. Saandip Datta - National Institute of Technology Warangal

Divya Sudarsi - National Institute of Technology Warangal

Srinagalakshmi Nammi - National Institute of Technology Warangal

Dynamic Characteristics of Architected Diamond Tpm's Sandwich Beam, [IMECE-India2026-187622]

Technical Paper Publication

Eqbert K - National Institute of Technology, Tiruchirappalli

Akshay Aneesh - TKM College of Engineering

Nitesh Sakhare - National Institute of Technology, Tiruchirappalli

R Prakash - National Institute of Technology, Tiruchirappalli

Synthesis of Diamond Reinforced Hybrid Reaction Bonded Silicon Carbide, [IMECE-India2026-189887]

Technical Paper Publication

R Vivek Sriram - INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Dr. Nilesh Jayantilal Vasa - INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Dr. Santanu Mandal - Carborundum Universal Limited

GT2.2 - Turbines and GT7.1 - Advanced Manufacturing, Materials and Coatings

9/3/2026

4:30 PM to 6:30 PM - CH02

Chair: Mr. RD Bharatan -

Chair: Rajesh Ranjan -

Chair: Mr. Srinivasan Swaminathan -

Chair: Koushik Vishwanathan -

Presentations:

Design and Analysis of a Single-Stage Axial Turbine: Multall-Cfx Workflow, [IMECE-India2026-188602]

Technical Paper Publication

Logesh Nagarethinam - Department of Mechanical Engineering, Amrita Vishwa Vidyapeetham, Amritapuri, Kerala, India

Dr. Vikas Rajan - Department of Mechanical Engineering, Amrita Vishwa Vidyapeetham, Amritapuri, Kerala, India

Prasanna Chikkamalliah - Everlence India Private Limited

Influence of Advanced Three-Dimensional Blade Features on the Performance of an Axial Turbine, [IMECE-India2026-187204]

Technical Paper Publication

Saravanan Venkatesh - Organisation: Triveni Turbines Limited

Jayshankar Ray - Organization: Triveni Turbines Limited

Ashutosh Sharma - Organisation: Triveni Turbines Limited

Rohan Chavan - Organization: Triveni Turbines Limited

Pramodchandra Gopi - Organization: Triveni Turbines Limited

Design of a Novel Blade Passage for Aero-Thermal Investigations

of a High-Pressure Turbine Nozzle Guide Vane, (IMECE-India2026-189726)

Technical Paper Publication

Daksh Gupta - Indian Institute of Technology Kharagpur

Chetankumar Mistry - Indian Institute of Technology Kharagpu

Resolving Unsteady Wake Dynamics in a Transonic Low-Pressure Turbine via Hybrid Scale-Resolving Simulations, (IMECE-India2026-189177)

Technical Paper Publication

SMRUTIRANJAN NAYAK - Indian Institute of Technology Kanpur

Harshal Akolekar - Indian Institute of Technology Jodhpur

Rajesh Ranjan - Indian Institute of Technology Kanpur

Failure Mechanisms of Thermal Spray Coating Systems Under Bending Loads, (IMECE-India2026-187221)

Technical Paper Publication

Adya Charan Arohi - Indian Institute of Technology Bombay

Saim Abbas - Indian Institute of Technology Bombay

Sanjay Sampath - Stony Brook University, US

Viswanathan Venkatachalapathy - Stony Brook University, US

Dheepa Srinivasan - Baker Hughes, Bangalore, India

Nagamani Jaya Balila - Indian Institute of Technology Bombay

Manufacturing-Induced Linear Indications in Est Quality Ss403cb Gas Turbine Compressor Blades: A Case Study on Detection and Quality Assurance, (IMECE-India2026-187821)

Technical Paper Publication

Kamaldeep Gupta - Bharat Heavy Electricals Limited

Priyanka Vankudavath - Bharat Heavy Electricals limited

Antony Harison Mc - BHEL Corporate R&D



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WHO WE ARE

Precision Equipments was established in the year 1981. Ever since its inception, it has been steadily growing and now it is one of the most preferred suppliers for the design & manufacture of Process Equipment mainly Heat Exchangers.

WHAT WE DO

Our product portfolio encompasses a comprehensive range of heat transfer solutions, including all TEMA-type shell-and-tube heat exchangers, plate-and-shell heat exchangers, plate-and-frame heat exchangers, air-cooled heat exchangers (ACHE/AFC), and air pre-heaters. We also specialize in the design and manufacture of pressure vessels, reactors, and columns, serving the Oil & Gas, LNG, Power, Fertilizer, and Chemical Industries worldwide. Our solutions are engineered to maximize thermal efficiency and optimize lifecycle costs through customized designs, backed by strong in-house thermal and mechanical engineering expertise, including advanced FEA and CFD capabilities.



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ASME U-2 Stamp
ASME R Stamp
ASME S Stamp
BV Marine
National Board (NB)
ISO 9001:2015; ISO 14001:2015; ISO 45001:2018

CORE CAPABILITIES & INFRASTRUCTURE

Ø - 5M
DIAMETER

= 30M
LENGTH

MT - 300MT
WEIGHT

- 500MM
TUBESHEET THK



END TO END
FABRICATION
UNDER ONE
ROOF



IN-HOUSE
MECHANICAL
& THERMAL
DESIGN



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FEA
CAPABILITY



ADVANCED
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Chennai 602 105, Tamil Nadu, India.

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road, Usain Nagar,
Meyyandi, Tiruvallur - 601402,
Tamil Nadu, India.

For Business Enquiries:

✉ info@precisione.com
☎ +91 98848 90112

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TECHNICAL SESSION SCHEDULE

FRIDAY, 4TH SEPTEMBER 2026

FRIDAY, 9/4/2026

IOGP5.2 - Pipeline Integrity Management

9/4/2026

11:00 AM to 1:00 PM - CH01

Chair: Saumitra Shankar Gupta - CHT

Chair: Raj Kishore - Engineers India Ltd.

Chair: Shiv Verma -

Presentations:

Going the Extra Mile With Seasoned Turnkey Pipeline Direct Assessment Programs, [IMECE-India2026-188428]

Technical Paper Publication

Ashish Khera - Allied Engineers

Bidyut Baniah - Allied Engineers

Integrated Approach for Ac Corrosion Defect Identification and Risk Assessment: A Case Study, [IMECE-India2026-189674]

Technical Paper Publication

Manish Mauti - BPCL

Uttam Kumar Sahu - BPCL

Automated Weld Ultrasonic Testing of Line Pipes: New Requirements, Equipment, and Experiences, [IMECE-India2026-188916]

Technical Presentation Only

Kunwarpal Singh - Welspun corp Ltd

T. S Kathayat - Welspun corp Ltd

Atul Srivastava - Welspun Corp Ltd

Dilipkumar Rath - Welspun Corp Ltd

Akella Pavan Kumar - Welspun Corp Ltd

Multifactor Segmentation for Oil and Gas Pipeline: Enhancing Safety and Economic Sustainability, [IMECE-India2026-186683]

Technical Paper Publication

Ajay Jain - Quest Global Engineering Services Pvt Ltd

Veerendra Korrapati - Quest Global Engineering Services Pvt Ltd

Statistical Approach for Quantification of Risk Due to Microbial Influenced Corrosion in Petroleum Pipelines, [IMECE-India2026-188133]

Technical Presentation Only

Uttam Kumar Sahu - BHARAT PETROLEUM CORPORATION LIMITED

Keshav Dewangan - BHARAT PETROLEUM CORPORATION LIMITED

Statistical Approach for Quantification of Risk Due to Microbial

Influenced Corrosion in Petroleum Pipelines, [IMECE-India2026-188144]

Technical Presentation Only

Uttam Kumar Sahu - BHARAT PETROLEUM CORPORATION LIMITED

Nikhil Chaturvedi - BHARAT PETROLEUM CORPORATION LIMITED

RA4.1: Robotics & Automation-Specialized Navigation & Control

9/4/2026

11:00 AM to 1:00 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Trajectory Tracking Control of Marine Surface Vessels With Robust Compensation for Unknown Water Currents, [IMECE-India2026-189916]

Technical Paper Publication

Antara Sarkar - Indian Institute of Technology Guwahati

Basireddy Sandeep Reddy - Indian Institute of Technology Guwahati

Santosh Kumar Dwivedy - Indian Institute of Technology Guwahati

Guidance and Navigation Control of Unmanned Surface Vehicle, [IMECE-India2026-188997]

Technical Paper Publication

Ninad D. Joshi - Indian Institute of Technology Hyderabad

Ashishranjan Pradhan - Indian Institute of Technology Hyderabad

Chandrakiran Nakka - Indian Institute of Technology Hyderabad

Himabindu Allaka - Indian Institute of Technology Hyderabad

Ashok Kumar Pandey - Indian Institute of Technology Hyderabad

Atlas: A Cooperative Aerial System for Large-Scale Search and Delivery, [IMECE-India2026-187405]

Technical Paper Publication

Harshal Kolhe - Visvesvaraya National Institute of Technology, Nagpur

Spruha Khirsagar - Visvesvaraya National Institute of Technology, Nagpur

Mrumayee Limaye - Visvesvaraya National Institute of Technology, Nagpur

Sanchet Dhalwar - Visvesvaraya National Institute of Technology, Nagpur

Ishani Khaty - Visvesvaraya National Institute of Technology, Nagpur

Vishnu S - Visvesvaraya National Institute of Technology, Nagpur

Ajinkya Baxy - Visvesvaraya National Institute of Technology, Nagpur

Nagpur

Design and Experimental Validation of a Lidar-slam and Model Predictive Control Based Autonomous Robot for Voice-Assisted Hospital Logistics, {IMECE-India2026-189257}

Technical Paper Publication

Shreyan Majumdar - Vellore Institute of Technology, Chennai Campus

Saumya Ezhil - Vellore Institute of Technology, Chennai campus

Sreejan Mondal - Vellore Institute of Technology, Chennai Campus

Naren Medarametla - Vellore Institute of Technology, Chennai Campus

Pradeep Natarajan - Vellore Institute of Technology, Chennai Campus

ACES1.4 - Green Hydrogen Production, Storage, and Integrated Hydrogen Energy Systems and ACES2.4 - Emerging Technologies - Clean Energy and ACES3.1 - Nuclear Energy Forum

9/4/2026

11:00 AM to 1:00 PM - CH05

Chair: Ankur Mullick - PIL

Chair: Pradeep Chauhan - Pipeline Infrastructure Ltd.

Presentations:

Techno-Economic Assessment of Solar-Powered Green Hydrogen Integration in Gas Turbine Combined Cycle Power Plants, {IMECE-India2026-188174}

Technical Paper Publication

Pertik Komboj - Siemens Energy India Limited

Pugalenthi Nandagopal - Siemens Energy India Limited

Matthias Duerr - Siemens Energy Global GmbH & Co. KG

Anubhav Sahu - Siemens Energy India Limited

Computational Modeling of Structure-Property Relationships in Steel Alloys: Development of Synthetic Deformation Mechanisms Maps, {IMECE-India2026-189656}

Technical Paper Publication

Mariyappan Arul Kumar - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Pradeepraj Kannadhasan - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

M K Rahgul Poopathi - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Use of Recovered Cold From Lng Regasification for Distillation Based Cryogenic Carbon Capture: A Conceptual Design, {IMECE-India2026-188874}

Technical Paper Publication

Shivayan Biswas - Indian Institute of Technology Kharagpur

Tirumala Sai Bammidi - Indian Institute of Technology Kharagpur

Pavitra Sandilya - Indian Institute of Technology Kharagpur

A Lumped Parameter Model for Desublimation Based Cryogenic Carbon Capture Using Swirl Flow in a Cryogenically Cooled Cyclone Separator, {IMECE-India2026-187993}

Technical Paper Publication

Emel V Kurian - Indian Institute of Technology Kharagpur

Pavitra Sandilya - Indian Institute of Technology Kharagpur

Digital Twin-based Fatigue Damage Monitoring and Life Prediction of Longitudinal Welds in High-Pressure Hydrogen Pipelines, {IMECE-India2026-188326}

Technical Paper Publication

Gurumurthy Kagita - SRM UNIVERSITY - AP

Charan Paramata - Anup Engineering Ltd.

Mohammed Shariff Shaik - Gabriel india limited

ATT4.1 - Heat Exchangers

9/4/2026

11:00 AM to 1:00 PM - CH12

Chair: Prasanta K. Das -

Presentations:

Experimental Investigation of Flow Boiling Characteristics of Low-Concentration Ammonia-water Mixtures in a Plate Heat Exchanger, {IMECE-India2026-187343}

Technical Paper Publication

Sathyabhama A - National Institute of Technology Karnataka

Vikash Kumar Singh Chauhan - National Institute of Technology Karnataka

Ramakrishna N Hegde - Srinivas University, Institute of Engineering and Technology

Saket Uday Kshatriya - National Institute of Technology, Karnataka

Heat Exchanger Network Analysis, {IMECE-India2026-188363}

Technical Paper Publication

Vaibhav Munde - Larsen & Toubro

Venkatesh Murur - Larsen & Toubro

Abinash Bej - Larsen & Toubro

Effects of Partially Mixed Conditions in Cross Flow Heat Exchangers, {IMECE-India2026-188368}

Technical Paper Publication

Karthik Silaipillayarputhur - SASTRA University

Numerical Investigation of Thermophysical Characteristics in Airfoil- Finned Pche Under Low-Re Sco2 Flow, {IMECE-India2026-189516}

Technical Paper Publication

Samir Nanda - Indian Institute of Technology Kharagpur

Sourav Mitra - Indian Institute of Technology Kharagpur

Comparative Assessment of Thermal-hydraulic Performance of Compact Plate-Type Heat Exchangers, {IMECE-India2026-188758}

Technical Presentation Only

Rambir Bhadouriya - Precision Equipments chennai

Chair: GAURAV BHENDE - PROTTON SYNERGY PVT. LTD.

Chair: Ramkumar Salem Gururajan - KBR

Chair: Parthapratim Brahma -

Presentations:

A Practical Approach for Hdpe Piping Stress Analysis Implementation and Verification in Beam Element Software, [IMECE-India2026-187468]

Technical Paper Publication

Arati Jagam - Seatrium Engineering, Mumbai, India

Gaurav Bhende - Protton Synergy, Mumbai, India

Ramachandra G - Protton Synergy, Mumbai, India

A Comparative Evaluation of Pump Nozzle Load Standards and Their Impact on Piping Flexibility Design, [IMECE-India2026-187476]

Technical Paper Publication

Arati Jagam - SEATRIUM ENGINEERING MUMBAI PRIVATE LIMITED

Baskar Nandhakumar - Seatrium Engineering

Shankara Sailesh V - Seatrium Engineering

Impact of Asme B31J Reducer Stress Intensification Factor (Sif) on Offshore and Onshore Piping Stress Analysis, and Mitigation Through Finite Element Analysis of Reducer Geometries, [IMECE-India2026-187677]

Technical Paper Publication

Venkatachalam Narayanan - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd.,

Blessy M - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India.

Akshay Vaidyasubramaniam - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India.

Sugumar Anumanthu - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India.

Optimization of Buckling Pin Valve Reaction Forces in Piping Systems: A Case Study in Fpsa Topsides Piping, [IMECE-India2026-186487]

Technical Paper Publication

Anand Arjun Gaonkar - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Bangalore, India

Ramkumar Salem Gururajan - Kellogg Brown & Root Engineering & Construction In

Rohit Hirianna Rao - Kellogg Brown & Root Engineering & Construction In

Sanchetha Padukone Chandra Hebbar - Kellogg Brown & Root Engineering & Construction In

Enhancing Offshore Piping Integrity Through Application of Specialty Viscous Damper Supports, [IMECE-India2026-185795]

Technical Paper Publication

Muthukrishnan Jayamani - Kellogg Brown & Root Engineering & Construction In

Ramkumar Salem Gururajan - Kellogg Brown & Root Engineering & Construction In

Surendhar Sivakumar - Kellogg Brown & Root Engineering & Construction In

Vignesh V B - Kellogg Brown & Root Engineering & Construction In

Comparative Study of Seismic Analysis of a Piping System Using Static Equivalent and Response Spectrum Method in Caesar li, [IMECE-India2026-196715]

Technical Presentation Only

Prabhjyot Singh - Bharat Heavy Electricals Limited

PVP3.1 Design & Analysis

9/4/2026

11:00 AM to 1:00 PM - CH15

Chair: Mayur Brijlani -

Chair: Parthapratim Brahma -

Chair: Sandeep Goyal - Isgec Heavy Engineering

Presentations:

Importance of Plate Thickness and Measurement Method on the Strength Calculation of Plate and Shell Heat Exchangers, [IMECE-India2026-188330]

Technical Paper Publication

Thorsten Klahm - GESMEX Exchangers GmbH

Harikrishnan Prabhakar - Precision Equipments (Chennai) Pvt Ltd

Study of Gap in External Stiffening Ring of Cylindrical Pressure Vessel, [IMECE-India2026-187785]

Technical Paper Publication

Mohakkumar Patel - Godrej & Boyce Manufacturing Limited

Ibrahim Mulla - Godrej & Boyce Manufacturing Company Limited

Akash Kale - Godrej & Boyce Manufacturing Company Limited

Suraj Bhasle - Godrej & Boyce Manufacturing Company Limited

Mohit Chavan - Godrej & Boyce Manufacturing Company Limited

Finite Element Analysis of a Thick Pressure Vessel With Modified Spherical Geometry Under Internal Pressure, [IMECE-India2026-189865]

Technical Paper Publication

Athulya Sunil - Government Engineering College Barton Hill

Sooryaputhri D B - Government Engineering College Barton Hill

Noofal N S - Indian Institute Of Space Science And Technology, Trivandrum, Kerala

Design of Thermowells in Pressure Vessel, [IMECE-India2026-188056]

Technical Paper Publication

Himanshu Bhatt - MechXcel Designs LLP

Ramnath Bichu - PYRO ELECTRIC INSTRUMENTS GOA PVT LTD

Rajendra Kanetkar - Esquire Ideation

Transforming Euro Iv Shell and Tube Type Heat Exchangers to Euro Vi Norms, {IMECE-India2026-189843}

Technical Paper Publication

Haresh Sippy - Tema India Ltd

Thermo-Hydraulic Performance Analysis of an Embaffle® Shell-and-Tube Heat Exchanger Using Porous-Media Cfd Modeling, {IMECE-India2026-188907}

Technical Paper Publication

Bhavesht Prajapati - The Anup Engineering Limited

Md Tabir - The Anup Engineering Limited

Raj Mistry - The Anup Engineering Limited

Nishant Prajapati - The Anup Engineering Limited

Saurabh Modi - Bluechip Infocorp Pvt.Ltd

Marta Mantegazza - Brembana & Rolle

SSDM1.4 - Structures

9/4/2026

11:00 AM to 1:00 PM - CH07

Chair: Joseph J Kakkassery - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Chair: Unnikrishnan Sreenivasan - Boeing India

Presentations:

Effect of Sheared Edge Notch on the Dynamic Three-Point Bending Fracture of Dp780 Hat Section, {IMECE-India2026-189789}

Technical Presentation Only

Abhishek Raj - Tata Steel Ltd.

Manikandan G - Centre for Innovation in Mobility (R&D, Tata Steel Ltd.)

Pundan Kumar Singh - Centre for Innovation in Mobility (R&D, Tata Steel Ltd.)

C Lakshmana Rao - IIT Madras

Correlation of Experimental Test Data and Finite Element Strength Analysis of a Thermoplastic Specimen, {IMECE-India2026-189047}

Technical Presentation Only

Anubhav Srivastava - Collins Aerospace

Shashidhar Shivarudrappa - Collins Aerospace

Sharad Anand Shivaprasad - Collins Aerospace

Research on Optimization of Aerospace Components Using Lyapunov Function With Design Practice of Front Landing Gear for a 15-25 Kg Class Unmanned Aerial Vehicle, {IMECE-India2026-185450}

Technical Paper Publication

Dhairya Dosi - Indian Institute of Technology, Gandhinagar

Ram Sundhar T. - National Institute of Technology Tiruchirappalli

Rajasegarane R - Indian Institute of Technology, Madras

Aravind S. - Indian Institute of Technology, Madras

Cyclic Life Estimation of Developmental Lox-Methane Engine by Thermo-Structural Analysis, {IMECE-India2026-186960}

Technical Paper Publication

Alexander Joseph V Paul - Liquid propulsion Systems Centre, Indian Space Research Organization

Krishnaji Jayamani - Liquid Propulsion Systems Centre, Indian Space Research Organization

Vinayaravi R - Liquid Propulsion Systems Centre, Indian Space Research Organization

Suresh Mathew Thomas - Liquid Propulsion Systems Centre, Indian Space Research Organization

Experimental Studies for Buckling of Composite Oblate Hemi-Ellipsoidal Shells Under External Pressure, {IMECE-India2026-188063}

Technical Paper Publication

Sibin Ramesh - Madras Institute of Technology, Anna University

Harini Ravi - Madras Institute of Technology, Anna University

Lohitha Varadharajan - Madras Institute of Technology, Anna University

Santhosh Rajinikanth - Madras Institute of Technology, Anna University

Gopikrishna Rangarajan - DRDL

Gangadharan R - Indian Institute of Technology Hyderabad

Arumugam Vellayalar - Madras Institute of Technology, Anna University

Fluid Structure Interaction Studies to Evaluate the Haemodynamics in the Human Abdominal Aorta Renal Artery Junction Under Varying Physiological Conditions, {IMECE-India2026-187947}

Technical Paper Publication

Gowrava Shenoy B - Manipal Academy of Higher Education

Raghuvir Pai B. - Manipal Academy of Higher Education

Ravindra Prabhu A - Manipal Academy of Higher Education

Dharshan Rangaswamy - Manipal Academy of Higher Education

Shah Mohammed Abdul Khader - Manipal Academy of Higher Education

SSDM2.4 - Structural Dynamics, Modelling & Simulation

9/4/2026

11:00 AM to 1:00 PM - CH13

Chair: Krishnamurthy GS - Royal Enfield

Chair: Abhinav Ravindra Dehadrai -

Presentations:

Credibility Assurance of Advanced Structural Simulations Driven by International Standards, {IMECE-India2026-188783}

Technical Presentation Only

Jaya Raju Namala - Airbus

Design and Simulation Analysis of an Adjustable Rocker-bogie Suspension for Mobile Robots, {IMECE-India2026-189848}

Technical Paper Publication

Shruti Deokar - Dr. Vishwanath Karad MIT World Peace University

Mitul Kumar Solanki - Dr. Vishwanath Karad MIT World Peace University, Pune

Dynamic and Acoustic Performance Evaluation of Viscoelastic Polymer Cages in High-Speed Automotive Rolling Element Bearings, [IMECE-India2026-189130]

Technical Paper Publication

Mitul Solanki - Dr. Vishwanath Karad MIT World Peace University, Pune

Deepak Hujare - Dr. Vishwanath Karad MIT World Peace University, Pune

Ratnadeep Kalzunkar - Dr. Vishwanath Karad MIT World Peace University, Pune

Analysis of Compressive Behavior of Geometrically Modified Auxetic Structures: A Numerical Study, [IMECE-India2026-188135]

Technical Paper Publication

Joel Rothinam Saleth - IIITDM Kancheepuram

N Rino Nelson - IIITDM Kancheepuram

Raguraman Munusamy - IIITDM Kancheepuram

Finite Element Analysis of Ev Battery Enclosures Using Johnson-Cook Constitutive and Damage Models, [IMECE-India2026-189984]

Technical Paper Publication

Phanish Sharma Vajhala Venkata - IIITDM Kancheepuram

Venkatesan A - IIITDM Kancheepuram

N Rino Nelson - IIITDM Kancheepuram

Numerical Investigation of the Influence of Stacking Sequence on Tension-After-Impact (Tai) Behaviour of Hourglass Cfrp Laminates Using 3d Hashin Damage Model, [IMECE-India2026-188766]

Technical Paper Publication

Rajagurunathan Madasamy - Indian Institute of Technology Madras

Raghu Prakash - IIT Madras

MT9.1 - Modelling and simulation of Machine tool and manufacturing process

9/4/2026

11:00 AM to 1:00 PM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology, Indore

Chair: Sivanandam Aravindan - Indian Institute of Technology, Delhi

Chair: Janakarajan Ramkumar - Indian institute of technology Kanpur, India

Presentations:

Cloud-Integrated Digital Manufacturing: An Automated Web-Based G-Code Generator for Precision Cnc Turning, [IMECE-India2026-189063]

Technical Paper Publication

Sarath P. - Amrita Vishwa Vidyapeetham

Rishi Kumar - Amrita Vishwa Vidyapeetham

Digital Twin-Based Numerical Investigation of Machining

Parameters and Multi-Response Cutting Characteristics in Vibration-Assisted Turning of Ti6al4v, [IMECE-India2026-187974]

Technical Paper Publication

Hamadharshini B - Amrita Vishwa Vidyapeetham

Rishi Chamarthi - Amrita Vishwa Vidyapeetham

Suraja M - Amrita Vishwa Vidyapeetham

Sumesh C S - Amrita Vishwa Vidyapeetham

Navneet Khanna - Institute Of Infrastructure Technology Research And Management (IIITRAM)

Numerical Investigation of Resistance Spot Welding in Dp980 Steel Using a Fully Coupled Multiphysics Model, [IMECE-India2026-188403]

Technical Paper Publication

Vipin Kumar Mishra - INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI ASSAM

Brajesh Asati - Research & Development TATA Steel Limited

Swarup Bag - INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI ASSAM

Kanwer Singh Arora - Research and development TATA steel limited

Transient Thermal and Cfd-Based Dielectric Flushing Analysis of Single-Spark Electric Discharge Machining of Nimonic 263 Using Ansys Cfx, [IMECE-India2026-189696]

Technical Paper Publication

Surabhi Mahana - NIT Raipur

Kolagani Sathvik - NIT Raipur

Kondapalli Lakshman Vignesh - NIT Raipur

Garle Kavya - NIT Raipur

Savara Suneel - NIT Raipur

Rajneesh Dwivedi - NIT Raipur

Mohan Kumar Pradhan - NIT Raipur

Numerical Investigation of Ply Interface Integrity on Machining-Induced Damage in Unidirectional Composites Using 3d Orthogonal Cutting Models, [IMECE-India2026-189170]

Technical Presentation Only

Pawan Kumar - Indian Institute of Technology Madras

Anil Meena - Indian Institute of Technology Madras

Shantanu S. Mulay - Indian Institute of Technology Madras

Digital Twin Framework and Metrology, [IMECE-India2026-189495]

Technical Paper Publication

Siddappaji Basavaraju - DRDO

Chair: Mr Anand Nagarajan -

Presentations:

A Cloud-Native IIoT Framework for Centralized Automation and End-to-End Control of Cng Station Operations., [IMECE-India2026-188382]

Technical Paper Publication

Dr Santanu Purohit - Bharat Petroleum corporation limited

Teepu Aditya Shankar - Bharat Petroleum Corporation Limited

Resilient Cyber-Physical Systems for Sustainable Smart Irrigation Under Infrastructure Uncertainty, [IMECE-India2026-189538]

Technical Paper Publication

Mehal V - Amrita Vishwa Vidyapeetham, Chennai

Dr. Dev Kunwar Singh Chauhan - Amrita Vishwa Vidyapeetham, Chennai

Smart Home Automation System, [IMECE-India2026-188371]

Technical Paper Publication

T.Jaya Chandra - Amrita vishwa vidya peetam

Shakti P Jena - Amrita vishwa vidya peetam

Automatic Breast ROI Segmentation and Symmetry Analysis for Thermographic Breast Abnormality Detection, [IMECE-India2026-189606]

Technical Paper Publication

Avinash Kumar - Indian Institute of Information Technology Design and Manufacturing Kancheepuram, Chennai-600127

Shiva Kant Pandey - IIITDM Kancheepuram Chennai

On Segmentation of an Electrocardiogram: Model Comparison for Determining Ejection Fraction, [IMECE-India2026-189633]

Technical Paper Publication

Nitin Pagar - MIT Art, Design & Technology University, Pune

Pallavi Adke - Dr. D. Y. Patil School of Science and Technology, Dr. D.Y. Patil Vidyapeeth, Pune

Vishal Naranje - AMITY UNIVERSITY DUBAI

Non-Invasive Voice-Based Detection of Laryngeal Disorders Using Acoustic Biomarkers and Machine Learning, [IMECE-India2026-189632]

Technical Paper Publication

Amit Dixit - PDPM IIITDM Jabalpur

Tanuja Sheorey - PDPM IIITDM Jabalpur

Vijay Kumar Gupta - PDPM IIITDM Jabalpur

Chair: Dibyendu Biswas -

Chair: Prakash Estalingam -

Presentations:

Dynamic Bandwidth Tuning Using Hexagonal Shape Memory Alloy Based Metastructure, [IMECE-India2026-186517]

Technical Paper Publication

Tanuj Gupta - Indian Institute of Technology Kanpur

Suryansh Pathak - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Bioinspired Bouligand Metastructure for Enhanced Wave Attenuation and Vibration Control, [IMECE-India2026-188935]

Technical Paper Publication

Subhadeep Sahana - Indian Institute of Technology Kanpur

Bijaya Bikram Samal - Indian Institute of Technology Kanpur

Ankur Dwivedi - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Vibroacoustic Behavior of a Circular Membrane With Multiple Line Masses, [IMECE-India2026-189731]

Technical Paper Publication

Ajju Raja Justus - Indian Institute of Technology Palakkad

Anoop Akkoorath Mana - Indian Institute of Technology Palakkad

Investigating the Dynamics of an Overhung Rotor at High-Temperature Using Empirical Mode Decomposition (Emd), [IMECE-India2026-188566]

Technical Paper Publication

Fahd Bin Abdul Hasis - Liquid Propulsion Systems Centre, Indian Space Research Organisation

Praveen Krishna I. R. - Indian Institute of Space Science and Technology

Vinayaravi R. - Liquid Propulsion Systems Centre

Ben Jacob - Liquid Propulsion Systems Centre

A Simulation Study of Intruded Bend Neck Helmholtz Resonator, [IMECE-India2026-188710]

Technical Paper Publication

Jhalu Gorain - HCLTech

Chandramouli Padmanabhan - IIT Madras

Early-Stage Bearing Degradation Detection in an Industrial Gas Turbine Using High-Temperature Acoustic Emission Sensors, [IMECE-India2026-189533]

Technical Paper Publication

Abhinandan Basu - BAKER HUGHES

Arul Kirubakaran - BAKER HUGHES

Aparna K - Baker Hughes

VD&C7.2- Dynamics and Wave propagation in architected materials and adaptive engineering structures and VD&C5.1: Novel measurement methods in Vibration and Acoustics

9/4/2026

11:00 AM to 1:00 PM - CH11

Chair: Dibyendu Biswas -

Chair: Prakash Estalingam -

Presentations:

Dynamic Bandwidth Tuning Using Hexagonal Shape Memory Alloy Based Metastructure, [IMECE-India2026-186517]

Technical Paper Publication

Tanuj Gupta - Indian Institute of Technology Kanpur

Suryansh Pathak - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Bioinspired Bouligand Metastructure for Enhanced Wave Attenuation and Vibration Control, [IMECE-India2026-188935]

Technical Paper Publication

Subhadeep Sahana - Indian Institute of Technology Kanpur

Bijaya Bikram Samal - Indian Institute of Technology Kanpur

Ankur Dwivedi - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Vibroacoustic Behavior of a Circular Membrane With Multiple Line Masses, [IMECE-India2026-189731]

Technical Paper Publication

Aiju Raja Justus - Indian Institute of Technology Palakkad

Anoop Akkoorath Mana - Indian Institute of Technology Palakkad

Investigating the Dynamics of an Overhung Rotor at High-Temperature Using Empirical Mode Decomposition (Emd), [IMECE-India2026-188566]

Technical Paper Publication

Fahd Bin Abdul Hasis - Liquid Propulsion Systems Centre, Indian Space Research Organisation

Praveen Krishna I. R. - Indian Institute of Space Science and Technology

Vinayaravi R. - Liquid Propulsion Systems Centre

Ben Jacob - Liquid Propulsion Systems Centre

A Simulation Study of Intruded Bend Neck Helmholtz Resonator, [IMECE-India2026-188710]

Technical Paper Publication

Jhali Gorain - HCLTech

Chandramouli Padmanabhan - IIT Madras

Early-Stage Bearing Degradation Detection in an Industrial Gas Turbine Using High-Temperature Acoustic Emission Sensors, [IMECE-India2026-189533]

Technical Paper Publication

Abhinandan Basu - BAKER HUGHES

Anul Kirubakaran - BAKER HUGHES

Aparna K - Baker Hughes

AM3D1.2- Current and Emerging Trends in AM

9/4/2026

11:00 AM to 1:00 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Influence of Build Orientation on Microstructure and Mechanical Properties of Wire Arc Additively Manufactured Ss347 Stainless Steel, [IMECE-India2026-189568]

Technical Paper Publication

Rajkishore Singh - IIT Jammu

Lakshmi Yadav - Indian Institute of Technology Jammu

Prateek Saxena - Indian Institute of Technology Mandi

Shiva Sekar - Indian Institute of Technology Jammu

Abhay Sharma - Indian Institute of Technology Jammu

Angshuman Kapil - Indian Institute of Technology Jammu

Predictive Deep Learning Modeling of Energy Consumption in Ball Milling of Additively Manufactured Ti6Al4V Titanium Alloy, [IMECE-India2026-186589]

Technical Paper Publication

Sachin Sharma - Institute of Infrastructure Technology Research and Management

Aastha Maheta - Institute of Infrastructure Technology Research and Management

Navneet Khanna - Institute of Infrastructure Technology Research and Management

Edge-Based Multi-Defect Detection Framework for Real-Time Fdm 3d Print Quality Assurance, [IMECE-India2026-189423]

Technical Paper Publication

Hemnath Anandan Kumar - Amrita Vishwa Vidyapeetham, Chennai campus

Mathimithran M - Amrita Vishwa Vidyapeetham, Chennai Campus

Physics-Informed Deep Learning for Subsurface Defect Detection via Air-Pocket Heat-Flow Anomaly in Pulsed Thermography, [IMECE-India2026-189612]

Technical Paper Publication

Avinash Kumar - IIITDM KANCHEEPURAM CHENNAI

Dheerendra Ghosh - IIITDM KANCHEEPURAM CHENNAI

Bharathan B - IIITDM KANCHEEPURAM CHENNAI

Design and Development of Ultrasonic Solid State Additive Manufacturing Technology for Multi Material Laminates, [IMECE-India2026-186957]

Technical Presentation Only

Rahul Naidu - Indian institute of technology Indore

Laser Based Fabrication of Copper Pillars Using a Combination of Contact and Non-Contact Mode Transfer of High Viscosity Ink, (IMECE-India2026-189728)

Technical Presentation Only

GUNASEKAR N - Indian Institute of Technology Hyderabad

Anurup Datta - Indian Institute of Technology Hyderabad

AM5.2 - Composite materials – polymer, ceramic, bio- and hybrid composites

9/4/2026

11:00 AM to 1:00 PM - CH08

Chair: A. deepa -

Chair: Amol Bhanage -

Presentations:

Effect of Surfactant-Treated Fiber on the Mechanical Properties of Fiber Reinforced Composites, (IMECE-India2026-189256)

Technical Paper Publication

Vishal Durlange - MIT World Peace University

Rohit Ghadge - MIT World Peace University

Kaustubh Kulkarni - MIT World Peace University

Enhanced Out-of-Plane Thermal Conductivity in Epoxy/cfrp Composites Using Two-Dimensional Graphene Sheet: An Experimental Study, (IMECE-India2026-188352)

Technical Paper Publication

Gopikrishna Chivukula (VSNS) - National Institute of Technology Raipur

Vanaja Avadhanam - CSIR-National Aerospace Laboratories

Venkata Swamy Naidu Neigapula - National Institute of Technology Raipur

Engineering the Healing Agent Core: Naoh-Functionalized Mwcnts for Thermally Stable and Mechanically Robust Self-Healing Epoxy Composites, (IMECE-India2026-189583)

Technical Paper Publication

Motru Deepak - National Institute of Technology, Warangal

Beera Satish Ben - National Institute of Technology, Warangal

Process Parameter Optimization to Augment the Tensile Strength of 3d Printed Polylactic Acid Reinforced With Mwcnt, (IMECE-India2026-188581)

Technical Paper Publication

Gowtham Raj R - New Horizon College of Engineering

Gayatri S Pujari - K S School of Engineering and Management

Preethi S - Lam Research India Pvt. Ltd.

Srinath M K - New Horizon College of Engineering

Veda Ayilur Ramnath - New Horizon College of Engineering

Harshith S - New Horizon College of Engineering

KT Pravin - New Horizon College of Engineering

Comparative Micromechanical Analysis of Cryogenic Micro-Cracking Mitigation in Cfrp Composites: Negative Thermal Expansion Oxides vs. Boron Nitride Nanotubes, (IMECE-

India2026-189900)

Technical Paper Publication

Rishit Salasiya - Pandit Deendayal Energy University

Vishvesh Badhika - Pandit Deendayal Energy University

Design and Numerical Analysis of Sustainable Auxetic Periodic Structures for Low-Velocity Impact Energy Absorption, (IMECE-India2026-188158)

Technical Paper Publication

Harish K R - RV University

K. Sudha Deepthi - Dayananda Sagar University

Kartik S Tandel - Dayananda Sagar University

Rammohan Bhanumurthy - RV University

Harish Hanumanthappa - RV University

GT3.1 - Fluid Dynamics, Heat Transfer and Thermal Engineering

9/4/2026

11:00 AM to 1:00 PM - CH02

Chair: Sendilkumaran Soundiramourty -

Chair: Prof Kameswararao Anupindi -

Presentations:

Cfd-Based Sensitivity Analysis of Film Hole Exit Parameters on Adiabatic Film Effectiveness on a Flat Plate, (IMECE-India2026-185721)

Technical Paper Publication

Aukkararn Putdivarnichapong - King Mongkut's Institute of Technology Ladkrabang

Pat Nuthammachote - King Mongkut's Institute of Technology Ladkrabang

Winyou Kidram - King Mongkut's Institute of Technology Ladkrabang

Bhuvish Wuthirananth - King Mongkut's Institute of Technology Ladkrabang

Karn Jeatrakul - King Mongkut's Institute of Technology Ladkrabang

Ditthaphat Tanpradit - Rajamangala University of Technology Krungthep

Prasert Prapamonthon - King Mongkut's Institute of Technology Ladkrabang

Ba Yin - Institute of Mechanics, Chinese Academy of Sciences

Zhenxu Sun - Institute of Mechanics, Chinese Academy of Sciences

Improving Film Cooling Effectiveness Using Sister Holes With Primary Hole Through Adverse Compound Angle Orientations, (IMECE-India2026-187858)

Technical Paper Publication

Seralathan Sivamani - Hindustan Institute of Technology and Science

Micha Premkumar T - Sri Sivasubramaniya Nadar College of Engineering

Sai Shyam Sundar S - Hindustan Institute of Technology and Science

Gunda Abhinay - Hindustan Institute of Technology and Science

Darsi Venkata Sukumar - Hindustan Institute of Technology and Science
 Dhanush Siddharth Sunkara - Hindustan Institute of Technology and Science
 Priyanka D Chudasama - Hindustan Institute of Technology and Science
 Sri Vamsi Krishna P - Hindustan Institute of Technology and Science
 Lokesh D - Hindustan Institute of Technology and Science
 Balaji G - Hindustan Institute of Technology and Science

Adjoint-Based Shape Optimization of Film Cooling Hole for Enhanced Film Effectiveness on a Flat Plate, {IMECE-India2026-186804}

Technical Paper Publication

Pot Nuthammachote - King Mongkut's Institute of Technology Ladkrabang
 Aukakarn Putdivarnichapong - King Mongkut's Institute of Technology Ladkrabang
 Winyou Kidrami - King Mongkut's Institute of Technology Ladkrabang
 Bhuvish Wuthironarith - King Mongkut's Institute of Technology Ladkrabang
 Karn Jeatrakul - King Mongkut's Institute of Technology Ladkrabang
 Atikorn Wongsatanawarid - King Mongkut's University of Technology Thonburi
 Prasert Propamonthon - King Mongkut's Institute of Technology Ladkrabang
 Zhenxu Sun - Institute of Mechanics, Chinese Academy of Sciences
 Bo Yin - Institute of Mechanics, Chinese Academy of Sciences

Numerical Study of Effect of Coolant Injection Location on Film Cooling Effectiveness in a Supersonic Cd Nozzle, {IMECE-India2026-187883}

Technical Paper Publication

Rishav Vatsa - Defence Institute of Advanced Technology
 Rahul Yadav - Defence Institute of Advanced Technology

GT1.3 - Compressors, Fans & Pumps

9/4/2026

11:00 AM to 1:00 PM - CH16A

Chair: Chetankumar Mistry - Indian Institute of Technology Kharagpur

Chair: Dilipkumar Bhanudasji Alone - CSIR-National Aerospace Laboratories

Presentations:

Modeling of Circumferential Grooved Casing Treatment Over Axial Rotor, {IMECE-India2026-189153}

Technical Paper Publication

Mohammed Abdullah Qizar - Honeywell Technology Solutions
 Shailesh Kumar - Honeywell Technology Solutions
 Shraman Gaswami - Honeywell Technology Solutions

Compressor Technology Enhancement for Charge Gas

Compressor Train in Ethylene Application, {IMECE-India2026-189490}

Technical Paper Publication

Bharat Sakale - Baker Hughes
 Vidyasagar Ramalingam Rengasamy - Baker Hughes
 Kalyankumar Venkatachalam - Baker Hughes
 Angelo Grimaldi - Baker Hughes
 Pavan Gattupalli - Baker Hughes
 Prasanna B - Baker Hughes
 Luca Martini - Baker Hughes
 Balachandran Kumaravelu - Baker Hughes

Design Optimization of Multistage Boiler Feed Pump for Efficiency Improvement, {IMECE-India2026-187575}

Technical Paper Publication

Kalyani Bangari - Bharat Heavy Electricals Limited

Surface Roughness Parametric Characteristics Validation on Aero Engine Components, {IMECE-India2026-187561}

Technical Paper Publication

Thennavarajan S - CSIR-National Aerospace Laboratories
 Dilipkumar Bhanudasji Alone - CSIR-National Aerospace Laboratories
 AbdulGafoor CP - Indian Institute Of Technology Madras
 Nagabhushana Rao Vadlamani - Indian Institute of Technology Madras(IITM)
 Arunachalam N - Indian Institute of Technology Madras(IITM)

IOGPS.3 - Pipeline Integrity Management

9/4/2026

2:00 PM to 4:00 PM - CH01

Chair: Saumitra Shankar Gupta - CHT

Chair: Raj Kishore - Engineers India Ltd.

Chair: Shiv Verma -

Presentations:

Analysing Strike Slip Fault on Pipeline by Generic Calculations & Finite Element Analysis, {IMECE-India2026-188862}

Technical Paper Publication

Gaurav Bherde - PROTON SYNERGY PVT. LTD.
 Ajit Awaghade - Muscat Engineering Consultancy

Telluric Effects on Cross Country Pipeline Cp System: Observations and Analysis, {IMECE-India2026-189692}

Technical Presentation Only

Manish Mauti - BPCL
 Anil Kumar - BPCL

Dc Interference Case Study - Assessment and Control of Stray Dc Currents in Pipelines Near Metro Rail Systems, {IMECE-India2026-188281}

Technical Presentation Only

Jeganathan Irudhayarajan - BPCL

Challenges and Emerging Technologies in Onshore and Offshore

Pipeline Integrity Management, {IMECE-India2026-196888}
Technical Presentation Only
Nivedita Sarma Bhattacharya - NAPCORR ENGINEERING
CONSULTANCY

RA5.1: Robotics & Automation- Human-Robot Interaction & Collaboration

9/4/2026

2:00 PM to 4:00 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Explainable AI-enabled Human-robot Collaboration Framework for Safety-Critical Robotic Systems, {IMECE-India2026-188563}

Technical Paper Publication

Bollimuntha Kavya Sai - Amrita Vishwa Vidyapeetham, Chennai

Dev Kunwar Singh Chauhan - Amrita Vishwa Vidyapeetham, Chennai

A Human-Centric Autonomous Health Monitoring Framework for Driver Safety Using Wearable Sensor, {IMECE-India2026-188294}

Technical Paper Publication

Bhavesh Durai S - AMRITA VISHWA VIDYAPEETHAM, CHENNAI CAMPUS

Keerthi M - AMRITA VISHWA VIDYAPEETHAM, CHENNAI CAMPUS

Dr.Sanchanna Ganesan - AMRITA VISHWA VIDYAPEETHAM CHENNAI CAMPUS

Real Time Collision Recovery in Collaborative Robots: A Hybrid Filter Approach, {IMECE-India2026-188022}

Technical Paper Publication

Sai Navya Sree Chandragiri - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai Campus, India.

Abhishek Jha - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai Campus, India

Human-Behavior Aware AI-Based Fuzzy Logic Control of Hydraulic Robotic Actuators, {IMECE-India2026-189967}

Technical Paper Publication

Krishna Siddharth K - dayananda sagar university

Puneeth N - Dayananda Sagar University

Promod Kumar Naik - Dayananda Sagar University

Sudha Deepthi K - Dayananda Sagar University

Inferring Object Weight From Human Handover Kinematics: Insights for Adaptive Human-Robot Handovers, {IMECE-India2026-189408}

Technical Paper Publication

Tarun Kayala - Visvesvaraya National Institute of Technology

Yuvraj Gupta - Visvesvaraya National Institute of Technology (VNIT), Nagpur

Parag Khanna - KTH Royal Institute of Technology

Autonomous Learning From Demonstrations for Cobot Using Closed Loop Evaluation Feedback, {IMECE-India2026-187542}

Technical Paper Publication

Vinod Borikar - Visvesvaraya National Institute of Technology, Nagpur

Pranay Dhongde - Visvesvaraya National Institute of Technology, Nagpur

Shital Chiddarwar - Visvesvaraya National Institute of Technology, Nagpur

ACES1.5 - Green Hydrogen Production, Storage, and Integrated Hydrogen Energy Systems and ACES2.5 - Emerging Technologies - Clean Energy

9/4/2026

2:00 PM to 4:00 PM - CH05

Chair: Ankur Mullick - PIL

Chair: Pradeep Chauhan - Pipeline Infrastructure Ltd.

Presentations:

Ammonia Cracker Route for Hydrogen Production, {IMECE-India2026-194690}

Technical Presentation Only

Uttam Sangade - Reliance Industries Ltd

Numerical Flow Optimization and Electromagnetic Forming of Trapezoidal Channel Bipolar Plates for Pem Fuel Cells, {IMECE-India2026-188932}

Technical Paper Publication

Nallisaianmizhthu Tha Vaa - University College of Engineering, BIT Campus

Jeno Salethraj - College of Engineering Guindy, Anna University

Balamurugan Chinnasamy - College of Engineering Guindy, Anna University

Mohammed Abdul Kadar Rahiman - College of Engineering Guindy, Anna University

Shanmuga Sundaram Karibeeran - College of Engineering Guindy, Anna University

Assessment of Png-cbg Mixing Behaviour in Pipeline Injection System, {IMECE-India2026-189421}

Technical Paper Publication

PANKAJ KUMAR - Motilal Nehru National Institute of Technology (MNNIT) - Allahabad, Prayagraj

Bireswar Paul - Motilal Nehru National Institute of Technology (MNNIT) - Allahabad, Prayagraj

Dhananjay Singh Yadav - Motilal Nehru National Institute of Technology (MNNIT) - Allahabad, Prayagraj

Akshay Ranjan Paul - Motilal Nehru National Institute of Technology (MNNIT) - Allahabad, Prayagraj

Understanding Risks of Low Temperatures Phenomenon

Encountered During Co₂ in Pipelines, [IMECE-India2026-188513]

Technical Paper Publication

Abhijit Rao - Shell Technology Center

Pratik Bhattacharjee - Shell Technology Center

Ruud Henkes - Shell Technology Center

Sensitivity Analysis of Recirculation Zone Dynamics and Pressure Loss to Sub-Degree Cone Angle Changes in a Stepped Combustor for a Hydrogen Fueled Engine, [IMECE-India2026-188212]

Technical Paper Publication

Noyal Varghese - Hindustan Institute of technology and science

B. Guru Kalyan - Hindustan Institute of technology and science

Dwayne Silveira - Hindustan Institute of technology and science

G. Dinesh Kumar - Hindustan Institute of Technology and Science

ATT5.1 - Thermal Storage Technologies

9/4/2026

2:00 PM to 4:00 PM - CH12

Chair: Sourav Mitra -

Presentations:

Heat Transfer Enhancement in the Discharging of a Thermal Energy Storage System Using Nano-Enhanced Paraffin Wax in Internally Finned Spherical Balls, [IMECE-India2026-187515]

Technical Paper Publication

A. Surya - Sri Sivasubramaniya Nadar College of Engineering

N. Nallusamy - Shiv Nadar University Chennai

R. Prakash - Sri Sivasubramaniya Nadar College of Engineering

Design and Development of a Heat Battery for Recovery of Sensible and Latent Thermal Energy From Process Fluids, [IMECE-India2026-187819]

Technical Paper Publication

Rajeev Reddy Sadu - Triveni Turbines Ltd

Shradharghya Shankar Adhikary - Triveni Turbines Limited

Sudheer Valluri - Triveni Turbines Limited

Jayshankar Ray - Triveni Turbines Limited

Thermal Performance Optimisation of Macro-Encapsulated PCM-Integrated Cementitious Composites with Simultaneous CO₂ Sequestration, [IMECE-India2026-188096]

Technical Paper Publication

Utsav Aggarwal - National Institute of Technology, Calicut

Sharu Bk - National Institute of Technology, Calicut

MCDA-Guided Selection of PCM for High-Temperature Energy Storage Application and Numerical Assessment of Top-Ranked PCMs, [IMECE-India2026-189225]

Technical Paper Publication

Sonu Singh - Indian Institute of Technology Jodhpur

Shobhana Singh - Indian Institute of Technology Jodhpur

Sachin Singh - Indian Institute of Technology Jodhpur

Klarissa Niedermeier - Institute of Thermal Energy Technology and

Safety (ITES)

Melting Dynamics of Macro-Encapsulated Pcm: A Numerical Study of Capsule Size, [IMECE-India2026-189639]

Technical Paper Publication

Rishi Purohit - Indian Institute of Technology Jodhpur

Shobhana Singh - Indian Institute of Technology Jodhpur

Klarissa Niedermeier - Karlsruhe Institute of Technology

Sachin Singh - India Indian of Technology Jodhpur

Thermal Analysis of a Li-Ion Battery Embedded in Wire-Meshed Phase Change Material, [IMECE-India2026-187800]

Technical Presentation Only

Swastik Acharya - Motilal Nehru National Institute of Technology Allahabad

PVP7.3 Piping Engineering and PVP6.1 Non-Destructive Examination

9/4/2026

2:00 PM to 4:00 PM - CH03

Chair: GAURAV BHENDE - PROTON SYNERGY PVT. LTD.

Chair: Parthapratim Brahma -

Chair: Ramkumar Salem Gururajan - KBR

Chair: RAJA RETHINAM PHILIP - L&T Construction, Mumbai

Chair: Harendra Kumar -

Presentations:

Modularization in the Oil and Gas Industry - Trends and Challenges, [IMECE-India2026-188360]

Technical Presentation Only

Kathirvel Nagappan - 0th Floor Prestige Polygon, 471 Anna Salai, Nandanam Chennai, Tamil Nadu, 600 035 | India

Chandran rajan@kbr.com Rajan - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India

Stephen Panamthodathuvarghese - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India

Selvaraj Kuppusamy - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India

Finite Element Simulation of Acoustic Emission During Tensile Fracture Using a Stress-Based Damage Model, [IMECE-India2026-189738]

Technical Paper Publication

Sudeep Krishna J - Indian Institute of Technology Madras

Krishnadas V K - Indian Institute of Technology, Madras

Chandan Kumar Mukhopadhyay - Indian Institute of Technology Madras

Abhishek Saini - Indian Institute of Technology Madras

Prabhu Rajagopal - Indian Institute of Technology Madras

Estimation and Evaluation of Root Concavity and Excess Penetration in Nuclear Piping Weld Joints Using Radiographic Testing, [IMECE-India2026-187555]

Technical Paper Publication

Ponnappan Somasundaram - Larsen & Toubro Limited
Rajarethinam Philip - Larsen & Toubro Limited

Ultrasonic Evaluation of Lamination in Thin Stainless-Steel Plates (3 Mm to 6 Mm Thickness), {IMECE-India2026-189796}

Technical Paper Publication

Ponnappan Somasundaram - Larsen & Toubro Limited
Santhakumar Palanivel - Larsen & Toubro Limited

Efficacy of Array Ultrasonic Imaging Technique for Detection of Flaws in a Butt Weld With Restricted Access, {IMECE-India2026-188889}

Technical Paper Publication

Sathish Murugan - TWI INDIA PVT LTD
Manoj Kumar Patra - TWI INDIA PVT LTD

Deploying the Tsukamoto Fuzzy Inference System for Quantitative Ultrasonic Non-Destructive Evaluation, {IMECE-India2026-188927}

Technical Paper Publication

Ravulakari Ajay - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
Sai Charan Chanda - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
Dr. Joseph J Kakkassery - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

PVP3.2 Design & Analysis and PVP2.1 Bolted Joints

9/4/2026

2:00 PM to 4:00 PM - CH15

Chair: Shree Prakash Pathak - Honeywell

Chair: Parthapratim Brahma -

Chair: Mayur Brijlani -

Chair: Sandeep Goyal - Isgec Heavy Engineering

Chair: Amit Jain -

Presentations:

Data-Driven Prediction of Stress Response in Pressurized Cylindrical Structures Using Physics-Based Axisymmetric Simulations, {IMECE-India2026-197386}

Technical Presentation Only

Sahil Sahil - Ansys Software Pvt. Ltd.

Analytical Modeling of Fugitive Emission Escape Pathways in Plug Valves, {IMECE-India2026-186579}

Technical Presentation Only

Arun Kumar Krishnan - Flowserve Corporation

Analytical Formulation of Flow Coefficient (Cv) Variation Resulting From Partial Plug Lift, {IMECE-India2026-186581}

Technical Presentation Only

Arun Kumar Krishnan - Flowserve Corporation

Evaluating Ptb3.2022 Examples Against 2025 Div2 Code,

{IMECE-India2026-190341}

Technical Presentation Only

Himanshu Bhatt - MechXcel Designs LLP

Ketav Vavaliya - Dipta Design and Engineering

Investigation and Integrity Assessment of a Custom Designed Large Diameter Body Flange Following a 200% Over Torquing, {IMECE-India2026-188582}

Technical Paper Publication

Ashim Mandal - Honeywell International Inc

Shreeprakash Pathak - Honeywell International Inc

Challenges in Using Interface Sealing Materials Effectively at High Temperature Applications, {IMECE-India2026-189723}

Technical Paper Publication

Kiruthik Si - IIITDM Kancheepuram

Rino Nelson N - IIITDM Kancheepuram

Ashwin Azhahianambi - Asian Sealing Products Pvt. Ltd.

Shailesh S - Asian Sealing Products Pvt Ltd

SSDM1.5 - Structures

9/4/2026

2:00 PM to 4:00 PM - CH07

Chair: Unnikrishnan Sreenivasan - Boeing India

Chair: Joseph J Kakkassery - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Presentations:

A Surrogate-Based Aerostructural Optimization Framework for Range Extension of High-Aspect-Ratio Wings of Glide Vehicles at Transonic Regime, {IMECE-India2026-187906}

Technical Presentation Only

Shrutam Saha - Defence Institute of Advanced Technology, DIAT-DRDO

Niladri Pahari - Research Centre Imarat, RCI-DRDO

S Kandasamy - Research Centre Imarat, RCI-DRDO

Ganapati Joshi - Defence Institute of Advanced Technology, DIAT-DRDO

Demonstrating Equipment Reliability and Safety to Customers Through ASME BPVC Code and Physical Validation, {IMECE-India2026-197180}

Technical Presentation Only

Viswanathan G S - Flowserve India Control Ltd

Eigenvalue Solution for Critical Buckling Load of Bio-Inspired Laminated Composite Plate and Shallow Shell Structures, {IMECE-India2026-187338}

Technical Paper Publication

Abu Saad - Motilal Nehru National Institute of Technology Allahabad

Ayush Mishra - Motilal Nehru National Institute of Technology Allahabad

Hukum Chand Dewangan - Motilal Nehru National Institute of

A Digital Twin Framework for Fatigue Life Assessment of Steel Truss Bridges Under Moving Vehicular Load, [IMECE-India2026-186630]

Technical Paper Publication

Nambiar Thejas - National Institute of Technology Calicut

Anil Ryan - National Institute of Technology Calicut

T Afnan - National Institute of Technology Calicut

K Adwaith - National Institute of Technology Calicut

K Arun Babu - National Institute of Technology Calicut

A. M. Sreenath - National Institute of Technology Calicut

Effect of Data Acquisition Delay and Noise on the Prediction Accuracy of a Structural Digital Twin, [IMECE-India2026-187977]

Technical Paper Publication

Bhanu Pratap Singh Kuntal - National Institute of technology Calicut

Pranay Vinayak Likhari - National Institute of Technology Calicut

A. M. Sreenath - National Institute of Technology Calicut

Effect of Patch Geometry on the Buckling Behaviour of Repaired Aircraft Panels: A Numerical Study, [IMECE-India2026-187439]

Technical Paper Publication

V. Arjun - National Institute of Technology Calicut

U. B. Jayadeep - National Institute of Technology Calicut

A. M. Sreenath - National Institute of Technology Calicut

SSDM2.5 - Structural Dynamics, Modelling & Simulation and SSDM3.4 Materials

9/4/2026

2:00 PM to 4:00 PM - CH13

Chair: Krishnamurthy GS - Royal Enfield

Chair: Abhijit Chaudhuri - Airbus

Presentations:

Comparative Numerical Study on Ductile Fracture Models in Dynamic Fracture, [IMECE-India2026-188959]

Technical Presentation Only

Vishal Jagadish - Indian Institute of Technology Madras

Alok Tripathy - Indian Institute of Technology, Madras

Shyam Keralavarma - Indian Institute of Technology, Madras

DATA-DRIVEN MECHANICAL CHARACTERIZATION OF RE-ENTRANT AUXETIC HONEYCOMB STRUCTURES USING POLYNOMIAL RIDGE REGRESSION MODEL, [IMECE-India2026-189614]

Technical Paper Publication

Arun Kumar S - Indian Institute of Information Technology Design & Manufacturing Kancheepuram

Dharun Bharathi S - Indian Institute of Information Technology Design & Manufacturing Kancheepuram

Rino Nelson N - Indian Institute of Information Technology Design

and Manufacturing Kancheepuram

Raguraman Munusamy - Indian Institute of Information Technology Design and Manufacturing Kancheepuram

Rajnish Mallick - Indian Institute of Information Technology, Design and Manufacturing Kancheepuram

Enhancing Ballistic Limits Through Functionally Graded Material Architectures: A Numerical Approach, [IMECE-India2026-189579]

Technical Paper Publication

Ankit Tiwari - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

Rajiv Shrivastava - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

Puneet Tandon - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

K. Ponappa - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

Geometry Induced Variations in Mechanical Stability of Biodegradable Polymer Stents: A Finite Element Perspective, [IMECE-India2026-189637]

Technical Paper Publication

Rajiv Shrivastava - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

Ankit Tiwari - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

Puneet Tandon - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

K. Ponappa - Indian Institute of Information Technology Design and Manufacturing-Jabalpur

Simulation Data Driven Approach to Predict Vehicle Structural Intrusion During Side Impact Using AI/ml Techniques, [IMECE-India2026-187882]

Technical Paper Publication

Venu Kommanaboyina - Indian Institute of Information Technology Design and Manufacturing, Kancheepuram

Raguraman Munusamy - Indian Institute of Information Technology Design and Manufacturing, Kancheepuram

Dhanush Jk - Indian Institute of Information Technology Design and Manufacturing, Kancheepuram

Validation of Cf/peek Mechanical Properties Using Finite Element Analysis and Establishing Equivalency to the Qualification Database, [IMECE-India2026-188625]

Technical Presentation Only

Siddharth Narayanan - Collins Aerospace

Shashidhar Shivarudrappa - Collins Aerospace

Hemesh Manchoor - Collins Aerospace

Ananda Kumar - Collins Aerospace

MT5.1 - Micro and Nano Manufacturing

9/4/2026

2:00 PM to 4:00 PM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology, Indore

Chair: Sivanandam Aravindan - Indian Institute of Technology, Delhi

Chair: Janakarajan Ramkumar - Indian Institute of Technology, Kanpur, India

Presentations:

Effect of Bio-Inspired Surface Textures on Friction and Wear Under Solid-Lubricated Conditions, [IMECE-India2026-189944]

Technical Paper Publication

Joyson Selvakumar - Anna University

Samuel Raj D - Anna University

Influence of Heat Treatments and Microstructures on Surface Integrity and Machinability of Inconel 718 Superalloy in EDM Process, [IMECE-India2026-189357]

Technical Paper Publication

Shashi Ranjan Singh - Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad

Gajula Bharath - Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad

Akash Gouda - Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad

Bhoomi Sridhar - Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad

Residual-Stress-Controlled Thermomechanical Behaviour of Nitinol/Kapton Bimorphs for Adaptive Optical Mirrors, [IMECE-India2026-185963]

Technical Paper Publication

Nikunjibhai Bheda - IIT Indore

Palani Iyamperumal Anand - IIT Indore

Suhas S. Joshi - IIT Indore

Large Area Superhydrophobic Surfaces, [IMECE-India2026-187773]

Technical Paper Publication

Abhishek Ayushya - Indian Institute of Technology Indore, India

Arpit Kumar Singh - Indian Institute of Technology Indore, India

Rajesh Kumar - Indian Institute of Technology Indore

Palani Iyamperumal Anand - Indian Institute of Technology Indore, India

Vipul Singh - Indian Institute of Technology Indore, India

Crystallographic Evolution in Nickel Electrochemical Additive Micro Manufacturing: Experiments and Charged-Electrode Molecular Dynamics Simulations, [IMECE-India2026-189477]

Technical Paper Publication

Saumyaajeet Panda - Indian Institute of Technology, Bhubaneswar

Sourabh Tandon - Indian Institute of Technology Bhubaneswar

Ayush Owhal - Prestige Institute of Engineering Management &

Research (PIEMR) Indore

T Lachana Dora - University of Alabama at Birmingham

Divyansh Patel - Indian Institute of Technology, Bhubaneswar

Mechanism-Based Investigation of Ultrasonic Vibration-Assisted Micro-Milling of Additively Manufactured Ti6Al4V, [IMECE-India2026-189346]

Technical Paper Publication

Sharib Imam - Indian Institute of Technology Ropar

Abhimanyu Kumar - Indian Institute of Technology Ropar

Chandrakant K. Nirala - Indian Institute of Technology Ropar

Anupam Agrawal - Indian Institute of Technology Ropar

CPSA/ML 5.1 - Smart Manufacturing & Quality

9/4/2026

2:00 PM to 4:00 PM - CH06

Chair: Dr. Nagesh Kulkarni -

Presentations:

Integration of Cyber-Physical System Into IoT-Enabled Vertical Centrifugal Casting: A Review, Framework and Bibliometrics Analysis, [IMECE-India2026-188852]

Technical Paper Publication

Mr. Dhaval Anadkat - Marwadi University

Amit Sata - Marwadi University

Human-in-the-Loop AI System for Adaptive Defect Detection in Small-Scale Pump Casing Manufacturing, [IMECE-India2026-188170]

Technical Paper Publication

Sanjana Nithayanandakumar - SRI RAMAKRISHNA INSTITUTE OF TECHNOLOGY

Sathyavathi S - Kumaraguru College of Technology

Immanuel R - SRI RAMAKRISHNA INSTITUTE OF TECHNOLOGY

David Rathnaraj J - SRI RAMAKRISHNA INSTITUTE OF TECHNOLOGY

Industrial IoT-Enabled Machine Signal Analytics for Identifying Nonconforming Parts in Complex Multi Diameter Cylindrical Plunge Grinding, [IMECE-India2026-188041]

Technical Paper Publication

Kumaran Thirumalai - Saint Gobain India Private Limited (R&D)

Upendran K - Saint Gobain India Private Limited (R&D)

Srivathsan S K - Saint Gobain India Private Limited (R&D)

Sanjay Nandan - Grindwell Norton Limited - Abrasives Business

A 4-D Digital Twin Framework for Closed-Loop Additive Manufacturing Using Embedded Vision, [IMECE-India2026-190035]

Technical Paper Publication

Kanishk G - Indian Institute of Space Science and Technology (IIST)

Sooraj V S - Indian Institute for Space Science and Technology

Nihar Patil - Indian Institute of Space Science and Technology (IIST)

A Vision-Based Framework for Real-Time Digital Gauge Detection and Value Extraction, [IMECE-India2026-188715]

Technical Paper Publication

Zainab Khan - Indian Institute of Technology, Kanpur

Harsh Singh - Indian Institute of Technology, Kanpur

Kamal Kishor Prajapati - Indian Institute of Technology, Kanpur

Pradeep Singh Chauhan - Power Grid Corporation of India Limited

Bishakh Bhattacharya - Indian Institute of Technology, Kanpur

An AI Powered Platform for Non Conformity Analysis and Management in Turbo Machinery Industry, [IMECE-India2026-187122]

Technical Paper Publication

Kodur Bala Akhil - Baker Hughes

Amruta Kulkarni - Baker Hughes

Prashant Malavade - Baker Hughes

VD&C3.1 - Fluid-Structure Interaction/ Flow-induced noise & vibration

9/4/2026

2:00 PM to 4:00 PM - CH11

Chair: Dr. Faruque Ali -

Chair: Dr Eswaran -

Presentations:

Minimizing Bubble-Induced Pressure Spikes in a T-Piece Neonatal Resuscitator, [IMECE-India2026-189023]

Technical Paper Publication

R Himanshu - Visvesvaraya National Institute of Technology, Nagpur

Sharvari Pokale - Visvesvaraya National Institute of Technology, Nagpur

Rashmi Uddanwadiker - Visvesvaraya National Institute of Technology (VNIT), Nagpur

Satish Deshpande - Shree Child Clinic, Nagpur

Numerical Fsi Investigation of Equilibrium Height Variation With Rotational Speed Under Jet Impingement of a Low-Aspect-Ratio Circular Cylinder, [IMECE-India2026-189168]

Technical Paper Publication

Saurabh D B - National Institute of Technology Calicut

Pranay Vinayak Likhari - National Institute of Technology Calicut

Jithin M - National Institute of Technology Calicut

A Frequency Domain Analysis of the Nonlinear Acoustic Wave Propagation in a Two-Dimensional Rigid-Walled Waveguide With a Uniform Mean Flow, [IMECE-India2026-189574]

Technical Paper Publication

Manish Dwivedi - Indian Institute of Science

Venkata R. Sonti - Indian Institute of Science

Aerodynamic Characterization of a Static Frisbee: Integrated Wind Tunnel and Computational Fluid Dynamics Analysis, [IMECE-India2026-189680]

Technical Paper Publication

Manan Jain - Chandigarh University

G Prasad - Chandigarh University

Balaji Ganesan - Hindustan Institute of Technology and Science

Naveen R - KCG College of Technology

Rakesh Kumar C - Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

Quantitative In-Flight Jitter Analysis in Uavs Using High-End Imus, [IMECE-India2026-189885]

Technical Paper Publication

Shubham Rai - Institute of Infrastructure, Technology, Research And Management

Abhishek Rawat - Institute of Infrastructure, Technology, Research And Management

Ajit Kumar - Institute of Infrastructure, Technology, Research And Management

Experimental Characterization of Damping in Fluid-Conveying Pipelines for Launch Vehicle Applications, [IMECE-India2026-190127]

Technical Paper Publication

Vivek Srambikkal - LPSC, ISRO

Vinayaravi R - LIQUID PROPULSION SYSTEMS CENTRE- INDIAN SPACE RESEARCH ORGANIZATION

Kadati Srinivas - LIQUID PROPULSION SYSTEMS CENTRE- INDIAN SPACE RESEARCH ORGANIZATION

Viswanath V - LIQUID PROPULSION SYSTEMS CENTRE- INDIAN SPACE RESEARCH ORGANIZATION

Krishnaji Jayamani - LIQUID PROPULSION SYSTEMS CENTRE- INDIAN SPACE RESEARCH ORGANIZATION

Suresh Mathew Thomas - LIQUID PROPULSION SYSTEMS CENTRE- INDIAN SPACE RESEARCH ORGANIZATION

AM3D2.2- Applications and Impact

9/4/2026

2:00 PM to 4:00 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Effect of Bending Deformation on the Electrochemical Performance of Diw-Printed Mxene Supercapacitors, [IMECE-India2026-189545]

Technical Paper Publication

Sudhansu Sekhar Nath - IIT Kharagpur

Poonam Sundriyal - IIT Kharagpur

Hydrodynamic Flow Characterization of a 3d-Printed Flapping Hydrofoil Using Acoustic Doppler Velocimetry, [IMECE-India2026-186164]

Technical Paper Publication
Durga Charan - IIT Kharagpur
Sunil Manohar Dash - IIT Kharagpur
Sunita Mishra - IIT Kharagpur

Impact of Morse-Code Inspired Architecture on Fracture Properties of Additively Manufactured Acrylonitrile Butadiene Styrene, {IMECE-India2026-187513}

Technical Paper Publication

Chayan Kosambia - IIT Bombay

Deepesh Yadav - KU Leuven Faculty of Engineering Technology, Belgium

Anand Bukan - Visvesvaraya National Institute of Technology (VNIT), Nagpur, India

Jaya Balila Nagamani - IIT Bombay

Sustainability Analysis and Application of Deep Learning Models in High Speed Cryogenic Machining of Inconel-718: Lpbf V/s Wrought, {IMECE-India2026-189392}

Technical Paper Publication

Aastha Maheta - Institute of Infrastructure Technology Research and Management

Shubhranshi Mishra - Institute of Infrastructure Technology Research and Management

Vivek Joshi - Tesla Giga Factory, Austin, TX 78725, USA

Nayneet Khanna - Institute of Infrastructure Technology Research and Management

Design and Experimental Evaluation of Cavitation-Assisted Micro-nano Bubble Generation Using a 3d-Printed Device, {IMECE-India2026-186163}

Technical Paper Publication

Manan Khodidas Prajapati - IIT Kharagpur

Durga Charan - IIT Kharagpur

Sunil Manohar Dash - IIT Kharagpur

Sunita Mishra - IIT Kharagpur

Additive Manufacturing of Graphite Composite Lithium-Ion Battery Anodes Using a Customized Direct Ink Writing Platform, {IMECE-India2026-197622}

Technical Presentation Only

Kanik Thakur - IIT Kanpur

Sumit Choudhary - Indian Institute of Technology Kanpur

Abhishek Sarkar - Indian Institute of Technology

AM3.2 - Materials Degradation - Fatigue, Creep, Corrosion, Wear and Failure Analysis

9/4/2026

2:00 PM to 4:00 PM - CH08

Chair: Jitendra Kumar Katiyar -

Chair: Dhiraj Mahajan -

Presentations:

Fracture Behaviour Under Bending Loads of Multi-Layered System

Used in Aircraft Fuselage, {IMECE-India2026-189448}

Technical Paper Publication

Satvik Yadav - IIT Bombay

B. Nagamani Jaya - IIT Bombay

Prita Pant - IIT Bombay

Physics-Informed Neural Network Based Prediction of Contact Angle on Bio-Inspired Superhydrophobic Surfaces Using Image-Based Surface Texture Analysis, {IMECE-India2026-189638}

Technical Paper Publication

Avinash Kumar - Indian Institute of Information Technology Design and Manufacturing Kancheepuram, Chennai-600127

Syed Mazhar Hussain - IIITDM KANCHEEPURAM CHENNAI

Bharathan B - IIITDM KANCHEEPURAM CHENNAI

Jitendra Kumar Katiyar - Manipal Institute of Technology, Manipal, MAHE

Development of an Integrated Computational Framework for Stress-Coupled Corrosion Phenomenon, {IMECE-India2026-189334}

Technical Paper Publication

Pradeepraj Konnadhasan - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Mariyappan Arul Kumar - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Finite Element Study on Effect of Process Parameters on Fatigue Life of Additive Manufactured Components, {IMECE-India2026-187412}

Technical Paper Publication

Pilli Abhishek - National Institute of Technology Calicut

Basil Kuriachan - National Institute of Technology Calicut

A. M. Sreenath - National Institute of Technology Calicut

Experimental Investigation of Frictional Wear and Engine Characteristics of Plasma-Sprayed CoFeCrAl Thermal Barrier Coatings on Diesel Engine Pistons, {IMECE-India2026-187846}

Technical Paper Publication

Franklin Issac R - Saveetha Engineering College

Manikandan R - Aalim Muhammed Salegh College of Engineering

Mohamed Abbas S - PERI Institute of Technology

Electric-Field-Assisted Microstructural Control of UHMWPE/Al₂O₃/CaSO₄ Hybrid Composites for Bio-Tribological Applications, {IMECE-India2026-187313}

Technical Paper Publication

Franklin Issac R - Saveetha Engineering College

GT3.2 - Fluid Dynamics, Heat Transfer and Thermal Engineering

9/4/2026

2:00 PM to 4:00 PM - CH02

Chair: Sendilkumaran Soundiramourty -

Chair: Prof Kameswararao Anupindi -

Presentations:

Study of Rectangular Exit Converging-Diverging Nozzle in a Military Aircraft Engine, {IMECE-India2026-187136}

Technical Paper Publication

Abhishek Raj - NIT CALICUT

Gunukula Nithin Yadav - NIT CALICUT

Dinu Thomas - NIT Calicut

Maram Priyanka - NIT Calicut

Nidhi Baranwal - National Institute of Technology Calicut

Numerical Simulation of an S-Shaped Hydrofoil to Study the Influence of Turbulence Over Cavitation in the Flow, {IMECE-India2026-187802}

Technical Paper Publication

Micha Premkumar Thomai - Shiv Nadar University Chennai

Manepalli Hemanth Kumar - Hindustan Institute of Technology and Science

Sukan M A - Hindustan Institute of Technology and Science

Seralathan Sivamani - Hindustan Institute of Technology and Science

Computational Study on the Effect and Acoustic Characteristics of Nozzles With Modified Chevrons, {IMECE-India2026-187878}

Technical Paper Publication

Nikhil Aanandhan A. R. S - Hindustan Institute of Technology and Science

Seralathan Sivamani - Hindustan Institute of Technology and Science

Raja Joseph D - Hindustan Institute of Technology and Science

Havilah Suguna Y. J - Hindustan Institute of Technology and Science

Poorna Karthik Konathala - Hindustan Institute of Technology and Science

Preetham P - Hindustan Institute of Technology and Science

Kakaraparathi Raja Alex - Hindustan Institute of Technology and Science

Kanna Gopi - Hindustan Institute of Technology and Science

Sathish S - Hindustan Institute of Technology and Science

Balaji G - Hindustan Institute of Technology and Science

Experimental and Computational Analysis of Jet Noise Characteristics With Different Nozzle Geometries, {IMECE-India2026-187890}

Technical Paper Publication

Sarweswaran R - Hindustan Institute of Technology and Science

Seralathan Sivamani - Hindustan Institute of Technology and Science

Manivannan P - Hindustan Institute of Technology and Science

Jayanthsree J - Hindustan Institute of Technology and Science

Vivek Sriram K - Hindustan Institute of Technology and Science

Lakkimsetty Gnanaswar - Hindustan Institute of Technology and Science

Sadhanala Kushal Kumar - Hindustan Institute of Technology and Science

Chembeti Neeraj Kumar - Hindustan Institute of Technology and Science

Sanju Medipally - Hindustan Institute of Technology and Science

Sathish S - Hindustan Institute of Technology and Science

Sankaralingam L - Dayananda Sagar College of Engineering

Numerical Investigation of Leading-Edge Bow Shock Control and Aerothermal Load Mitigation via Cooling Injection in Supersonic Flows, {IMECE-India2026-188550}

Technical Paper Publication

Nitin Dabas - Defence institute of Advanced technology

Dineshsingh Thakur - Defence institute of Advanced technology

Sunil Chandel - Defence institute of advanced technology

Variable Cycle Engine With Single Vabi for Turbofan-turbojet Mode Switching in Vertical Takeoff and Interceptor Missions, {IMECE-India2026-188600}

Technical Paper Publication

Atri Bandyopadhyay - BARBARIK AEROSPACE LLP

Subh Arun Das - Barbarik Aerospace LLP

Dheeraj Kumar Kasa - Barbarik Aerospace LLP

GT1.4 - Compressors, Fans & Pumps

9/4/2026

2:00 PM to 4:00 PM - CH16A

Chair: Chetankumar Mistry - Indian Institute of Technology Kharagpur

Chair: Dilipkumar Bhanudasji Alone - CSIR-National Aerospace Laboratories

Presentations:

Lip - Effects on Overall Performance of Ducted Fan in Hover: An Experimental and Computational Investigation Employing a Single Flow Passage Technique, {IMECE-India2026-187864}

Technical Paper Publication

Keerthana Raghu - Defence Bio-Engineering and Electromedical Laboratory, DRDO

Raghuram T - Defence Bio-Engineering and Electromedical Laboratory, DRDO

Rohith Mohanan - Indian Institute of Technology Madras

Ranjith Mohan - Indian Institute of Technology Madras

A Python-Based Parametric Geometry Framework for Automated Cfd Optimization of Axial Fans, {IMECE-India2026-187045}

Technical Paper Publication

Naji Nasar A. - DESIM Innovations (OPC) Private Limited

Abdul Nassar - DESIM Innovations (OPC) Private Limited

Influence of Inducer Helix Pitch on Cavitation Performance of Centrifugal Condensate Pumps, [IMECE-India2026-187057]

Technical Paper Publication

Naji Nasar A - DESiM Innovations (OPC) Private Limited

Abdul Nassar - DESiM Innovations (OPC) Private Limited

Coupled Aerodynamic Performance Enhancement and Structural Durability Assessment of a Compact Electric Ducted Fan, [IMECE-India2026-190089]

Technical Paper Publication

Abdul Nassar - DESiM Innovations (OPC) Private Limited

Rahul Tarale - Atrilon Technologies Pvt Ltd

Naji Nasar - DESiM Innovations (OPC) Private Limited

Cfd Study of Hub Profile Contouring in an Axial Flow Compressor, [IMECE-India2026-189237]

Technical Paper Publication

Pratiksha Patel - Hindustan Institute of Technology and Science, Chennai

Piyusha Zende - Hindustan Institute of Technology and Science, Chennai

Vidhyashankar N - GTRE, DRDO

Prithvirajan G - GTRE, DRDO

Parthasarathy Vasanthakumar - Hindustan Institute of Technology and Science, Chennai

Impact of Surface Roughness on the Aerodynamic Performance of Centrifugal Compressor, [IMECE-India2026-189326]

Technical Paper Publication

Anamika Anil C - Honeywell Technology Solutions Lab Private Limited

Kartikeya Krishna A - Honeywell Technology Solutions Lab Private Limited

Hasham Chougule - Honeywell Technology Solutions Lab Private Limited

Mohammed Qizar - Honeywell Technology Solutions Lab Private Limited

Shraman Goswami - Honeywell Technology Solutions Lab Private Limited

IOGP5.4 - Pipeline Integrity Management and IOGP6.1 - Environmental Sustainability and Risk Mitigation in Pipeline Projects

9/4/2026

4:30 PM to 6:30 PM - CH01

Chair: Saumitra Shankar Gupta - CHT

Chair: Raj Kishore - Engineers India Ltd.

Chair: Santosh Kumar 121002 - IOCL

Chair: Nivedita Sarma Bhattacharyya - Ex EIL , NAPCORR ENGINEERING CONSULTANCY

Presentations:

Digital Mapping of Underground Pipelines, [IMECE-India2026-197713]

Technical Presentation Only

Rajeev Gupta - Underground Magnetics

A Hybrid Dina-ugan Architecture for Enhanced Denoising in Underwater Pipeline Inspection, [IMECE-India2026-189120]

Technical Paper Publication

Subhabrat Swain - IIT BHUBANESWAR

George Rajan Varughese - IITBHUBANESWAR

Sanskar Pradip Kosare - IIT BHUBANESWAR

Satish Kumar Panda - IIT BHUBANESWAR

Subsea Gas Pipeline Leak Detection Model Based on Machine Learning, [IMECE-India2026-189836]

Technical Paper Publication

Bala Murugan S - Indian Institute of Technology Guwahati

Siddharth Panda - National Institute of Technology Rourkela

R K Bekara - National Institute of Technology Rourkela

Anwesa Mohanty - OUTF

Telluric Interference on Low-Latitude Pipelines: A Field Study From India, [IMECE-India2026-197310]

Technical Presentation Only

Anshul Jain - DEHN India Private Limited

Manish Kumar Mautia - Bharat petroleum corporation limited

Uttam Kumar Sahu - Bharat Petroleum corporation limited

Ensuring Long-Term Integrity of Tank Bottom Plates Against Corrosion, [IMECE-India2026-196887]

Technical Presentation Only

Nivedita Sarma Bhattacharyya - Ex EIL , NAPCORR ENGINEERING CONSULTANCY

Assessment of Vintage Api X65 Pipeline Steel for Hydrogen Transport Applications, [IMECE-India2026-190203]

Technical Presentation Only

Shiv Kumar - Indian Institute of Technology Bombay

Prita Pant - IIT Bombay

Nagamani Jaya Balila - IIT Bombay

RA6.1: Robotics & Automation- Soft Robotics & Bio-Inspired Systems

9/4/2026

4:30 PM to 6:30 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Failure Analysis and Process Optimization of Silicone-Molded Fibre-Reinforced Soft Robotic Grippers, [IMECE-India2026-189547]

Technical Paper Publication

Shailesh Bamoriya - GITAM Deemed to be University Bengaluru

Kunku Dinesh - GITAM Deemed to be University Bengaluru

Mohammed Khalander Y - GITAM Deemed to be University Bengaluru

Manjunatha T - GITAM Deemed to be University Bengaluru
Jai Singh - GITAM Deemed to be University Bengaluru

Design and Experimental Investigation of a Soft Robotic Knifefish With Single-Point Centralised Fin Actuation, {IMECE-India2026-187379}

Technical Paper Publication

Shreyash Sahu - Indian Institute of Technology, Kharagpur
Deepak Kumar Singh - Indian Institute of Technology Kharagpur
Rahul Ranjan - Indian Institute of Technology Kharagpur
Sunil Manohar Dash - Indian Institute of Technology Kharagpur

Self Powered Flexible Tactile Sensor Based on a Pdms Max Phase Cellulose Nanocrystal for Soft Robotics and Human Machine Interface, {IMECE-India2026-189542}

Technical Paper Publication

Saurabh Kumar Yadav - Jawaharlal Nehru University
Muktesh Pal - Delhi Technological University
Dr Poonam Agarwal - Jawaharlal Nehru University
Sanjay Kumar - Delhi Technological University
Ankur Goswami - Indian Institute of Technology Delhi

Design and Kinematic Analysis of a Bio-Inspired Soft Continuum Manipulator for Minimally Invasive Surgery, {IMECE-India2026-189979}

Technical Paper Publication

Vaishnavi Tomar - MIT World Peace University

Kinematic Analysis of Soft Robotic Manipulators Based on Jacobian Matrix Approach, {IMECE-India2026-187869}

Technical Paper Publication

Aditya Dharkar - National Institute of Technology, Raipur
Shubhashis Sanyal - National Institute of Technology, Raipur

Nature Inspired Surface Modified Dielectric Elastomer Membrane for Pressure Sensing, {IMECE-India2026-189588}

Technical Paper Publication

Dhananjay Sahu - National Institute of Technology Raipur
Raj Kumar Sahu - National Institute of Technology Raipur
Yadagiri Naik Banothu - DRDO
Somnath Bhattacharya - National Institute of Technology Raipur
Himanshu Pathak - Indian Institute of Technology Mandi

ACES1.6 - Green Hydrogen Production, Storage, and Integrated Hydrogen Energy Systems and ACES2.6 - Emerging Technologies - Clean Energy

9/4/2026

4:30 PM to 6:30 PM - CH05

Chair: Ankur Mullick - PIL

Chair: Pradeep Chauhan - Pipeline Infrastructure Ltd.

Presentations:

Integration of Modularization in Green Ammonia Projects, {IMECE-India2026-188228}

Technical Paper Publication

Kathirvel Nagappan - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India
Vetrivivek Sivasubramanian - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India
Stephen Panamthodathuvarghese - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India
Chandran Rajan - Kellogg Brown & Root Engineering and Construction India Pvt. Ltd., Chennai, India

Cost Parity Pathways for Green Hydrogen: Technology Performance, Carbon Pricing, and Investment Risk, {IMECE-India2026-187034}

Technical Paper Publication

Lakshmi Shanmukha Valli Mankala - Vasavi College of Engineering
Mohammed Shareeq Ali Khan - Vasavi College of Engineering
Namani Khelan - University of Stuttgart
Karthik Malliela - X Dimensions Robotics
Jayant Nema - IIT Madras

A Sensor Less, Controller-Free Dual Axis Solar Tracker Powered by Auxiliary Pv Panels, {IMECE-India2026-189952}

Technical Paper Publication

Susant Kumar Sahu - Vignan's Institute of Information Technology(Autonomous), Visakhapatnam
Subbarama Kousik S - Karunya Institute of Technology and Sciences

Wastewater-Driven Green Hydrogen Production in Thermal Power Plants: Enhancing Sustainability and Efficiency, {IMECE-India2026-189314}

Technical Paper Publication

Sumit Kumar - NTPC
Lalu Chandra - Indian Institute of Technology, Kanpur
Rajeev Kumar Jain - NTPC Ltd.

Assessing the System-Level Impact of Battery Electric Vehicle Integration on Sustainable Mobility in India, {IMECE-India2026-189834}

Technical Paper Publication

Sherwin Abraham - Pandit Deendayal Energy University
Ojas Saibhai - Pandit Deendayal Energy University
Ravi Kant - Pandit Deendayal Energy University

ATT6.1 - Thermal management of electronic and electrochemical systems

9/4/2026

4:30 PM to 6:30 PM - CH12

Chair: Hari Shanker Thakur -

Presentations:

Thermal Response of Lithium-Ion Cells to Iudc Loading at Power Levels Up to 5 Kw Under Varying Ambient Temperatures, {IMECE-India2026-185870}

Technical Paper Publication

Pravin Mane - National Institute of Technology Warangal, Warangal.

Karthik Balasubramanian - National Institute of Technology Warangal, Warangal. Walchand College of Engineering, Sangli.

Sampath Chinige - National Institute of Technology, Warangal.

Evaluation of Flow Boiling Instability in Converging and Diverging Microchannels: An Analytical-experimental Instability Parameter Study, [IMECE-India2026-188112]

Technical Paper Publication

Monojit Konar - Indian Institute of Technology Bombay

Sandip K. Saha - Indian Institute of Technology, Bombay, India

Numerical Study of Non-Uniform Multi-Microchannel Heat Sinks for Enhanced High Heat Flux Cooling, [IMECE-India2026-188113]

Technical Paper Publication

Asit Kumar Meher - Indian Institute of Technology Bombay

Amit Agrawal - Indian Institute of Technology Bombay

Sandip K. Saha - Indian Institute of Technology, Bombay, India

Scaling of Evaporation Flux from Capillary Bundles, [IMECE-India2026-189444]

Technical Paper Publication

Deepu Mohan - Indian Institute of Technology Madras

A. R. Anand - Indian Space Research Organisation (ISRO)

Baburaj A. Puthenveetil - Indian Institute of Technology Madras

Numerical Investigation on an Aerofoil Assisted Air-Cooled Battery Thermal Management System for Electric Vehicle, [IMECE-India2026-189511]

Technical Paper Publication

Sathyasree Nirmala - Virginia Tech India

Sutheesh P M - Enginuvity Nexus Technologies

Rohinikumar Bandaru - National Institute of Technology Calicut, India

Nadiya Philip - Virginia Tech India Research and Education Forum

Roop L. Mahajan - Virginia Tech

Padmanabhan Myoor K. - Dr. MGR Educational and Research Institute

Thermal Analysis of a Liquid-Cooled EV Battery Cooling Plate Using Ansys Fluent, [IMECE-India2026-189910]

Technical Paper Publication

Sam Solomon D P - Coimbatore Institute of Technology (CIT)

Alagusundaram C - Coimbatore Institute of Technology

Saravanan P - Coimbatore Institute of Technology (CIT)

Susindhar R - Coimbatore Institute of Technology (CIT)

PVP6.2 Non-Destructive Examination

9/4/2026

4:30 PM to 6:30 PM - CH03

Chair: RAJA RETHINAM PHILIP - L&T Construction, Mumbai

Chair: Parthapratim Brahma -

Chair: Harendra Kumar -

Presentations:

A Heuristic Fuzzy Logic Approach for Defect Characterization Using Eddy Current Testing Phase and Amplitude Response Analysis, [IMECE-India2026-188940]

Technical Paper Publication

Medam Nithin Kumar - Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

Siva Maya S - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Joseph J Kakkassery - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Gowri Shankar Rao R - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

A Review of Detection Limits and Sensitivity for Hydrogen-Induced Cracking in Non-Destructive Evaluation Applications, [IMECE-India2026-189322]

Technical Presentation Only

Prashanth R - Flowserve

Endoscopic Inspection Method for Valve Leak Deduction, [IMECE-India2026-188633]

Technical Presentation Only

Balaji Mugundhan - Flowserve India Controls Private Limited

Narendiran Jayaseelan - Flowserve India Controls Private Limited

Guided Wave Analysis for Inspection of Finned Tubes in Heat Exchangers, [IMECE-India2026-189431]

Technical Presentation Only

Ambuj Kumar Gautam - IIT Jodhpur

Wenchuan Wu - National Defense University

Ching-Chung Yin - National Yang Ming Chiao Tung University Taiwan

SSDM1.6 - Structures

9/4/2026

4:30 PM to 6:30 PM - CH07

Chair: Shashidhar Shivarudrappa - COLLINS AEROSPACE

Chair: Shahul Nazar - Technical Specialist, Airbus

Presentations:

Stress Concentration Analysis in Bio-Inspired Materials, [IMECE-India2026-195468]

Technical Presentation Only

Resmy J Devan - INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY

A Unified Cuf-Based Investigation of Free Vibrations in Porous and Non-Porous Fgm Cylindrical Shells, [IMECE-India2026-195454]

Technical Presentation Only

Satish Sahu - NIT Raipur

Rajana Suresh Kumar - NIT Raipur

Integration of Magnetic Particle Testing Data Into Digital Twin Models for Structural Integrity Assessment, [IMECE-India2026-188881]

Technical Paper Publication

Maddipati Chandra Sai Pavan - Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

Amma Vamshi - Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

Joseph Kakkassery - Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

Influence of Booster Thrust Transfer Location on Structural Loads of Heavy-Lift Launch Vehicles, [IMECE-India2026-189292]

Technical Paper Publication

Akash S S - Vikram Sarabhai Space Center

Subash S - Vikram Sarabhai Space Centre

Girish Babu P - Vikram Sarabhai Space Centre

Sajan Daniel - Vikram Sarabhai Space Centre

Ann-Based Interpretation of Concrete Quality Using Ultrasonic Pulse Velocity (Upv), [IMECE-India2026-189078]

Technical Paper Publication

Karishma Tiwari - Visvesvaraya National Institute of Technology, Nagpur, Maharashtra, India

Dr. Sanjay B. Borghate - Visvesvaraya National Institute of Technology, Nagpur, Maharashtra, India

Title: Stiffness Evolution and Failure Behavior of Hot-Air Riveted (Heat-Staked) Thermoplastic Joints: An Experimental, CAE, and Applied Machine Learning Approach, [IMECE-India2026-185535]

Technical Paper Publication

Durgaprasad Kosgi - ZF Group

Simon Kraus - ZF group

SSDM3.3 - Materials

9/4/2026

4:30 PM to 6:30 PM - CH13

Chair: Hariprasath M - Infosys

Chair: George DSA - Airbus India Private Limited

Presentations:

Exploratory Study on Time-Dependent Deformation Using Dwell-Assisted Automated Ball Indentation, [IMECE-India2026-

183714]

Technical Paper Publication

S Vishal - Indian Institute of Technology Madras

Raghu Prakash - IIT Madras

Zhou Wei - Nanyang Technological University

Computational Modeling of Hydrogen Embrittlement in Steel Alloys: Microstructure Sensitive Help Mechanism, [IMECE-India2026-187943]

Technical Paper Publication

M K Rahgul Poopathi - Indian Institute of Information technology, Design and Manufacturing (IIITDM), Kancheepuram

Mariyappan Arul Kumar - Indian Institute of Information Technology, Design and Manufacturing, Chennai

Experimental Investigation of Rate-Dependent Tensile and Compressive Behavior of Silicone Rubber Under Different Strain Amplitudes, [IMECE-India2026-189520]

Technical Paper Publication

Karne Naveen Kumar - Indian institute of space science and technology

Praveen Krishna Ir - Indian institute of space science and technology

Machine Learning-Based Prediction of Mechanical Properties of Metal Powder Reinforced Polymer Matrix (Mprpm) Composites, [IMECE-India2026-188816]

Technical Paper Publication

Yogesh Dandekar - National Institute of Technology, Raipur

Mridul Singh Rajput - National Institute of Technology, Raipur

Rajana Suresh Kumar - National Institute of Technology, Raipur

Fracture Toughness of Cellular Lattices Containing TetraKaidecahedron and Octet Truss Cells of the Same Size, [IMECE-India2026-188070]

Technical Presentation Only

Zuriah Syed - Mahindra University

Harshavardhan Kalathur - Mahindra University

Gouripriya S - Mahindra University

Application of Acoustic Metamaterials for Low - Frequency Noise Attenuation in Aircraft Nacelle Structures, [IMECE-India2026-188040]

Technical Presentation Only

Siddharth Narayanan - Collins Aerospace

MT4.1 - Digital twin and metrology

9/4/2026

4:30 PM to 6:30 PM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology Indore

Chair: Sivanandam Aravindan - Indian Institute of Technology Delhi

Chair: Janakaram Ramkumar - Indian institute of technology Kanpur, India

Presentations:

Thermal Data Driven Digital Twin of Grinding Wheel and Its Interaction With Work Surface for Real-Time Prediction and Control, [IMECE-India2026-189617]

Technical Paper Publication

Sarath Babu Thekkoot Surendran - Indian Institute of Space Science and Technology, Thiruvananthapuram

V S Sooraj - Indian Institute of Space Science and Technology, Thiruvananthapuram

Digital Twin-Inspired Model-test-metrology Framework for Cardiovascular Implants Manufacturing Verification, [IMECE-India2026-188757]

Technical Presentation Only

Subhash N. N. - SCTIMST

Muraleedharan C. V. - SCTIMST

Numerical Simulation for Prediction of Temperature Distribution and Metal Removal Rate of Titanium Alloy in Electro-Discharge Machining, [IMECE-India2026-189191]

Technical Paper Publication

Jonnala Subba Reddy - Lakireddy Bali Reddy College of Engineering, Mylavaram

Av S S K S Gupta - JNTU College of Engineering, Hyderabad

Anodization-Induced Functionalization of Laser-Textured Titanium for Self-Cleaning Applications, [IMECE-India2026-196805]

Technical Presentation Only

Dinesh Kumar S - IIITDM Kancheepuram

Kishor Kumar Gajrani - IIITDM Kancheepuram

Development of a Flexible Laser Induced Sensing Platform With Surface-Engineered Novel Functional Coatings, [IMECE-India2026-189592]

Technical Presentation Only

ACHYUT MISHRA - IIT Jodhpur

Gulshan Verma - IIT Jodhpur

Monsur Islam - Universidad Politécnica de Madrid

Ankur Gupta - IIT Jodhpur

Optimization and Predictive Modeling of Ultrasonic-Assisted Pulse Electrodeposited Hydroxyapatite Coatings on Ti6Al4V Using Rsm and Ann, [IMECE-India2026-195370]

Technical Presentation Only

Saloni Singhal - IITJ

Divyansh Mittal - IITJ

Chandan Pandey - IITJ

Ankur Gupta - IITJ

CPSA/ML 6.1 - Physics-informed Machine Learning

9/4/2026

4:30 PM to 6:30 PM - CH06

Chair: Dr. BP Gautham -

Presentations:

Stable Integration of Physics-Informed Ai/ml Turbulence Closures Within Rans Solvers for Industrial Cfd, [IMECE-India2026-188643]

Technical Paper Publication

Swapnil Wadkar - ZF India Pvt Ltd

Ajit Joshi - MIT ADT University

Rajesh Deepak Kanna - ZF India Pvt Ltd

Sagar Shinde - Ramchandra College of Engg.

Physics-Preserved Dataset Scaling for Neural Networks and Cfd in High-Speed Compressible Flows, [IMECE-India2026-189941]

Technical Paper Publication

Ansh Tiwari - Amity Institute of Aerospace Engineering

K. Navraj Dara - Amity Institute of Aerospace Engineering

Vibhu Vaibhav Singh - Amity Institute of Aerospace Engineering

Sahaj Goel - Amity Institute of Aerospace Engineering

Improved Balanced-Risk Analysis in Conceptual Design of Complex Physics-Based Systems Using Dimensional Analysis and Pi Theorems Within Design Optimisation Under Uncertainties, [IMECE-India2026-188763]

Technical Paper Publication

Van-Dung Truong - VTT Technical Research Centre of Finland

William Brace - VTT Technical Research Centre of Finland

Petri Kuosmanen - Aalto University

More Dimensional Fied Data Prediction, [IMECE-India2026-187472]

Technical Paper Publication

Swanand Lele - GE Vernova

Madhusudan Pothumathi - GE Vernova

Jaikumar Loganathan - GE Vernova

VD&C1.2 - Linear and non-linear dynamics and control

9/4/2026

4:30 PM to 6:30 PM - CH11

Chair: Dr. Anoop A M -

Chair: Dr. Kiran Vijayan -

Presentations:

Active Constrained Layer Damping of Graphene Reinforced Composite Plates on Winkler Pasternak Foundation, [IMECE-India2026-187946]

Technical Paper Publication

Nandyal Hemant Reddy - National Institute of Technology Surathkal, Karnataka

Subhaschandra Kattimani - National Institute of technology
Surathkal, karnataka
Sai Kumar Shada - National Institute of Technology Surathkal
Karnataka

Generalization of Zero Assignment Control Technique for MIMO
Systems, [IMECE-India2026-188666]

Technical Paper Publication

Tatavarty Srikanth - Visvesvaraya National Institute of Technology
Nagpur

Pasupula Ranga Aravinda Swamy - Visvesvaraya National
Institute of Technology Nagpur

Ajinkya Baxy - Visvesvaraya National Institute of Technology
Nagpur

Development of a Single Platform Integrated Engine Vehicle
Control Model for Real Time Applications, [IMECE-India2026-
188735]

Technical Paper Publication

Anirudh Sai Ram Bommidu - Indian Institute of Technology Madras

Kartheeswaran Ayyanar - Indian Institute of Technology Madras

Mayank Mittal - Indian Institute of Technology Madras

PSD Based Random Vibration Analysis and Response Mitigation for
Aerospace Structures, [IMECE-India2026-188797]

Technical Paper Publication

Swetha Sri Nakka - Advanced Systems Laboratory

Prangyadeepta Choudhury - Advanced Systems Laboratory

Malleswara Rao, N. V. - Advanced Systems Laboratory

Sanjay Anandrao Khalane - Advanced Systems Laboratory

Application of Constrained Layer Damping on the Picking Cone of
a Power Loom for Vibration Attenuation, [IMECE-India2026-
189364]

Technical Paper Publication

Prahalad Badkar - DKTE Society's Textile and Engineering Institute,
Rajwade, Ichalkaranji-416 115, Dist.: Kolhapur (Maharashtra)
India

Vinayak Naik - Mechanical Department, DKTE Society's Textile and
Engineering Institute, Rajwade, Ichalkaranji-416 115 Dist.:
Kolhapur (Maharashtra) India

AM3D3.2- Materials & Characterization for AM

9/4/2026

4:30 PM to 6:30 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of
Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Comparative Analysis of Microstructural and Mechanical

Properties in Friction Stir Welding of the Top and Bottom Layer
Surfaces of Additively Manufactured AlSi10Mg to Copper,
[IMECE-India2026-188606]

Technical Paper Publication

Stephen Waako - Pandit Deendayal Energy University

Vishvesh Badheka - Pandit Deendayal Energy University

Microstructural Evolution and Mechanical Behaviour of AlSi9Cu3
Alloy Fabricated by Casting and Laser Powder Bed Fusion,
[IMECE-India2026-189695]

Technical Paper Publication

Ramesh R - Indian Institute of Technology Madras

Saurabh Gairola - Indian Institute of Technology Madras

Jayaganthan R - Indian Institute of Technology Madras

Kamaraj M - Indian Institute of Technology Madras

Influence of Stress Relief Treatment on Elevated-Temperature
Deformation and Microstructural Evolution of Additively
Manufactured AlSi10Mg Alloy, [IMECE-India2026-189707]

Technical Paper Publication

Ramesh R - Indian Institute of Technology Madras

Saurabh Gairola - Indian Institute of Technology Madras

Jayaganthan R - Indian Institute of Technology Madras

Kamaraj M - Indian Institute of Technology Madras

Microstructural Evolution and Aging Response of Additively
Manufactured Ti-Modified Aluminium 2024 Alloy, [IMECE-
India2026-189713]

Technical Paper Publication

Ramesh R - Indian Institute of Technology Madras

Saurabh Gairola - Indian Institute of Technology Madras

Jayaganthan R - Indian Institute of Technology Madras

Kamaraj M - Indian Institute of Technology Madras

Microstructural and Mechanical Properties Analysis of Bimetallic
Component Fabricated Using Arc-Based Additive Manufacturing,
[IMECE-India2026-189647]

Technical Paper Publication

Deepak Suna - Indian Institute of Technology Bhubaneswar, Indira
Gandhi Institute Of Technology, Sarang

Manas Mohan Mahapatra - Indian Institute of Technology
Bhubaneswar

Pandu Ranga Vundavilli - Indian Institute of Technology
Bhubaneswar

AM8.1 - Advanced Surface Engineering - Coatings

9/4/2026

4:30 PM to 6:30 PM - CH08

Chair: Eklavya Calla -

Presentations:

Optimization of Laser Surface Texturing Parameters for Enhanced
Hydrophobicity of Al7075 Aluminium Alloy, [IMECE-India2026-
188349]

Technical Paper Publication

Rahul Soni - Dr. B. R. Ambedkar National Institute of Technology Jalandhar

Rajeev Verma - Dr. B. R. Ambedkar National Institute of Technology Jalandhar

Rajiv Kumar Garg - Dr. B. R. Ambedkar National Institute of Technology

Harpreet Singh - Indian Institute of Technology Ropar

Surface Characterization and Tribological Evaluation of G-Cara Coatings on Wc Substrates, [IMECE-India2026-187340]

Technical Paper Publication

Neelam Venkata Sunil Kumar - IIITDM Kurnool

Penchalrao K - IIITDM Kurnool

Neha Khatri - CSIR-Central Scientific Instruments Organisation

Prabhakar Sandepogu - IIITDM Kurnool

Pandiyarajan Thangaraj - IIITDM Kurnool

Vipindas K - IIITDM Kurnool

Droplet Impact Behavior on Superhydrophobic Copper-Mof Surfaces, [IMECE-India2026-189666]

Technical Paper Publication

Nirmal Manyani - Indian Institute of Technology Madras

Prasanna Kumar Billa - IIT MADRAS, CHENNAI, TAMILNADU

Raman Vedarojan - Indian Institute of Technology Madras

Pallab Sinha Mahapatra - Indian Institute of Technology Madras

Multilayer Plasma-Sprayed Uhtc Composite Coatings on Gfrp: Microstructure and Mechanical Performance, [IMECE-India2026-190119]

Technical Paper Publication

Varun Kumar - Indian Institute of Technology Ropar

Saiful Wali Khan - Indian Institute of Technology Ropar

Lopamudra Palodhi - Indian Institute of Technology Ropar

Rohitash Kumar - Defence Laboratory, Jodhpur

Anju Nirwan - Defence Laboratory, Jodhpur

Ravi Kant - Indian Institute of Technology Ropar

Harpreet Singh - Indian Institute of Technology Ropar

Interaction of Tamping-Induced Microstructural Gradients and Heat Treatment in Thick Cold-Sprayed Al 6061 Coatings, [IMECE-India2026-190120]

Technical Paper Publication

Gaurav Rai - Indian Institute of Technology Ropar, Rupnagar Punjab

Saiful Wali Khan - Indian Institute of Technology Ropar, Rupnagar Punjab

S Akhil Teja - Indian Institute of Technology Ropar, Rupnagar Punjab

Varun Kumar - Indian Institute of Technology Ropar, Rupnagar Punjab

Md Shad Ali - Indian Institute of Technology Ropar, Rupnagar Punjab

Ravi Kant - Indian Institute of Technology Ropar, Rupnagar Punjab

Harpreet Singh - Indian Institute of Technology Ropar, Rupnagar Punjab

Laser Sheet Melt and Spray (L-Sms): A Novel Near Zero Waste Sheet Feedstock Based Process for Coating Deposition, [IMECE-India2026-189548]

Technical Paper Publication

Equbal Ahmed - Indian Institute of Technology Ropar

Ravi Kant - Indian Institute of Technology Ropar

Dhruva Kumar Goyal - Amity School of Engineering and Technology, Amity University Punjab

GT3.3 - Fluid Dynamics, Heat Transfer and Thermal Engineering

9/4/2026

4:30 PM to 6:30 PM - CH02

Chair: Sendilkumaran Soundiramourty -

Chair: Prof Kameswararao Anupindi -

Presentations:

Performance Improvement in a Two Pass "U" Shaped Channel Using Wavy Channel and Secondary Flows, [IMECE-India2026-188798]

Technical Paper Publication

Karthikeyan Paramanandam - Honeywell Aerospace India Private Limited

Manasa D - Honeywell Aerospace India Private Limited

Lakshmi Nanjundaswamy - Honeywell Aerospace India Private Limited

Experimental and Cfd Investigation of Deflection-Induced Aerodynamic Loading on a Naca 0012 Profile: Implications for Turbomachinery Blade Control and Off-Design Operation, [IMECE-India2026-188848]

Technical Paper Publication

Swapnil Wadkar - ZF India Pvt Ltd

Rajesh Deepak Karra - ZF India PVT LTD

Ajit Joshi - MIT ADT University

Sagar Shinde - Ramchandra College of Engg.

Effect of Geometry of Impinging surface on Characteristics of Twin Impinging Jets in V/STOL Applications, [IMECE-India2026-188866]

Technical Paper Publication

K B V Satya Prakash - Sasi Institute of Technology & Engineering

Narendra Eelaprolu - Lakireddy Bali Reddy College of Engineering

Venkata Hemanth Kokarla - Lakireddy Bali Reddy College of Engineering

Thambi Joseph Neeluri - Lakireddy Bali Reddy College of Engineering

Venkateswara Rao Vellanaki - Lakireddy Bali Reddy College of Engineering

Dakshina Murthy Inturi - Lakireddy Bali Reddy College of Engineering

Lovaraju Pinnam - Lakireddy Bali Reddy College of Engineering

Flow Characteristics of Altitude Adaptive Nozzles, {IMECE-India2026-188890}

Technical Paper Publication

Lovaraju Pinnam - Lakireddy Bali Reddy College of Engineering

Fiyaz Shaik - Lakireddy Bali Reddy College of Engineering

Dakshina Murthy Inturi - LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

Hemanth Kola - Lakireddy Bali Reddy College of Engineering

Bhaskar Reddy Pothireddy - Lakireddy Bali Reddy College of Engineering

Malleswar Meesala - Lakireddy Bali Reddy College of Engineering

Shock Structures Over a Compound Geometry in Supersonic Flow, {IMECE-India2026-189011}

Technical Paper Publication

Balaji E - Hindustan Institute of Technology and Science

Poornanand K - Hindustan Institute of Technology and Science

Navin Kumar M - Hindustan Institute of Technology and Science

Balaji Ganesan - Hindustan Institute of Technology and Science

Vijayanandh Raja - Kumaraguru College of Technology

Boopathy Govindarajan - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Technology and Science

Santhosh Kumar Ganesan - University College of Engineering, Bharathidasan Institute of Technology Campus, Anna University,

Vigneswaran C M - Ramaiah Institute of Technology

Muthuram A - SRM Institute of Science and Technology,

Prasad G - Chandigarh University,

Sathish Kumar K - Nehru Institute of Engineering and Technology

Numerical Experiments on Particle Separator Swirl Tubes, {IMECE-India2026-189169}

Technical Paper Publication

Dhinakaran Ramachandran - TurboTech Precision Engineering Pvt. Ltd.

Libin George - TurboTech Precision Engineering Pvt. Ltd.

Seran Krishnamoorthy - TurboTech Precision Engineering Pvt. Ltd.

GT1.5 - Compressors, Fans & Pumps

9/4/2026

4:30 PM to 6:30 PM - CH16A

Chair: Chetankumar Mistry - Indian Institute of Technology Kharagpur

Chair: Dilipkumar Bhanudasji Alone - CSIR-National Aerospace Laboratories

Presentations:

Adjoint-Based Shape Optimization of Conventional and Compact Centrifugal Compressor Volute, {IMECE-India2026-187989}

Technical Paper Publication

Kavichelvan K. - Indian Institute of Technology Dharwad

M. C. Keerthi - Indian Institute of Technology Dharwad

Investigations on Shrouded Tandem-Bladed Axial Flow Compressor, {IMECE-India2026-189690}

Technical Paper Publication

Raja Hiralal Jena - Indian Institute of Technology Kharagpur

Hitesh Bhai Patel - Indian Institute of Technology Kharagpur

Anubhav Mohanty - Indian Institute of Technology Kharagpur

Chetankumar Mistry - Indian Institute of Technology Kharagpur

Impact of Sweep Angle on Cavitation Breakdown in Turbopump Inducers, {IMECE-India2026-189906}

Technical Paper Publication

Praveen Kumar Akula - Indian Institute of Technology Kharagpur

Chetan Kumar Suresh Bhai Mistry - Indian Institute of Technology Kharagpur

Multi-Fidelity Optimization of Propeller Blades, {IMECE-India2026-189366}

Technical Paper Publication

Gadi Rotti Basava Raju - M. S. Ramaiah University of Applied Sciences

Aaditya _____ - M.S. Ramaiah University of Applied Sciences

Nishal Sanil Monteiro - M.S. Ramaiah University of Applied Sciences

A. T. Sriram - M.S. Ramaiah University of Applied Sciences

Performance Analysis of an Axial Flow Fan With Skewed Semi-Elliptic Casing Treatment, {IMECE-India2026-189924}

Technical Paper Publication

Deepanshu Choudhary - Manipal Institute of Technology, Manipal Academy Of Higher Education

Gautham Amin - Manipal Institute of Technology, Manipal Academy of Higher Education

Ishaan Shukla - Manipal Institute of Technology, Manipal Academy of Higher Education

Aditya Kuthe - Manipal Institute of Technology, Manipal Academy of Higher Education

Pramod Salunkhe - Manipal Institute of Technology, Manipal Academy of Higher Education

Enhancing Aerodynamic Performance of Naca 4415 Airfoil Using Vortex Generators: A Computational Study, {IMECE-India2026-188323}

Technical Paper Publication

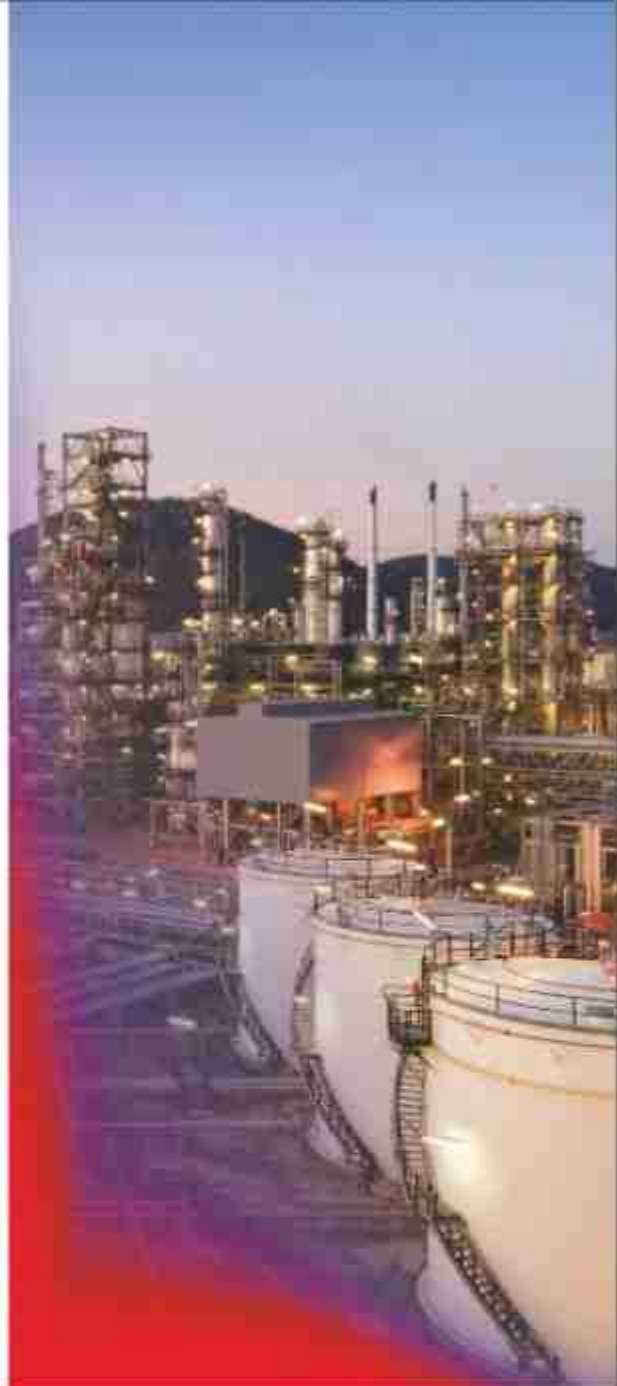
Prajna M - MS Ramaiah University of Applied Sciences

Mahesh Vorpe - MS Ramaiah University of Applied Sciences

Sushma Kalshetty - MS Ramaiah University of Applied Sciences

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[Honeywell Technologies Newsroom.](#)

TECHNICAL SESSION SCHEDULE

SATURDAY, 5TH SEPTEMBER 2026

AM2.1 - Materials Modeling and Mechanics including AI/ML

9/5/2026

8:30 AM to 10:30 AM - CH08

Chair: K. v. Vamsi -

Chair: Pratik Ray -

Presentations:

Continuum Damage Mechanics (Cdm) Based Approach for Estimation of Creep Life of Nickel Base Superalloys, [IMECE-India2026-188421]

Technical Paper Publication

Samnath Nandi - BHEL Corporate R&D, Hyderabad

Ahv Pavan - BHEL Corporate R&D, Hyderabad

Vivek Arya - BHEL Corporate R&D, Hyderabad

Explainable Deep Learning for Predicting Energy Absorption and Stiffness of Mechanical Metamaterials, [IMECE-India2026-186945]

Technical Paper Publication

Dheera S Nair - Indian Institute of Information Technology, Design and Manufacturing, IIITDM Kancheepuram

Rajnish Mallick - Indian Institute of Information Technology, Design and Manufacturing, IIITDM Kancheepuram

Micromechanical Modeling of the Effect of Morphology and Strain Rate on the Mechanical Behavior of Ni-Based Single Crystal Superalloys, [IMECE-India2026-189806]

Technical Paper Publication

Debraj Shaw - Indian Institute of Technology Hyderabad

Anirban Naskar - Indian Institute of Technology Hyderabad

Chandra Prakash - Indian Institute of Technology Hyderabad

Modelling Elastic Moduli in $-Ni(a, X)$ via a Calphad Approach, [IMECE-India2026-188347]

Technical Paper Publication

Arham Aneeq - Indian Institute of Technology, Indore

K. V. Vamsi - Indian Institute of Technology, Indore

Explainable machine learning (xML) framework for fatigue life prediction of carbon nanotube-filled FRPs using machine learning regressor models, [IMECE-India2026-188242]

Technical Paper Publication

Anand gaurav - New Age Makers Institute of Technology (NAMTECH)

Taguchi L9 and Machine Learning-based Prediction of Dry Sliding Wear in Stir-Cast Eutectic Al-si/kyanite/graphite Hybrid

Composites, [IMECE-India2026-188778]

Technical Paper Publication

Rahul Patil - NUTAN MAHARASHTRA INSTITUTE OF ENGINEERING AND TECHNOLOGY

Eaknath Deore - SSVPS's B.S.Deoce College of Engineering Dhule

Deepak Sonawane - SSVPS's B.S.Deoce College of Engineering Dhule

Sucheta Salunkhe - Dr. D.Y.Patil Technical Campus

RA7.1: Robotics & Automation- Robot Kinematics & Field Applications

9/5/2026

8:30 AM to 10:30 AM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Feedforward Tracking Control of Planar Cable-Driven Parallel Robots Using Filtered B-Splines Approach, [IMECE-India2026-187710]

Technical Paper Publication

Keval Ramani - Indian Institute of Technology Goa

Roshan Sharma - Indian Institute of Technology Goa

Parth Gupta - Indian Institute of Technology Goa

Sliding Mode Based Manipulability Tracking and Control of a Holonomic Wheeled Mobile Manipulator, [IMECE-India2026-189581]

Technical Paper Publication

Ankur Deka - Indian Institute of Technology Guwahati

Sandeep Reddy - Indian Institute of Technology Guwahati

Parametric Analysis and Decomposition of Mechanical Advantage and Transmission Ratio in Loop Mechanisms, [IMECE-India2026-189856]

Technical Paper Publication

Nayan Shaji - Indian Institute of Space Science and Technology

Sam Noble - Indian Institute of Space Science and Technology

Comparative Study of Computed Torque, and Adaptive Control Strategies for Hybrid Position/force Control in a Pushing Robot Manipulator With Uncertain Mass Properties, [IMECE-India2026-187234]

Technical Paper Publication

Vishal Naik - Indian Institute of Technology, Dharwad

Sangamesh Deepak R - Indian Institute of Technology, Dharwad

Autonomous Parallel Scan-and-Spray Dual Uav Collaboration for

Precision Agriculture Using Onboard Vision, {IMECE-India2026-187460}

Technical Paper Publication

Rajasi Deshmukh - Visvesvaraya National Institute of Technology, Nagpur

Samiran Biswas - Visvesvaraya National Institute of Technology, Nagpur

Kumar Ayush - Visvesvaraya National Institute of Technology, Nagpur

Sunil Watgule - Visvesvaraya National Institute of Technology, Nagpur

Abhinav Anand - Visvesvaraya National Institute of Technology, Nagpur

Tarun Kayala - Visvesvaraya National Institute of Technology, Nagpur

Dr. Ashwin Kothari - Visvesvaraya National Institute of Technology, Nagpur

Kinematic Modeling and Task-Space Trajectory Control of a Mobile Manipulator for Automated Rubber Latex Collection, {IMECE-India2026-189661}

Technical Paper Publication

Ajay Krishnan V - Indian Institute of Technology Palakkad

Santhakumar Mohan - Indian Institute of Technology Palakkad

RA11.1: Robotics & Automation- Advanced UAV & Aerial Systems

9/5/2026

8:30 AM to 10:30 AM - CH15

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Modelling and Control of a Tilt-Rotor Quadcopter, {IMECE-India2026-189029}

Technical Paper Publication

Parthiv P - Indian Institute Of Technology, Palakkad

Abhijith Sureshbabu - Indian Institute Of Technology, Palakkad

Santhakumar Mohan - Indian Institute Of Technology, Palakkad

Vijay Muralidharan - Indian Institute Of Technology, Palakkad

Design and Analysis of a Rocket Integrated Hybrid Uav, {IMECE-India2026-188731}

Technical Paper Publication

Haneesh M - M. S. Ramaiah University of Applied Sciences

Rajashekarareddy H. G. - M. S. Ramaiah University of Applied Sciences

A. T. Sriram - M. S. Ramaiah University of Applied Sciences

Physics-Guided, Explainable AI for Multi-Domain Health Monitoring of Autonomous Drones Using Flight Dynamics, {IMECE-India2026-188879}

Technical Paper Publication

Ansilin Kumar S M - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Surendar Ganesan - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Balasubramanian Esakki - National Institute of Technical Teachers' Training and Research, Chennai

Sarath Kumar C - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Investigation of Flight Instability in a Fixed-Wing Vtol Uav Using Structural and Cfd Analysis, {IMECE-India2026-187203}

Technical Paper Publication

Ishani Khatri - Visvesvaraya National Institute of Technology, Nagpur

Sunil Watgule - Visvesvaraya National Institute of Technology, Nagpur

Mayank Lonkar - Indian Institute of Technology Madras

Ajinkya Baxy - Visvesvaraya National Institute of Technology, Nagpur

Ritesh Keshri - Visvesvaraya National Institute of Technology, Nagpur

Time Horizon-Based Adaptive Gain Tuning Using Soft Actor-Critic (Sac) Agent for Artificial Potential Field, {IMECE-India2026-188491}

Technical Paper Publication

Adeetya Uppal - Indian Institute of Technology Kharagpur

Rakesh Kumar Sahoo - Indian Institute of Technology Kharagpur

Manoranjan Sinha - Indian Institute of Technology Kharagpur

Orientation-Agnostic Payload and Center-of-Gravity Estimation for Autonomous Stable Grasping, {IMECE-India2026-189323}

Technical Paper Publication

Siddarth Nagaraj - Indian Institute of Technology Madras

Bija Sebastain - Indian Institute of Technology Madras

ATT7.1 - Computational and Experimental Heat Transfer - I

9/5/2026

8:30 AM to 10:30 AM - CH12

Chair: Anandaroop Bhattacharya - IIT Kharagpur

Presentations:

Analysing the Relationship Between Climatological Trends and Hvac Energy Consumption, {IMECE-India2026-187109}

Technical Paper Publication

prem chander m - hindustan university

Hariram V - Hindustan university

Fluid-Structure-Interaction (Fsi) Modeling of Pressure-Induced Deformation in Human Arteries, {IMECE-India2026-189141}

Technical Paper Publication

Ranjit Singh - New York University Abu Dhabi

Sunil Kumar - New York University Abu Dhabi

Investigation of Partially Heated Rotating Cylinder in Buoyancy Driven Thermal Convection, {IMECE-India2026-189222}

Technical Paper Publication

Deepu M - IIST VALIYAMALA

Abhijith Vijayan - IIST VALIYAMALA

Performance Enhancement of Domestic Refrigeration Systems: A Multi-Component Retrofit Strategy Using Variable Capacity Compressors and Hybrid Vacuum Insulation, {IMECE-India2026-

189349]

Technical Paper Publication

Omkar Mirajkar - COEP Technological University, Pune

H. P. Shinde - COEP Technological University, Pune

Anil Kute - Whirlpool of India Ltd

Chetan Meshram - Whirlpool of India Ltd

Sankarshan Verma - Whirlpool of India Ltd

Mohan Prabhu - Whirlpool of India Ltd

Towards Net-Efficient Buildings: A Hybrid Hvac System With Separate Sensible-latent Cooling and Integrated Water-energy Recovery, [IMECE-India2026-189823]

Technical Paper Publication

Karthick Siddhesh S P - Amrita Vishwa Vidyapeetham

Ravickiran Muthuvinayagam - Amrita Vishwa Vidyapeetham

Santosh Ravichandran - Amrita Vishwa Vidyapeetham

Thermal Reliability of Graphene Based Nanofluid Heat Pipes for Next - Generation Electronic Heat Management Applications, [IMECE-India2026-188231]

Technical Paper Publication

Aruna Veerasamy - Sathyabama Institute of Science and Technology

Anish M - Sathyabama Institute of Science and Technology

Kanimozhi Balakrishnan - Sathyabama Institute of Science and Technology

Jayaproskash V - Sathyabama Institute of Science and Technology

PVP1.1 Codes & Standards

9/5/2026

8:30 AM to 10:30 AM - CH03

Chair: Ankit Dipak Dalal - L&T

Chair: Parthapratim Brahma -

Chair: Amit Jain -

Presentations:

Installation Misalignment in Expansion Joint Design: A Profile-Based Approach Under Asme Bpvc VIII-2, [IMECE-India2026-189426]

Technical Paper Publication

Vishvajee K Joshi - Kellogg Brown and Root

Umamagesh Ganesan - LSI-MECH Engineers Pvt LTD

Agroja Magesh - LSI-MECH Engineers Pvt LTD

Study of Small Hole Opening reinforcement by FEA to include as exemption in ASME Div 2, [IMECE-India2026-189384]

Technical Paper Publication

Rupeshbhai Parikh - Larsen and Toubro LTD

Parag Suryawanshi - Larsen and Toubro LTD

Design of Tubesheet With Untubed Area, [IMECE-India2026-187669]

Technical Paper Publication

Anjaneyulu Kakumanu - Engineers India Limited

Sandeep Goyal - ISGEC Heavy Engineering Ltd.

Manish Garg - ISGEC Heavy Engineering Ltd.

Srikanth Karanam - Engineers India Limited

FEA Simulation Based Evaluation of In-Situ Local Post Weld Heat Treatment for Brownfield Equipment Revamp, [IMECE-India2026-187965]

Technical Paper Publication

Pradeep Bankar - Larsen and Toubro Heavy Engineering

Suyog Shinde - Larsen and Toubro Heavy Engineering

Harshal Kolhe - Larsen and Toubro Heavy Engineering

Harsh Mashru - Larsen and Toubro Heavy Engineering

Assessment of Design Methods for Type D Bolted Flange Dished Heads Considering Flange-head Continuity, [IMECE-India2026-189595]

Technical Paper Publication

Shyam Gopalakrishnan - LRQA Inspection Services India LLP

Shamin Sidhaye - LRQA Inspection Services India LLP

Akshay Chavade - LRQA Inspection Services India LLP

Mohammad Abdul Qadeer - LRQA Inspection Services India LLP

Sujay Pathre - Lloyd's Register Marine and Offshore India LLP

Ameya Mathkar - Thyssenkrupp Uhde India Pvt. Ltd

From Clauses to Clarity, With Confidentiality: Self Hosted AI, [IMECE-India2026-186713]

Technical Paper Publication

Himanshu Bhatt - MechXcel Designs LLP

Rajendra Kanetkar - Esquire Ideation

SSDM3.1 - Materials

9/5/2026

8:30 AM to 10:30 AM - CH07

Chair: George DSA - Airbus India Private Limited

Chair: K Sudha Deepthi -

Presentations:

Laser-Induced Flammability Reactivity Assessment (Lifra), [IMECE-India2026-190288]

Technical Presentation Only

Umamaheswaran Shanmugam - Boeing India

Design and Analysis of a Cubesat Structure for Atmospheric Re-Entry, [IMECE-India2026-189720]

Technical Presentation Only

Gnanesh Raj T - Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram, India

EXPERIMENTAL AND FINITE ELEMENT INVESTIGATION OF CARBON FIBER REINFORCED POLYMER OUTER SHELL AND STEEL INNER SHELL BI-MATERIAL HYDRAULIC CYLINDER, [IMECE-India2026-187594]

Technical Paper Publication

Profulla Bhaskar Pawar - Birla Institute of Technology and Science, Pilani, Hyderabad Campus

Srinivasa Prakash Regalla - Birla Institute of Technology and Science, Pilani, Hyderabad Campus

Amit Rajnarayan Singh - Birla Institute of Technology and Science, Pilani

Ayyappa Swamy Kundrapu - Wipro Infrastructure Engineering, WIPRO R&D

Transverse Mechanical Properties of Nacre-Inspired Composite With Interlamellar Connections, [IMECE-India2026-189245]

Technical Paper Publication

Ramya Raveendran - College of Engineering Trivandrum

Anup S - Indian Institute of Space Science and Technology

Anisotropic Elastic-Plastic Material Model for Injection Molded Thermoplastics Composite, [IMECE-India2026-188444]

Technical Paper Publication

Ismet Baran - Collins Aerospace | An RTX Business

Prashanth Kumar K - Collins Aerospace

S. Kshirabdh Tanaya - Collins Aerospace

Sujan J Vasishta - Collins Aerospace

Tejas A - Collins Aerospace

Experimental and Numerical Analysis of Pin Loaded Reinforced Thermoplastic Composites, [IMECE-India2026-188525]

Technical Paper Publication

Prashanth Kumar K - Collins Aerospace

S. Kshirabdh Tanaya - Collins Aerospace

Ismet Baran - Collins Aerospace

Sujan J Vasishta - Collins Aerospace

Tejas A - Collins Aerospace

Sudheendra K - Collins Aerospace

SSDM2.6 - Structural Dynamics, Modelling & Simulation

9/5/2026

8:30 AM to 10:30 AM - CH13

Chair: Krishnamurthy GS - Royal Enfield

Chair: Abhinav Ravindra Dehadrai -

Presentations:

Micromechanical Investigation of Load Transfer and Stress Localization in Regular Staggered Composites Using an Energy-Based Tension Shear Chain Framework, [IMECE-India2026-189457]

Technical Paper Publication

Resmy J Devan - Indian Institute of Space Science and Technology

Anup S - Indian Institute of Space Science and Technology

Numerical Solution of Free Vibration of Micro- and Nano-Beams Using the Integral Form of Eringen's Strain-Driven Model, [IMECE-India2026-188621]

Technical Paper Publication

S LAKHIL - Indian Institute of Space Science and Technology

IR Praveen Krishna - IIST

Dynamic Analysis of Interconnected Drive System, [IMECE-India2026-188229]

Technical Paper Publication

Aasiba Nisrin M - Indian Institute of Technology Kanpur

Ashish Rajeev Nayak - Indian Institute of Technology Kanpur

Sriansh Singh - Indian Institute of Technology Kanpur

Tanmay Mathur - Indian Institute of Technology Kanpur

Quantum Walks for Rare-Event Simulation in Structural Reliability Analysis, [IMECE-India2026-189663]

Technical Paper Publication

Abhinav Krishnan Thazhe Kurunthil - Indian Institute of Technology Kharagpur

Indranil Hazra - Indian Institute of Technology Kharagpur

Band Gap Study on a Metamaterial Plate With Cross-Shaped Elliptical and Rectangular Cutouts, [IMECE-India2026-189487]

Technical Paper Publication

Chaitanya Morey - Indian Institute of Technology Madras

Sundararajan Natarajan - Indian Institute of Technology Madras

Chandramouli Padmanabhan - Indian Institute of Technology Madras

Aeroelastic Stability of Morphing Aircraft: Unified Windowed Matrix Pencil Method and Floquet Approach, [IMECE-India2026-187232]

Technical Paper Publication

Debashis Singha - Indian Institute of Technology Madras

Senthil Murugan - Indian Institute of Technology Madras

MT6.1 - Non traditional and finishing process

9/5/2026

8:30 AM to 10:30 AM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology Indore

Chair: Sivanandam Aravindan - Indian Institute of Technology Delhi

Chair: Janakarajan Ramkumar - Indian institute of technology Kanpur, India

Presentations:

Pulse-Electrodeposited 3d Micro-Architected Electrodes for Sustainable Hydrogen Generation, [IMECE-India2026-189940]

Technical Presentation Only

Divyansh Mittal - Indian Institute of Technology Jodhpur

Kaushik Teji - Indian Institute of Technology Jodhpur

Monsur Islam - Universidad Politécnica de Madrid

Chandan Pandey - Indian Institute of Technology Jodhpur

Review on Electric Discharge Machining of Superalloys: Process Optimization and Performance Enhancement, {IMECE-India2026-186865}

Technical Paper Publication

Pankaj Prajapati - GUJARAT TECHNOLOGICAL UNIVERSITY - INSTITUTE OF TECHNOLOGY & RESEARCH

Ashutosh Gohel - GUJARAT TECHNOLOGICAL UNIVERSITY - INSTITUTE OF TECHNOLOGY & RESEARCH

Dr. Kapil Surani - GUJARAT TECHNOLOGICAL UNIVERSITY - INSTITUTE OF TECHNOLOGY & RESEARCH

Vibration-Assisted Magnetic Abrasive Finishing: A Technical Review, {IMECE-India2026-186868}

Technical Paper Publication

Manoj Kumar Ippili - National Institute of Technology Warangal

Nareesh Kumar Maraju - National Institute of Technology Warangal

Venkatesh Gudipadu - National Institute of Technology Warangal

Vamsi Krishna Pasam - National Institute of Technology Warangal

Integrated Electrical, Thermo-Physical, and Safety Property Analysis of Industrial Edm Dielectric Fluid for Discharge Performance Enhancement, {IMECE-India2026-189156}

Technical Paper Publication

Rajneesh Dwivedi - NIT Raipur

Mohan Kumar Pradhan - NIT Raipur

Effects of Core Dust During Assembly, {IMECE-India2026-197787}

Technical Presentation Only

Syed Muzzammil - Boeing India

Trilokpati Padhy - Boeing India

Lalit Saketh Behara - Boeing India

Development of High Strength Al Alloy for High Pressure Die Casting and Direct Age Hardening, {IMECE-India2026-189772}

Technical Paper Publication

Nikhil S Deo - Eaton India Innovation Center

Eric M Johnson - Eaton Corporation

Manish M Pande - IIT Bombay

Nithyanand Prabhu - IIT Bombay

CPSA/ML7.1 - Generative AI & Agentic AI

9/5/2026

8:30 AM to 10:30 AM - CH06

Chair: Dr V Venkateswara Rao -

Presentations:

A Generative AI Framework for the Conceptual Design Synthesis of Multi-State Mechanical Devices, {IMECE-India2026-189372}

Technical Paper Publication

Somasekhara Rao Todeti - National Institute of Technology Karnataka

Anurag Kumar - National Institute of Technology Karnataka (NITK), Surathkal

Rahul N C - National Institute of Technology Karnataka

A Multi-Fidelity Hierarchical Cyber-Physical System (H-Cps) for Automated Design Synthesis: Integrating Parametric Virtualization With Iot-Driven Physical Feedback, {IMECE-India2026-189909}

Technical Paper Publication

Nakuladhav M S - College of Engineering Guindy

Mohnish S - College of Engineering Guindy

Sunil B - College of Engineering Guindy

Chithoranjana Baburajan - College of Engineering Guindy

Context-Driven Multi-Agent AI for Aircraft Product Cost Optimization, {IMECE-India2026-188181}

Technical Paper Publication

Ravi G. v. V - Infosys

Sundaresan Poovalingam - Infosys

Devaraja Holla Vaderahobli - Infosys

dr.sunitha Abburi - Infosys

Murli Ananda Ramu Manohar - Infosys

Enhancing PfMEA Risk Analysis Through AI Enabled Guided Risk Assessment, {IMECE-India2026-189543}

Technical Paper Publication

Rishabh Shukla - TCS Research, Tata Consultancy Services

Himanshu Sharma - TCS Research, Tata Consultancy Services

Arpit Vishwakarma - TCS Research, Tata Consultancy Services

Gautham Bp - TCS Research, Tata Consultancy Services

Aero Gaiia (Grounded AI Assistants for Aerospace) - a Practical Evaluation Framework for Agentic AI in Aerospace, {IMECE-India2026-187782}

Technical Paper Publication

Maruti Rao Taluru - Boeing India Private Limited

Deepak Kumar - Boeing India Private Ltd

Predictive Maintenance and Real-Time Structural Health Monitoring of Excavators Using Digital Twin, {IMECE-India2026-188716}

Technical Paper Publication

Abhishek Madival - Altair Engineering India Pvt Ltd

Nikhil Sathe - Altair Engineering India Pvt Ltd

Manoj K V - Altair Engineering India Pvt Ltd

VD&C1.3 - Linear and non-linear dynamics and control

9/5/2026

8:30 AM to 10:30 AM - CH11

Chair: Dr. Kiran Vijayan -

Chair: Nidish Narayanaa Balaji -

Presentations:

Damping and Dynamic Characterization of Composite and Steel Structures, [IMECE-India2026-187728]

Technical Paper Publication

Akash J Vaidyan - IIT Kharagpur

Kiran Vijayan - IIT Kharagpur

Nilanjan Das Chakladar - IIT Kharagpur

Sommerfeld Effect in a Cantilever Beam Subjected to Non-Ideal Excitation With Consideration of the Stator and Rotor Inertia Parameters of the Motor, [IMECE-India2026-188092]

Technical Paper Publication

Shivam Upadhyay - Indian Institute of Technology Kharagpur

Ranjan Bhattacharyya - Indian Institute of Technology Kharagpur

Arun Kumar Samantaray - Indian Institute of Technology Kharagpur

Modal Analysis of Diffuser Casing of an Electrical Submersible Pump Using Short Carbon-Fibre-Reinforced Peek Composites, [IMECE-India2026-189220]

Technical Paper Publication

DHANASEARAN Arumugam - AMET University

Kavin S - AMET University

Yanamala Vinay Kumar - AMET University

Raja Bharathi B - AMET University

Christopher Stephen - NIOT

Kumaraswamy Sivasailam - Former Professor, Dept of Mech Engg, IIT Madras

Mohamed Iqbal Shajahan - Vel Tech University, AVADI

Investigation of Shear-Thickening Fluid as a Passive Damping Medium for Boring Bar Stability Enhancement, [IMECE-India2026-189368]

Technical Presentation Only

Maresh Babu N - IIT Madras

Sivasrinivasu Devadula - IIT Madras

Magneto-Rheological (M R) Fluid Damper Application for Vibration Isolation in Design of Satellite Transportation Container, [IMECE-India2026-195337]

Technical Presentation Only

Dr Shashank Srivastava - U R Rao Satellite Centre, ISRO, Bangalore, India

Saurabh Yadav - U R Rao Satellite Centre, ISRO, Bangalore, India

Chandan Kumar Yadav - U R Rao Satellite Centre, ISRO, Bangalore, India

Balaji R - IIT Madras

Prashant D Bagalkot - U R Rao Satellite Centre, ISRO, Bangalore, India

Shree Niwas Sahu - U R Rao Satellite Centre, ISRO, Bangalore, India

Belgaonkar PV - U R Rao Satellite Centre, ISRO, Bangalore, India

Magnetically Tunable Bulk and Surface Elastic Waves in Isotropic Magnetoelastic Composites, [IMECE-India2026-197646]

Technical Presentation Only

Ankush Yadav - Technion - Israel Institute of Technology

Pavel Galich - Technion - IIT

VD&C7.3 - Dynamics and Wave propagation in architected materials and adaptive engineering structures 9/5/2026

8:30 AM to 10:30 AM - CH16A

Chair: Dr. Pavel Galich -

Chair: Dr Ajinkya Baxy -

Presentations:

A Peridynamics Model for Shell Piezoelectricity, [IMECE-India2026-197102]

Technical Presentation Only

ANIRBAN Mondal - Indian Institute of Technology (ISM) Dhanbad

Nilesh Choudhary - INDIAN INSTITUTE OF TECHNOLOGY (ISM) DHANBAD

Pranesh Roy - INDIAN INSTITUTE OF TECHNOLOGY (ISM) DHANBAD

A Peridynamics Shape Memory Polymer Beam Model, [IMECE-India2026-197183]

Technical Presentation Only

Anshul Sharma - Indian Institute of Technology (Indian School of Mines) Dhanbad

Nilesh Choudhary - Indian Institute of Technology (Indian School of Mines) Dhanbad

Abhijeet Kumar - Indian Institute of Technology (Indian School of Mines) Dhanbad

Anirban Mondal - Indian Institute of Technology (Indian School of Mines) Dhanbad

Pranesh Roy - Indian Institute of Technology (Indian School of Mines) Dhanbad

Peridynamics Modeling of Beams and Lattice Structures Incorporating Cross-Sectional Area-Stretch, [IMECE-India2026-197317]

Technical Presentation Only

BEAUTY DEY - INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES)

Pranesh Roy - INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES)

A Nonclassical Model of Shape Memory Polymer Shells Using Peridynamics, [IMECE-India2026-197336]

Technical Presentation Only

Pradyumn Kumar - Indian Institute of Technology (Indian School of Mines) Dhanbad

Abhijeet Kumar - Indian Institute of Technology (Indian School of Mines) Dhanbad

Nilesh Choudhary - Indian Institute of Technology (Indian School of Mines) Dhanbad

Anshul Sharma - Indian Institute of Technology (Indian School of Mines) Dhanbad

Anirban Mondal - Indian Institute of Technology (Indian School of Mines) Dhanbad

Pranesh Roy - Indian Institute of Technology (Indian School of Mines) Dhanbad

Peridynamics Modeling of Elastic Wave Propagation in Locally Resonant Shell Metasurfaces, {IMECE-India2026-197392}

Technical Presentation Only

Ankaj Kumar - Indian Institute of Technology (Indian School of Mines) Dhanbad

Nilesh Choudhary - Indian Institute of Technology (Indian School of Mines) Dhanbad

Tanuj Gupta - Indian Institute of Technology Kanpur

Ankur Dwivedi - Indian Institute of Technology Kanpur

Bijaya Bikram Samal - Indian Institute of Technology Kanpur

Pranesh Roy - Indian Institute of Technology (Indian School of Mines) Dhanbad

Rahul Bhartiya - Indian Institute of Technology (Indian School of Mines) Dhanbad

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Peridynamics Computational Homogenization Method for Shells and Metasurfaces Using Riemannian Geometry, {IMECE-India2026-197453}

Technical Presentation Only

Kumari Neelam Ranjana - INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

Pranesh Roy - INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

AM3D3.3- Materials & Characterization for AM and AM3D4.1 - Modeling & Simulation of AM

9/5/2026

8:30 AM to 10:30 AM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Comparative Study on Machinability of Additively Manufactured and Wrought Inconel Alloy Under Ecological Conditions, {IMECE-India2026-188955}

Technical Paper Publication

Mayur Makhesana - Institute of Technology, Nirma University

Shruti Bhatt - Institute of Technology, Nirma University

Kaushik Patel - Institute of Technology, Nirma University

Navneet Khanna - Institute of Infrastructure Technology Research and Management

Feedstock-Dependent Microstructural Evolution and Mechanical Response of 316 L Stainless Steel in Directed Energy Deposition,

{IMECE-India2026-189724}

Technical Paper Publication

Ramesh R - Indian Institute of Technology Madras

Saurabh Gairola - Indian Institute of Technology Madras

Jayaganthan R - Indian Institute of Technology Madras

Kamaraj M - Indian Institute of Technology Madras

Effect of Track Overlap on Layer Height in Laser Powder Directed Energy Deposition of Inconel 718, {IMECE-India2026-190001}

Technical Paper Publication

Akhil A I - Indian Institute of Space Science and Technology

Sooraj V S - Indian Institute of Space Science and Technology

Anil Kumar V - Vikram Sarabhai Space Centre

Pradeep P I - Vikram Sarabhai Space Centre

Apurba Roy - Vikram Sarabhai Space Centre

Influence of Layer-Wise Scan Rotation and Island Patterning on Microstructure Evolution and Mechanical Performance of Selective Laser Melted Inconel 718, {IMECE-India2026-188900}

Technical Presentation Only

Anuvashini Ss - S.A. Engineering College

Arjun K - S.A. Engineering College

Prakash C - S.A. Engineering College

Vishal Raj J - S.A. Engineering College

Predictive Modelling of Bead Geometry and Solidification Dynamics in Laser Powder-Direct Energy Deposition of High-Strength Al 7050 Alloys, {IMECE-India2026-188662}

Technical Paper Publication

Bhargavi Anuhya Rao Tattugalla - National Institute of Technology Warangal

Manjalah M - National Institute of Technology Warangal

Vinod Kumar J - DMRL

Sampath Kumar Ch - National Institute of Technology Warangal

Experimental and Numerical Investigation of Interfacial Integrity in Dissimilar Steel Hybrid Structures Fabricated by Wire-Based Directed Energy Deposition, {IMECE-India2026-187001}

Technical Paper Publication

Ujjaval Modi - NAMTECH

Litton Bhandari - NAMTECH

Aref Yadollahi - Purdue University Northwest

Hardik Arvindbhai Patel - NAMTECH

AM6.1 - Bio-Materials and applications

9/5/2026

8:30 AM to 10:30 AM - CH14

Chair: GEETHA MANIVASAGAM -

Chair: Kundanati Lakshminath -

Presentations:

Topology Optimization of Knee Implant for Stress Reduction and

Weight Minimization, [IMECE-India2026-188427]

Technical Paper Publication

Md Iftekhar Kalim - Chandigarh University

Gurleen Kaur - Chandigarh University

Sachin Kalsi - Chandigarh University

Jagjit Singh - chandigarh university

Mechanical and Corrosion Behavior of Cryo-Treated Nitinol Shape Memory Alloy for Biomedical Applications, [IMECE-India2026-189160]

Technical Paper Publication

Santosh Kumar Rajak - PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, Madhya Pradesh-482005, India

R. Seetharam - Indian Institute of Information Technology Design and Manufacturing, Kurnool, Andhra Pradesh-518007, India

Puneet Tandon - PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, Madhya Pradesh-482005, India

Improving the Hydrophobic Characteristics of Natural Banana Fiber Using Sustainable Bio-Acetic Acid Treatment, [IMECE-India2026-189739]

Technical Paper Publication

Suganth V - IIITDM Kancheepuram

N Rino Nelson - IIITDM Kancheepuram

Biomass-Derived Silica From Rice Husk for Sustainable Tribological Coatings, [IMECE-India2026-187015]

Technical Paper Publication

Kotapuri Penchal Rao - Indian Institute of Information Technology Design and Manufacturing, Kurnool

N V Sunil Kumar - Indian Institute of Information Technology Design and Manufacturing Kurnool

Neha Khatri - CSIR - Central Scientific Instruments Organisation

Vipindas K - Indian Institute of Information Technology Design and Manufacturing Kurnool

Study on Choline Chloride and Ethylene Glycol Deep Eutectic Solvent and Its Recyclability for Hydroxyapatite Extraction From Fish Scales, [IMECE-India2026-187013]

Technical Paper Publication

Devara Venkata Krishna - Indian Institute of Technology madras

Ramakrishnan Swaminathan - Indian Institute of Technology Madras

Kundanati Lakshminath - Indian Institute of Technology Madras

Comparative Fracture Characterization and Peak Load Capacity of Laser-Welded Dissimilar Joints in Amplatzer and Cocoon Pda Occluders, [IMECE-India2026-188459]

Technical Presentation Only

Vishnu S. Prasad - SCTIMST

Abhijith M. - SCTIMST

Subhash N. N. - SCTIMST

AM9.2- Materials for (strategic sectors) Aerospace and Defense applications

9/5/2026

8:30 AM to 10:30 AM - CH16B

Chair: Prof. R. Santhanam -

Presentations:

Impact Response of Glass Fiber/pu Sandwich Composite Structures for Aerospace and Defense Applications, [IMECE-India2026-185585]

Technical Paper Publication

Vishnu Vijay Kumar - NEW YORK UNIVERSITY ABU DHABI

Khaled Shahin - NEW YORK UNIVERSITY ABU DHABI

Suresh Rajendran - INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Baloganesan G - Indian Institute of Technology Madras

Numerical Modeling of High-Temperature Creep Behavior in In718 Alloy: Effect of Microstructure, [IMECE-India2026-189233]

Technical Presentation Only

Pirithvi Kumaravel - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

M. Arul Kumar - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Accelerated High Through-Put Testing Method to Determine Fatigue Properties of Metallic Alloys, [IMECE-India2026-188572]

Technical Paper Publication

Banamali Kar - INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Kartikey Sharma - INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Balila Nagamani Jaya - INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Achieving Superior Strength-ductility Synergy in a γ' -Strengthened Ni-Rich High Entropy Alloy for Cryogenic Applications, [IMECE-India2026-197263]

Technical Presentation Only

Neil Gregory Vaz - Karunya Institute of Technology and Sciences

Ramkumar K R - Karunya Institute of Technology and Sciences

Vijay S J - Karunya Institute of Technology and Sciences, Karunya Nagar

Development of Hoop-Wound Metal and Glass Fiber Reinforced Hybrid Composite Cylinders Using Filament Winding, [IMECE-India2026-189046]

Technical Presentation Only

Balaji Servaran - National Institute of Technology Warangal and Defence Research and Development Laboratory Hyderabad

Vijayabaskar Narayamurthy - Research Centre Imarat

Srikanth Korla - National Institute of technology Warangal

Advanced Materials, [IMECE-India2026-188276]

Technical Presentation Only
Vinod Naganoor - Collins Aerospace
Yuvaraj Shivakumar - Collins Aerospace

GT1.1 - Compressors, Fans & Pumps

9/5/2026

8:30 AM to 10:30 AM - CH01

Chair: Chetankumar Mistry - Indian Institute of Technology Kharagpu

Chair: Dilipkumar Bhanudasji Alone - CSIR-National Aerospace Laboratories

Presentations:

Aerodynamic Performance Enhancement of Naca 0012 Airfoil Using Trapezoidal Surface Grooves at Stall Conditions, [IMECE-India2026-187519]

Technical Paper Publication

Madhupriya. S - MS Ramaiah University of Applied Sciences

Raveena Doddamani - MS Ramaiah University of Applied Sciences

Maresh Varpe - MS Ramaiah University of Applied Sciences

Pramod Salunkhe - Manipal Institute of Technology

Indigenous development of the transonic centrifugal compressor stage for small gas turbine engine, [IMECE-India2026-187987]

Technical Paper Publication

Rajesh Emandi - CSIR-NAL

Dilipkumar Bhanudasji Alone - CSIR-NAL

Nagabhushana Rao Vadlamani - IIT-MADRAS

Aerodynamic Performance and Stability of a Transonic Axial Compressor Rotor With Axially Skewed Slots, [IMECE-India2026-188951]

Technical Paper Publication

Mandara b.k - Ramaiah University of Applied Sciences

Maresh K. Varpe - Ramaiah University of Applied Sciences

Subbaramu Shivaramaiah - Ramaiah University of Applied sciences

Effect of Axial Slot Geometry on Aerodynamic Performance and Stability of a Transonic Axial Compressor Rotor, [IMECE-India2026-188948]

Technical Paper Publication

Subbaramu Shivaramaiah - Ramaiah University of Applied sciences

Smriti S - Ramaiah University of Applied Sciences

Maresh K. Varpe - Ramaiah University of Applied Sciences

GT4.1 - Combustion, Fuels and Emissions

9/5/2026

8:30 AM to 10:30 AM - CH02

Chair: Prof. Aditya Konduri -

Chair: Ganesh Rao -

Presentations:

Synergistic Shock-vortex Interaction for Enhanced Fuel-air Mixing in Scramjet Combustors: Comparative Optimization of Strut, Cavity, and Surface-Protrusion Flameholders, [IMECE-India2026-189560]

Technical Paper Publication

Nandini Sachdev - Amity University

Anmish Varma - Amity university

Debayan Roy - Amity university

Maansi Srivastava - Amity university

Full Aero-Engine Numerical Simulation to Study the Effect of Combustor Liner Configuration on Thermal Pattern Factors, [IMECE-India2026-189658]

Technical Paper Publication

TV Yogesh - Gas Turbine Research Establishment

Saurav Sonawane - Gas Turbine Research Establishment

Sham B - Gas Turbine Research Establishment

Batchu Suresh - Gas Turbine Research Establishment

Ajay Pratap - Gas Turbine Research Establishment

S V Ramana Murty - Gas Turbine Research Establishment

Experimental Study of Wave Propagation in a Pulsejet Engine With a Diodic Channel, [IMECE-India2026-187679]

Technical Paper Publication

Kumar Lakshmi Chandra Roy - IIT Kharagpur

Mudit Kakkar - Indian Institute of Technology, Kharagpur

Rajesh Kumar - IIT Kharagpur

Saishanthosh Iyer - IIT Kharagpur

Amardip Ghosh - IIT Kharagpur

Large-Eddy Simulation of Reacting and Non-Reacting Flow Fields in a Trapped Vortex Combustor, [IMECE-India2026-188084]

Technical Paper Publication

Aritra Roy Choudhury - Indian Institute of Science

Konduri Aditya - Indian Institute of Science

GT5.1 - Structures and Rotordynamics

9/5/2026

8:30 AM to 10:30 AM - CH05

Chair: Babu Santhana Gopalakrishnan -

Presentations:

Contact Analysis of Curvic Joints Used in Gas Turbine Shaft Assembly, [IMECE-India2026-187452]

Technical Paper Publication

Sirigi Abhiram Krishna Chaitanya - Indian Institute Of Technology, Kanpur

Tanmay Dutt Mathur - Indian Institute of Technology, Kanpur

Ajit Kumar - Gas turbine research establishment

Nagaraju D - Gas Turbine Research Establishment

Sprinkler Design for Steam Injection for Power Augmentation, (IMECE-India2026-187683)

Technical Paper Publication

Aparna Satheesh - Baker Hughes

Babu Santhana Gopalakrishnan - Baker Hughes

Sendilkumaran Soundiramourty - Baker Hughes

Vishnu Vardhan Reddy Tippireddy - Baker Hughes

Beyond Resonance Avoidance: Dynamic Response and Probabilistic Fatigue Life of Deliberately Mistuned Bladed Disks, (IMECE-India2026-187688)

Technical Paper Publication

Rahul Tarale - Atrilon Technologies Private Limited

Murari Singh - GE Oil & Gas

Integrated Design Approaches for Achieving Robust Flange Contact in Gas Turbine Casings, (IMECE-India2026-187866)

Technical Paper Publication

Aparna Satheesh - Baker Hughes

Ritwik Sahgaura - Baker Hughes

Babu Santhana Gopalakrishnan - Baker Hughes

Shanmukarjun Gs - Baker Hughes

Ramesh Kammalapalli - Baker Hughes

RA8.1: Robotics & Automation- Medical & Healthcare Robotics

9/5/2026

11:00 AM to 1:00 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

A Virtual Tactile Sensing and Safety Intelligence Framework for Adaptive Robotic Handling of Healthcare Containers, (IMECE-India2026-188996)

Technical Paper Publication

Sai Navya Sree Chondragiri - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai Campus, India

Sushitha Susan Joseph - Indian Institute of Information Technology Kottayam

Design and Development of Automatic Medical Waste Segregation Using Vision-Based Classification and Motorized Disposal Control, (IMECE-India2026-188023)

Technical Paper Publication

Kenrick Kudirical - Fr. Conceicao Rodrigues Institute of Technology

Pratham Mohite - Fr. Conceicao Rodrigues Institute of Technology

Anjes K Justin - Fr. Conceicao Rodrigues Institute of Technology

Amit Malgol - Fr. C. Rodrigues Institute of Technology Vashi

Sunny Sarraf - Fr. Conceicao Rodrigues Institute of Technology

Statistical Comparison of Classifier Performance for Breast Cancer

Tumor Prediction Using Independent T-Tests, (IMECE-India2026-187823)

Technical Paper Publication

Sonam Jawahar Singh - Defence Institute of Advanced Technology (DIAT), Deemed to be University

Pooja Agrawal - Defence Institute of Advanced Technology (DIAT), Deemed to be University, Girinagar, Pune

Neurobotic Control of Cable-Driven Parallel Robot System for Physical Rehabilitation, (IMECE-India2026-188794)

Technical Paper Publication

Aniket Nandi - Indian Institute of Technology Kanpur

Shivam Gupta - Indian Institute of Technology Kanpur

Ruchira Kumar Pradhan - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Towards Autonomous Multimodal Vision-Guided Dynamic Trajectory Planning for Assistive Feeding Using a 5-Dof Robotic Arm, (IMECE-India2026-186652)

Technical Paper Publication

Trishit Debsharma - Jadavpur University

Debarghya Bonerjee - National Institute of Technology Surathkal

Vineet Vashista - Indian Institute of Technology Gandhinagar

Debanik Roy - Bhabha Atomic Research Centre, Mumbai and Homi Bhabha National Institute, Dept. of Atomic Energy, Govt. of India

Design and Experimental Evaluation of a Gas-Spring-Assisted Passive Knee Exoskeleton Providing Sit-to-Stand Extension Torque, (IMECE-India2026-189659)

Technical Paper Publication

Godavarthy Krishna Teja - Vardhaman College of Engineering

Panchalingam Varu Prasad Reddy - Vardhaman College of Engineering

Eerapaneni Durga Prasad - Vardhaman College of Engineering

Pathapalli Venkateshwar Reddy - Vardhaman College of Engineering

A.C. Umamaheshwer Rao - Vardhaman College of Engineering

Vadla Maheshchary - Vardhaman College of Engineering

Dheeraj Joshi - Vardhaman College of Engineering

Nallimilli Srinivasa Reddy - Vardhaman College of Engineering

RA12.1: Robotics & Automation- Specialized Robotics Applications

9/5/2026

11:00 AM to 1:00 PM - CH15

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Reduced Gravity Environment (Regen): Conceptual Design of a Multi-User Gravity Offload System for Extravehicular Activity (Eva) and Lunar Environment, (IMECE-India2026-189500)

Technical Paper Publication

Vijayaragavan S M - Human Space Flight Centre ISRO
Ravi Shankar S S - Human Space Flight Centre, ISRO
Hitesh Arvindan R - Human Space Flight Centre ISRO
Mathew George - Human Space Flight Centre ISRO
Kumar K - Human Space Flight Centre ISRO

Shape Memory Unit for Natural Light Following via Elastic Response, [IMECE-India2026-189710]

Technical Paper Publication

Uday Kiran B - National Institute of Technology Calicut
Puneeth Shetty - National Institute of Technology Calicut
Satwik Balurgi - National Institute of Technology Calicut
Pranesh Dutta - National Institute of Technology Calicut

Design and Development of a Tendon-Driven Finger Tremor Simulator for Evaluating Tremor Suppression Systems, [IMECE-India2026-189514]

Technical Paper Publication

Muram Jayaram - SRM University AP
Prof P Vivekananda Shanmuganathan - SRM University AP

Force Simulation for Robotic Decal Application on Curved Surfaces, [IMECE-India2026-187851]

Technical Paper Publication

Dittino Raji - St Francis Institute of Technology
Mohsin Dalvi - St Francis Institute of Technology

Leveraging AI and Data Analytics for Enhancing Energy Efficiency in Electric Vehicles, [IMECE-India2026-188395]

Technical Paper Publication

Sindhu Prabha Kesava - ZF India Pvt Ltd

Reducing the Virtual-real Discrepancy in Offline Robot Programming Through Geometry-Centric and Information-Based Modeling, [IMECE-India2026-188345]

Technical Paper Publication

Mokshith Srinivas Surutkar - NIT-Warangal
Sarthak Vinod Atkore - NIT-Warangal
Krishna Prakash Yadav - NIT-Warangal
Gaurav Kumar Sharma - NIT-warangal

ATT8.1 - Computational and Experimental Heat Transfer - II
9/5/2026

11:00 AM to 1:00 PM - CH12

Chair: Abhishek Vyas -

Presentations:

Transient Heat Transfer and Thermal Protection Analysis of a Short-Duration High Heat-Flux Reacting Flow System, [IMECE-India2026-186648]

Technical Paper Publication

Rajdip Das - National Institute of Technology Rourkela

Souvik Das - NIT Rourkela

Mohit Lal - NIT Rourkela

Comparative Thermo-Hydraulic Performance of Aerofoil Inserts and Traditional Passive Techniques Under Equal Pumping Power Constraints, [IMECE-India2026-186981]

Technical Paper Publication

Rohit Jadhao - Nutan Maharashtra Institute of Engineering and Technology Talegaon Dabhade
Parashuram Chitragar - Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering & Technology
Dattatray Kamble - Anant Rao Pawar College Of Engineering & Research (APCOER)

Dimensionless Scaling of Evaporative Cooling Under Free and Forced Convection, [IMECE-India2026-188590]

Technical Paper Publication

Pratyay Choudhury - Malaviya National Institute of Technology Jaipur
Manjinder Singh - Malaviya National Institute of Technology Jaipur

Resonance-Induced Thermal Localization for Passive Hydrogen Ignition in a Cavity-Coupled Compressible Jet Architecture, [IMECE-India2026-189006]

Technical Paper Publication

Manan Jain - Chandigarh University
G Prasad - Chandigarh University
Balaji Ganesan - Hindustan Institute of Technology and Science
Naveen R - KCG College of Technology
Rakesh Kumar C - Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology

Simulation of Integrated Vehicle Dynamics and Engine Models for Engine Control Unit Development, [IMECE-India2026-187105]

Technical Paper Publication

Divyakumar Bhavsar - Indian Institute of Technology Madras
Mayank Mittal - Indian Institute of Technology Madras

Thermal Process Design for Nitinol Pda Occluders: Meeting Target Retraction Loads Through Transient Analysis, [IMECE-India2026-184940]

Technical Presentation Only

Vishnu Prasad - SCTIMST
Liji G. V. - SCTIMST
Reji Kumar S. - SCTIMST
Prathyush M. - SCTIMST
Vinodkumar V. - SCTIMST
Subhash N. N. - SCTIMST
Subhash N. N. - SCTIMST

Chair: Ankit Dipak Dalal - L&T

Chair: Parthapratim Brahma -

Chair: Ashim Mandal - Honeywell

Chair: Sudhanshu Singhal - Honeywell UOP

Chair: Amit Jain -

Presentations:

Conceptual Comparison of Flange Design in Accordance With
Asme and en Standards, {IMECE-India2026-189157}

Technical Presentation Only

Meganiathan Durai Pandian - Flowserve

Monitoring & In-Service Inspection of Pressure Vessel Under Cyclic
Service, {IMECE-India2026-188678}

Technical Paper Publication

Vakul Kokra - Honeywell UOP India Pvt. Ltd

Prashant Kiri - Honeywell UOP India Pvt. Ltd.

Integrity Assessment of Marine Pressure Vessels and Piping Systems
During Casualty Scenarios: An Industry Case-Based Approach,
{IMECE-India2026-186443}

Technical Paper Publication

Ranadeb Ray - Lloyd's Register Marine & Offshore India LLP

Alloy 699xa: An Advanced Tubular Material for Metal Dusting
Resistance in Hydrogen Production Environments at Refining and
Petrochemical Applications, {IMECE-India2026-187753}

Technical Paper Publication

Shabarēsh Nair - TUBACEX

Venkat Ramesh - Tubacex

Experimental Study on the Effect of External Constraints on
Ballooning of Fast Reactor Cladding Tubes, {IMECE-India2026-
187774}

Technical Presentation Only

Rosy Sarkar - IGCAR

Bhuwan Chandra Sati - Indira Gandhi Centre for Atomic Research

R. Suresh Kumar - Indira Gandhi Centre for Atomic Research

K. Natesan - IGCAR

Fugitive Emission Valve Design Philosophy, Qualification Testing
and Comparative Analysis of Iso 15848-1 and Api 641, {IMECE-
India2026-189501}

Technical Presentation Only

Rajkumar Ravichandran - Flowserve India controls Private limited

Chair: Hariprasath M - Infosys

Chair: K Sudha Deepthi -

Presentations:

Circular Economy for High Performance Composites –
Microstructural Evolution and Mechanical Property Retention in
Reprocessed Carbon Reinforced Peek Composites, {IMECE-
India2026-189333}

Technical Presentation Only

Parthasarathy Govindaraju - Collins Aerospace

Siddharth Narayanan - Collins Aerospace

Dragonfly-Inspired Flapping Wing Fabrication Using Pvd/cnt
Nanocomposite Membranes and 3d-Printed Vein Structures,
{IMECE-India2026-188061}

Technical Presentation Only

Vaibhav Gujar - Indian Institute of Technology Madras

Lakshminath Kundanati - Indian Institute of Technology Madras

Full-Field Dic-driven Inverse Calibration and Damage-Onset
Mapping in Natural-Fiber/epoxy Laminates, {IMECE-
India2026-189239}

Technical Paper Publication

Dr. K. Sudha Deepthi - Dayananda Sagar University

Dr. Rammohan B - RV University

Dr. Kartik S Tandel - Dayananda Sagar University

dr.srinath R - Dayananda Sagar University

Harish K R - RV University

Dan-4 Molecular Perovskite Oxidizers: A Novel High-Energy
Material for Next-Generation Solid Rocket Propellants, {IMECE-
India2026-189265}

Technical Paper Publication

Harshith A L - Dayananda Sagar University

Vaibhavi Vinaykumar Ghatge - Dayananda Sagar University

Deeksha R - Dayananda Sagar University

Aadarsha M Reddy - Dayananda Sagar University

Rakshit S Hulkund - Dayananda Sagar University

Kartik S Tandel - Dayananda Sagar University

Dr. Srinath R - Dayananda Sagar University

Dr. K. Sudha Deepthi - Dayananda Sagar University

Dr. Ashok R L - Kuvempu university

Spoorthi N S - Kuvempu University

Quality Function Deployment (Qfd) Analysis of Stubble-Based
Composite Wooden Chair, {IMECE-India2026-189460}

Technical Paper Publication

Shubhangi Saxena - GURU GOBIND SINGH INDRAPRASTHA
UNIVERSITY, DELHI, INDIA

Tiju Thomas - GURU GOBIND SINGH INDRAPRASTHA
UNIVERSITY, DELHI

Machine-Learning-Based Characterization of Drilling-Induced Damage and Open-Hole Tensile Response of Gfrp Laminates, [IMECE-India2026-189539]

Technical Paper Publication

Shebaz Ahmed J P - Hindustan Institute of Technology and Science

Nandha G - Rajalakshmi Engineering College

Balavignesh Ganesan - Rajalakshmi Engineering College

SSDM2.7 - Structural Dynamics, Modelling & Simulation

9/5/2026

11:00 AM to 1:00 PM - CH13

Chair: Krishnamurthy GS - Royal Enfield

Chair: Abhijit Chaudhuri - Airbus

Presentations:

An Open Loop Experimental Nonlinear Modal Analysis Approach Through the Loewner Framework, [IMECE-India2026-189165]

Technical Paper Publication

Giri Bharadwaj Patimeeda - Indian Institute of Technology Madras

Nidish Narayanan Balaji - Indian Institute of Technology Madras

Scott A. Smith - Norwich University

Matthew Brake - Rice University

Design and Development of a Finite Element Model for Impact Analysis Through Under Water Explosion, [IMECE-India2026-188372]

Technical Paper Publication

Pankaj Meena - Indian Institute of Technology Madras

Rajiv Sharma - Indian Institute of Technology Madras

Dynamic Analysis of Functionally Graded Metamaterial Plates Using Isogeometric Analysis, [IMECE-India2026-188341]

Technical Paper Publication

Denis Bragta - Indian Institute of Technology Mandi

Shubham Saurabh - Indian Institute of Technology Mandi

Raj Kiran - Indian Institute of Technology Mandi

Vishal Singh Chauhan - Indian Institute of Technology Mandi

Free Vibration Behavior of Rotating Porous Micro-Disk Made of Functionally Graded Material Under Thermal Loading, [IMECE-India2026-189561]

Technical Paper Publication

Prince Dey - IEM SALT LAKE

Suman Pal - IEM, SALT LAKE

Avinandan Mukherjee - AIEM, SALT LAKE

Arghadip Das - IEM, Saltlake

Aritra Roychowdhury - IEM

Dynamic Qualification of a Cryogenic Engine Igniter for Reusable Upper-Stage Applications, [IMECE-India2026-189179]

Technical Paper Publication

Krishnaajith Jayamani - Liquid Propulsion Systems Centre, Indian Space Research Organisation,

Vinayaravi R - Liquid Propulsion Systems Centre, Indian Space Research Organisation,

Suresh Mathew Thomas - Liquid Propulsion Systems Centre, Indian Space Research Organisation

Numerical Investigation of Freeplay Effects on Natural Frequencies of Hinged Plate Structures, [IMECE-India2026-189798]

Technical Paper Publication

Agathish M - Madras Institute of Technology

Swathi P - Madras Institute of Technology

Sakthivikash S - Madras Institute of Technology

Ravi Teja K - Defence Research and Development Laboratory

Santhosh R - Defence Research and Development Laboratory

Suganyadevi S - Madras Institute of Technology

MT1.2 Energy beam based welding and joining process and MT2.1 - Advancement in casting and forming processing

9/5/2026

11:00 AM to 1:00 PM - CH09

Chair: Iyamperumal Anand Palani - Indian Institute of Technology Indore

Chair: Sivanandam Aravindan - Indian Institute of Technology Delhi

Chair: Janakarajan Ramkumar - Indian institute of technology Kanpur, India

Presentations:

Analysis of Mechanical Integrity and Microstructural Characteristics of Tig and Sma Welded- Similar and Dissimilar Metals: An Industry-Supported Study, [IMECE-India2026-188012]

Technical Paper Publication

Shubhranshi Mishra - Institute of Infrastructure Technology Research and Management (IITRAM)

Shashwat Singh - Institute of Infrastructure Technology Research and Management (IITRAM)

Navneet Khanna - Institute of Infrastructure Technology Research and Management (IITRAM)

Investigation of Microstructure and Mechanical Properties of Resistance Spot Welded Dissimilar Copper and Magnesium Joints, [IMECE-India2026-189464]

Technical Paper Publication

Parth Apamathi - Pandit Deendayal Energy University- PDEU

Kushagra Patel - Pandit Deendayal Energy University

Raj Pandya - Pandit Deendayal Energy University

Megh Raval - Pandit Deendayal Energy University

Vishvesh Badheka - Pandit Deendayal Energy University

Comparative Durability of Platinum Nanocoating vs. Intaglio™ Chemical Etching on Nitinol Pda Occluders Under Simulated Delivery Stress, [IMECE-India2026-188458]

Technical Presentation Only

Abhijith M. - SCTIMST

Vishnu S. Prasad - SCTIMST
Subhash N. N. - SCTIMST

Experimental and Numerical Investigation of Electromagnetically Forming of Integrally Riveted AA1100 Sheets, [IMECE-India2026-189450]

Technical Paper Publication

Rakesh Mishra - Indian Institute of Technology Indore

Ashish Rajak - Indian Institute of Technology Indore

Effect of Strain Rates and Pulsed Current on the Mechanical and Formability of Aluminium AA5754 Alloys During Electric Assisted Forming, [IMECE-India2026-189098]

Technical Paper Publication

Chandrasekhar Besetty - NIT Warangal

Mamatha Lingutla - NIT Warangal

Jyoti Sharma - NIT Warangal

Srinivas Kandukuri - NIT Warangal

Bhargava Marrapu - NIT Warangal

Effect of Strain Rates and Pulsed Current on the Mechanical and Formability of Aluminium AA5754 Alloys During Electric Assisted Forming, [IMECE-India2026-197099]

Technical Presentation Only

Bhargava Marrapu - NIT Warangal

Chandrasekhar Besetty - NIT Warangal

Mamatha Lingutla - NIT Warangal

Jyoti Sharma - NIT Warangal

Srinivas Kandukuri - NIT Warangal

CPSA/ML 8.1 - Security Standards & Integration

9/5/2026

11:00 AM to 1:00 PM - CH06

Chair: Dr B Sreehari Kumar -

Presentations:

Securing the Pulse: A Quantitative Risk Assessment Framework for API 670-Compliant Wireless Vibration and Condition Monitoring Systems (Wcms) to Achieve IEC 62443 S12 in Refinery Environments, [IMECE-India2026-187731]

Technical Paper Publication

Haree Premnath Venkatakrishnan - Technip Energies India Pvt Ltd

Cybersecurity Under Digitisation in the Upd and Downstream Oil & Gas Sector, [IMECE-India2026-188481]

Technical Paper Publication

Dr Santanu Purohit - Bharat Petroleum Corporation Limited

Closing the Algorithmic-Industrial Gap: Robust II-OT Interfaces for Battery Energy Storage Systems, [IMECE-India2026-189171]

Technical Paper Publication

Athak Goyal - Siemens Energy India Limited

Lalit Kumar - Siemens Energy India Limited

Rishi Relan - Siemens Energy India Ltd

Intelligent Migration of Legacy Test Systems Using AI-ML, [IMECE-India2026-187770]

Technical Presentation Only

Sana Ksildar - Collins Aerospace

Mohammed Aboobacker Sidheeqe - Collins Aerospace

Marimuthu Murugan - Collins Aerospace

Software Supply Chain Security Integration for Engineering Applications Supporting Cyber-Physical Systems, [IMECE-India2026-190297]

Technical Presentation Only

Lahari S - GE India PVT Ltd

Real-Time Digital Twin for Rapid Performance Prediction of Centrifugal Pumps Using 1d System Modeling and AI-Based Reduced-Order Model, [IMECE-India2026-187616]

Technical Paper Publication

Abhishek Madival - Altair Engineering India Pvt. Ltd

Manoj K V - Altair Engineering India Pvt. Ltd

VD&C4.1- Vehicular Vibration including ride comfort and VD&C8.2- Rotor Dynamics

9/5/2026

11:00 AM to 1:00 PM - CH11

Chair: Chandramouli Padmanabhan -

Chair: Dr. R K Behera -

Presentations:

Superposed Psd Generation for Vehicle Vibration Design: A Statistical and Machine-learning Methodology for Automotive Suppliers, [IMECE-India2026-188642]

Technical Paper Publication

Punit Bandi - BorgWarner India Propulsion Engineering Center

Sridhar G - BorgWarner India Propulsion Engineering Center

Evaluation of Fuel Consumption Sensitivity to Toe Misalignment in Heavy Commercial Vehicles Using a Markov Chain-based Synthetic Driving Cycle, [IMECE-India2026-189119]

Technical Paper Publication

Amarchand Chandran - Indian Institute of Technology Madras

Arko Mukhopadhyay - Michelin India Private Limited

Mitanshu Sharma - Michelin India Private Limited

Shankar Subramanian - Indian Institute of Technology Madras

Investigation of Powertrain Induced Vibration and Tire-Field Interaction Dynamics on Whole Body Vibration Perception in an Agricultural Tractor, [IMECE-India2026-189310]

Technical Paper Publication

Sandeep Rajan Nagarajan - Vellore Institute of Technology Vellore

Palanivelu Sakthivel - Vellore Institute of Technology, Vellore

Ann Based Real Time Prediction of Steering Comfort in the 10-50 Hz. Frequency Band Using Vibration Feature Analysis, (IMECE-India2026-189517)

Technical Paper Publication

P M G Bashir Asdaq - Dayananda Sagar University

Atharva Deshmukh - Dayananda Sagar University

Gagan Rakshith - Dayananda Sagar University

Amala Darshan - Dayananda Sagar University

A Lumped-Parameter Dynamic Modelling Approach for Fault Diagnosis of Helical Gears, (IMECE-India2026-187830)

Technical Paper Publication

Vishal Salunkhe - Fr. Conceicao Rodrigues Institute of Technology

Prathamesh Varsolikar - Fr. Conceicao Rodrigues Institute of Technology

Siddharth Patil - Fr. Conceicao Rodrigues Institute of Technology

Nikhil Verma - Fr. C. Rodrigues Institute of Technology

Tritto Antony - Fr. Conceicao Rodrigues Institute of Technology

Aniket Bobade - Agnel Charities Fr. C. Rodrigues Institute of Technology

S. M. Khot - Fr. Conceicao Rodrigues Institute of Technology

Dynamic Characterization of Worm Gear Faults Using Quasi-Dynamic Modelling and Time-Varying Mesh Stiffness, (IMECE-India2026-188279)

Technical Paper Publication

Prajwal Jalke - Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai

Vishal Salunkhe - Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai

Srushiti Anjarlekar - Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai

S. M. Khot - Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai

Shubhradeep Bera - Father Conceicao Rodrigues Institute of Technology, Vashi

Manomay Jadhav - Father Conceicao Rodrigues Institute of Technology, Vashi

VD&C3.2- Fluid-Structure Interaction/ Flow-induced noise & vibration

9/5/2026

11:00 AM to 1:00 PM - CH16A

Chair: Dr. Sunetra Sarkar -

Chair: Vivek Srambikkal -

Presentations:

Nonlinear Dynamics and Chaos Prediction in a Coupled Two-Cylinder Bistable VIV Harvester, (IMECE-India2026-187450)

Technical Paper Publication

Sudipta Maity - Indian Institute of Technology Madras

Shaikh Faruque Ali - Indian Institute of Technology Madras

Grzegorz Litak - Lublin University of Technology

Flow-Induced Vibration of Spools During Preheating and Isothermal Testing of a Fast Breeder Reactor, (IMECE-India2026-188317)

Technical Presentation Only

Eswaran M - Indira Gandhi Centre for Atomic Research

Sajish S D - Indira Gandhi Centre for Atomic Research

Natesan K - Indira Gandhi Centre for Atomic Research

Vibration and Performance Studies on Ferro-Magnetic Particle Collector of Indian Fast Breeder Reactors, (IMECE-India2026-188653)

Technical Presentation Only

Eswaran M - Indira Gandhi Centre for Atomic Research

Nimala Sundaran M - Indira Gandhi Centre for Atomic Research

Sajish S D - Indira Gandhi Centre for Atomic Research

Natesan K - Indira Gandhi Centre for Atomic Research

Numerical Modal Analysis of a Flexible Underwater Towed Array Considering Fluid-Structure Interaction Effects, (IMECE-India2026-188954)

Technical Paper Publication

Genesh R - Defence Research Development Organization (NPOL)

Kummara Siva Kumar - Defence Research Development Organization (NPOL)

Senthil Rajan S - Defence Research Development Organization (NPOL)

Santhanakrishnan T - Defence Research Development Organization (NPOL)

High Pressure Hydrogen Reciprocating Compressor Cylinder Cooling Optimization, (IMECE-India2026-187961)

Technical Paper Publication

Samprada Kumbhare - Baker Hughes

Manjush Ganiger - Baker Hughes

Vidyasagar Ramalingam Rengasamy - Baker Hughes

Alessio Capanni - Baker Hughes

Fabrizio Lattini - Baker Hughes

Jan Wojnar - Baker Hughes

Kalyankumar Venkatachalam - Baker Hughes

Sendilkumaran Soundiramourty - Baker Hughes

Vibration Assessment of Interconnecting Piping in Heavy Steam Turbine Machine, (IMECE-India2026-188472)

Technical Paper Publication

Amruta Kulkarni - BAKER HUGHES

Dipendra Mishra - BAKER HUGHES

Paggini Andrea - BAKER HUGHES

Schiavi Walter - BAKER HUGHES

Praveen Ramaswamy - BAKER HUGHES

AM3D1.3 - Current and Emerging Trends in AM

9/5/2026

11:00 AM to 1:00 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

4d Printed Electrically Actuated Polymers, [IMECE-India2026-188736]

Technical Paper Publication

Kshayik Champawat - BITS Pilani K.K. Birla Goa Campus

Pushkar Kamble - BITS Pilani K.K. Birla Goa Campus

Enhancing Transverse Strength of 3d-Printed Polymer Component via Peripheral Z-Pinning, [IMECE-India2026-185680]

Technical Paper Publication

Hrishikesh Dutta - Chennai Institute of Technology

Dhinakaran Veemari - Chennai Institute of Technology

Design and Development of a Three-Axis Fused Deposition System for Clay-Based Additive Manufacturing, [IMECE-India2026-187716]

Technical Paper Publication

Sunny Sarraf - Fr. C. Rodrigues Institute of Technology, Vashi

Kenrick Wilson - Fr. Conceicao Rodrigues Institute of Technology

Yusuf Kalsekar - Fr. C. Rodrigues Institute of Technology, Vashi

Tanmay Ambulkar - Fr. C. Rodrigues Institute of Technology, Vashi

Maithili Desai - Fr. C. Rodrigues Institute of Technology, Vashi

Design for Additive Manufacturing: Challenges and Opportunities, [IMECE-India2026-187978]

Technical Paper Publication

Pranjal Patil - Boeing

AM8.2 - Advanced Surface Engineering - Coatings

9/5/2026

11:00 AM to 1:00 PM - CH08

Chair: Eklavya Calla -

Presentations:

Effect of Laser Interaction on Electrochemical Performance of Zinc Ion Batteries, [IMECE-India2026-189518]

Technical Paper Publication

Manikandan Murugan - Indian Institute of Technology, Madras

Nilesh Jayantilal Vasa - Indian Institute of Technology, Madras

Sivarama Krishnan - Indian Institute of Technology, Madras

A Study of Copper Coating by Cold Spray Method on Different

Metallic Substrates for Launch Vehicle Applications, [IMECE-India2026-187477]

Technical Paper Publication

Vincy PV - Indian Space Research Organisation

Dhanya Chandran S - Indian Space Research Organisation

Senthil Kumar A - Indian Space Research Organisation

Sivan Kutty K. R. - Indian Space Research Organisation

Govind NA - Indian Space Research Organisation

Effect of Heat Treatment on Microstructure and Wear Resistance of In718-B4c Composite Cladding Using Laser Cladding, [IMECE-India2026-189622]

Technical Paper Publication

Subodh Gadre - National Institute of Technology Karnataka

Bhaskar Manne - NITK, Surathkal

Neha Choudhary - National Institute of Technology Karnataka

Srikanth Boritha - NITK, Surathkal

Efficacy of Thermal Sprayed NiCrAlY Bond Coat in Improving Oxidation Resistance of Additively Manufactured Mar-M 509 Alloy, [IMECE-India2026-186827]

Technical Presentation Only

Derick Jeswin A. P. - Manastu Space Technologies Pvt. Ltd.

Sumanth Govindarajan - National Institute of Technology Karnataka

Dheepa Srinivasan - Baker Hughes

Balila Nagamani Jaya - Indian Institute of Technology Bombay

Experimental Investigation on Micro Hole Drilling on Carbon-Silicon Carbide (C/sic) by Electrical Discharge Drilling (Edd) Process, [IMECE-India2026-189888]

Technical Paper Publication

Ashok Kumar - University College of Engineering, Osmania University

Hephzibah Berachah - University College of Engineering, Osmania University

Azhar Equbal - Jamia Millia Islamia Central University

From Agricultural Residue to Pharmaceutical Packaging: PLA/rice Husk Biocomposite Films Engineered Through Cold-Crystallization Annealing, [IMECE-India2026-197614]

Technical Presentation Only

Maneesh Dev - IIT Madras

Dr. Lakshminath Kundanati - IIT Madras

AM10.1 - Multifunctional materials for sensors and actuators

9/5/2026

11:00 AM to 1:00 PM - CH14

Chair: Sunil Rane -

Chair: Tanushree Choudhury -

Chair: Revathy Padmanabhan -

Presentations:

Experimental Investigation of NiTi-Based Planar Serpentine Shape Memory Alloy Springs for Compact Actuators, {IMECE-India2026-188469}

Technical Paper Publication

Sankalp Jain - Birla Institute of Technology & Science Pilani, Hyderabad Campus

Ekansh Goel - Birla Institute of Technology & Science Pilani, Hyderabad Campus

Sarthak Ranaware - Birla Institute of Technology & Science Pilani, Hyderabad Campus

Aayush Asnani - Birla Institute of Technology & Science Pilani, Hyderabad Campus

Sankarsh Srivatsan - Birla Institute of Technology & Science Pilani, Hyderabad Campus

Amit Kumar Gupta - Birla Institute of Technology & Science Pilani, Hyderabad Campus

Abhishek Sarkar - Birla Institute of Technology & Science Pilani, Hyderabad Campus

Mechanical Properties of Soft-Ferromagnetic Ni₅₀Fe₂₅Cu₂₅ Alloy, {IMECE-India2026-188298}

Technical Paper Publication

Rahul Rai - Indian Institute of Technology Indore

Vivek Verma - Indian Institute of Technology Indore

Ranjith Kumar Poobalan - Indian Institute of Technology Indore

Development of an Equivalent Circuit Based Fractional Order Transfer Function Model of IPMC Actuator, {IMECE-India2026-188659}

Technical Paper Publication

Arko Biswas - Indian Institute of Technology Kanpur

Manjesh Kumar Singh - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Transport-Layer-Free Cs₂MAPbBr₃ Lateral Photodetector With Al₂O₃ Nanoparticles as Interface Modifiers., {IMECE-India2026-188777}

Technical Paper Publication

Sankar Chandra Paul - Indian Institute of Technology Bhilai

Santu Mazumder - Indian Institute of Technology Bhilai

Surya Ketaraju - Indian Institute of Technology Bhilai

Akshay Kumar - Indian Institute of Technology Bhilai

Nikhil Chander - Indian Institute of Technology Bhilai

Development of Carbon Black/Ketjen Black/polydimethylsiloxane-Based Flexible Sensor for Measuring Subtle Deformation, {IMECE-India2026-189627}

Technical Paper Publication

Tejasvi Anant - National Institute of Technology, Raipur

Dhananjay Sahu - National Institute of Technology, Raipur

Om Prakash Prabhakar - National Institute of Technology, Raipur

Raj Kumar Sahu - National Institute of Technology, Raipur

One-Pot Synthesis of Filler-Reinforced Vhb Elastomer Composites for Enhanced Electromechanical Actuation Performance, {IMECE-India2026-189093}

Technical Paper Publication

Dhananjay Sahu - National Institute of Technology, Raipur

Om Prakash Prabhakar - National Institute of Technology Raipur

Tejasvi Anant - National Institute of Technology Raipur

Raj Kumar Sahu - National Institute of Technology Raipur

Structural, Thermal, and Electrical Properties of In-Situ Oxygen-Doped Transition Metal Dichalcogenides, {IMECE-India2026-187687}

Technical Presentation Only

Diwakar Singh - IIT Bombay

Gayatri Subhalaxmi - IIT Bombay

Ramesh Rajarapu - IIT Bombay

Tanushree Choudhury - IIT Bombay

AM4.2 - Advanced Materials for Energy and AM7.1 - Materials for Automotive light weighting

9/5/2026

11:00 AM to 1:00 PM - CH16B

Chair: Shobit Omar -

Chair: Parag Bhargava -

Chair: GANAPATHY MANIKANDAN -

Chair: Himadri Roy -

Presentations:

Investigating Partial Oxidation of CH₄ in CO₂-Rich Environments Using gd_{0.1}ce_{0.9}o_{2-δ}-srfe_{0.9}ti_{0.1}o_{3-δ} Composite Oxygen Transport Membranes, {IMECE-India2026-188076}

Technical Presentation Only

Darshilkumar Chhatrodiya - IIT Kanpur

Shobit Omar - IIT Kanpur

Santanu De - IIT Kanpur

Advanced Corrosion-Resistant Materials for Energy Systems: The Role of UNS N08935, {IMECE-India2026-197506}

Technical Presentation Only

Deepak Vaidya - Outokumpu

Printability Evaluation and Microstructural Characterization of Laser Powder Bed Fusion Manufactured Hastelloy-X Based Components, {IMECE-India2026-188737}

Technical Presentation Only

Sudharshanandharayanan Arumugam - Indian Institute of Technology Delhi

Ayan Bhowmik - Indian Institute of Technology Delhi

Effect of Heat Treatment on Mechanical and Microstructural Properties of Mg - 1Zn - 1Y Alloy, {IMECE-India2026-189132}

Technical Paper Publication

Rajendra Pathak - Maulana Azad National Institute Of Technology, Bhopal

Jayashree Baral - Maulana Azad National Institute Of Technology, Bhopal

Mechanical and Tribological Performance of Centrifugal Cast TiB₂-Al7075 Functionally Graded Composite for Automotive Liner Application, [IMECE-India2026-189116]

Technical Paper Publication

Amrit Mallick - National Institute of Technology Andhra Pradesh
Srinivasu Gangi Setti - National Institute of Technology Raipur
Raj Kumar Sahu - National Institute of Technology Raipur
Kunal Dewangan - National Institute of Technology Raipur
Rupesh Kumar Verma - National Institute of Technology Raipur
Jagadish Noyak - National Institute of Technology Raipur

High-Performance Martensitic Steel for Automotive Lightweighting: A Multi-Path Approach to Enhanced Strength and Ductility, [IMECE-India2026-189867]

Technical Paper Publication

Nemai Gorain - Tata Steel Ltd.

GT1.2 - Compressors, Fans & Pumps

9/5/2026

11:00 AM to 1:00 PM - CH01

Chair: Chetankumar Mistry - Indian Institute of Technology Kharagpur

Chair: Dilipkumar Bhanudasji Alone - CSIR-National Aerospace Laboratories

Presentations:

Effect of Combined Axial Slot and Circumference Groove on Performance and Stability of a Transonic Axial Compressor Rotor, [IMECE-India2026-188949]

Technical Paper Publication

Rohith R - Ramaiah University of Applied Sciences
Mahesh K. Varpe - Ramaiah University of Applied Sciences
Subbaramu Shivaramaiah - Ramaiah University of Applied sciences

Gpu Based Computing for Turbomachinery Design, [IMECE-India2026-188392]

Technical Paper Publication

Dhinakaran Ramachandran - TurboTech Precision Engineering Pvt. Ltd.
Rahul Vasishtha - PES University

Multi Objective Aerodynamic Shape Optimization of Axial Compressor Blade, [IMECE-India2026-189861]

Technical Paper Publication

Sumit Badarao - Gas Turbine Research Establishment
N Vidhyashankar - Gas Turbine Research Establishment
Gouri Rani - Uttaranchal University
Nitin Balsaraf - Gas Turbine Research Establishment
Ajay Pratap - Gas Turbine Research Establishment

Performance Sensitivity to Tip Clearance in Contra-Rotating Axial-Centrifugal Compressors, [IMECE-India2026-189706]

Technical Paper Publication

Akchhay Kumar - Indian Institute of Technology Kharagpur
Ashutosh Acharya - Indian Institute of Technology Kharagpur
Sankar Kumar - GTRE
Ajay Pratap - GTRE
Chetankumar Mistry - Indian Institute of Technology Kharagpur

GT4.2 - Combustion, Fuels and Emissions

9/5/2026

11:00 AM to 1:00 PM - CH02

Chair: Prof. Aditya Konduri -

Chair: Ganesh Rao -

Presentations:

Hydrogen-Assisted Combustion Enhancement of Kerosene in Jet in Supersonic Cross-Flow: Effects of Injection Configuration and Fuel Blending, [IMECE-India2026-189873]

Technical Paper Publication

Gagan Verma - Indian Institute of Technology Bhubaneswar
Amrit Bikram Sahu - Indian Institute of Technology Bhubaneswar

Investigation of Thermal and Kinetics Impact of Hydrogen and Methane Addition on Temperature Sensitivity of Propane/air Laminar Flame Speeds, [IMECE-India2026-187699]

Technical Paper Publication

Gaurab Sonowal - Indian Institute of Technology Bhubaneswar
Ganivada Prashanth - Indian Institute of Technology Bhubaneswar
Tanish Rawat - Indian Institute of Technology Bhubaneswar
Amrit Bikram Sahu - Indian Institute of Technology Bhubaneswar

Modelling of Turbulent Combustion of Liquid Ammonia in Dual Fuel CI Engine, [IMECE-India2026-189438]

Technical Paper Publication

Ketan Warghat - Indian Institute of Technology Hyderabad
Dinesh Prabhakaran - Indian Institute of Technology, Hyderabad
Sayak Banerjee - Indian Institute of Technology, Hyderabad
Raja Banerjee - Indian Institute of Technology, Hyderabad
Pankaj Kolhe - Indian Institute of Technology, Hyderabad

Numerical Analysis of the Isothermal Flow Field in a Counter-Rotating Twin-Swirl Stabilized Combustor, [IMECE-India2026-187678]

Technical Paper Publication

Revanth Gonipati - Indian Institute of Technology, Kharagpur
Atanu Dolai - Eindhoven University of Technology
Pabitra Badhuk - Indian Institute of Technology, Kharagpur

The Influence of Lance Geometric Parameters on the Temperature Distribution in a Blast Furnace Operating With Hydrogen, [IMECE-India2026-187676]

Technical Paper Publication

Chandra Sekhar Maradana - Indian Institute of Technology, Kharagpur

Primary Zone Flow Characteristics of a High-Intensity Compact Aero-Engine Combustor Using Radial Swirler, [IMECE-India2026-186438]

Technical Paper Publication

G Sriram - PARK College of Engineering and Technology

K Prem Kumar - PARK College of Engineering and Technology

Muthukumar Muthuramalingam - FLUDYN Advanced Technology Centre

A P Haran - PARK College of Engineering and Technology

Dharani Madala - Analyzer CAE Solutions Pvt. Ltd.,

Experimental Investigation on Transitions to Thermoacoustic Instability in Partially-Premixed Methane Flames, [IMECE-India2026-189631]

Technical Paper Publication

Athul Jith K P - Indian Institute of Space Science and Technology

Ramakrishnan P V - Indian Institute of Space Science and Technology

Rajesh Sadanandan - Indian Institute of Space Science and Technology (IIST)

GT5.2 - Structures and Rotordynamics and GT7.2 - Advanced Manufacturing, Materials and Coatings

9/5/2026

11:00 AM to 1:00 PM - CH05

Chair: Babu Santhana Gopalakrishnan -

Chair: Prof Piyush Shokya -

Chair: Mr. Srinivasan Swaminathan -

Chair: Koushik Vishwanathan -

Presentations:

A Study on the Structural Safety Margins for the Enhanced Nozzle Configuration, [IMECE-India2026-188729]

Technical Paper Publication

Gautham V - Kumaraguru College of Technology

Premkumar P S - Kumaraguru College of Technology

Vasantharaj C - Kumaraguru College of Technology

Krishnakumar P - Kumaraguru College of Technology

An Integrated Physics-Based Framework for Fault Diagnosis of Multi-Stage Planetary Gearbox Systems, [IMECE-India2026-189125]

Technical Paper Publication

Vishal Salunkhe - "Agnel Charities" Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, 400 703, Maharashtra, India.

Siddhant Chikane - "Agnel Charities" Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, 400 703, Maharashtra, India.

Anay Bapat - "Agnel Charities" Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, 400 703, Maharashtra, India.

Mann Dodiya - "Agnel Charities" Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, 400 703, Maharashtra, India.

Christon Misquith - "Agnel Charities" Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, 400 703, Maharashtra, India.

S. M. Khot - "Agnel Charities" Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, 400 703, Maharashtra, India.

Damage Tolerance Design by Studying Interaction Between Discontinuities in a Structure, [IMECE-India2026-190097]

Technical Paper Publication

Abhimanyu S - Baker Hughes

Manoharan S - Baker Hughes

Babu Santhana Gopalakrishnan - Baker Hughes

Leonardo Tognorelli - Baker Hughes

Development and Evaluation of a Cascade Cooling Concept to Enable Material Transition in an Aero-derivative Turbine Casing, [IMECE-India2026-188003]

Technical Paper Publication

Srinidhi Katti - Baker Hughes

Babu Santhana Gopalakrishnan - Baker Hughes

Anusha T - Baker Hughes

Roberto De Prosperis - Baker Hughes

Leonardo Langone - Baker Hughes

Stefano Luci - Baker Hughes

Fault Diagnosis of a Wind Turbine Planetary Gearbox Using Dimensional Analysis and Experimental Validation, [IMECE-India2026-188519]

Technical Paper Publication

Vishal Salunkhe - Fr. Conceicao Rodrigues Institute of Technology

Manav Kali - Fr. C. Rodrigues Institute of Technology, Vashi

Vedant Pawar - Fr. Conceicao Rodrigues Institute of Technology

Komal Kamble - Fr. Conceicao Rodrigues Institute of Technology

Malhaar Salunkhe - Fr. Conceicao Rodrigues Institute of Technology

S. M. Khot - Fr. Conceicao Rodrigues Institute of Technology

RA9.1: Robotics & Automation- Humanoid & Legged Robots

9/5/2026

2:00 PM to 4:00 PM - CH10

Chair: DR. KU. SHITAL SUDHAKAR CHIDDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Analyzing the Relationship Between Mechanical Tasks and Dynamic Failure in Humanoids, [IMECE-India2026-189207]

Technical Paper Publication

Sidharth V - Dayananda Sagar University

Sujal Krishna Das - Dayananda Sagar University

Anirudhha V M - Dayananda Sagar University

Pramod Kumar Naik - Dayananda Sagar University

Puneeth N - Dayananda Sagar University

Sudha Deepthi - Dayananda Sagar University

Multijoint Assistance for Loaded Walking: A Simulation Study, [IMECE-India2026-187990]

Technical Paper Publication

Karthick Ganesan - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Abhishek Gupta - Indian Institute of Technology Bombay

Biomimetic Trajectory Generation and Dynamic Reachability of Novel Quadruped Limb, [IMECE-India2026-188328]

Technical Paper Publication

S Abdul Azeez - Indian Institute of Information Technology, Design and Manufacturing, Kurnool.

Dr. Ravi Kumar Mandava - Indian Institute of Information Technology, Design and Manufacturing, Kurnool.

Nenavath Srinivas Naik - Indian Institute of Information Technology, Design and Manufacturing, Kurnool.

Comparative Analysis of Lower-Limb Gait: Human Biomechanics vs. Humanoid Robotic Modelling, [IMECE-India2026-188370]

Technical Paper Publication

Ajay Kashyap - National Institute of Technology Raipur

Anisha Sharma - National Institute of Technology Raipur

Shubhashis Sanyal - National Institute of Technology Raipur

Design and Development of Hexapod Ant Robot With AI Detection, [IMECE-India2026-189341]

Technical Paper Publication

N Sivakamasundari - Hindustan institute of technology and sciences

Jitendra Babu - Hindustan institute of technology and sciences

Lanka Rakesh - Hindustan institute of technology and sciences

Nelakuditi Rakesh - Hindustan institute of technology and sciences

Sathwik S - Hindustan institute of technology and sciences

An Fcm-Based Anfis With Petri Net Coordination for Cooperative Multi-Humanoid Robot Path Planning in Complex Environments, [IMECE-India2026-186584]

Technical Paper Publication

Chiranjit Sau - NIT Arunachal Pradesh

Prases Kumar Mahanty - NIT Arunachal Pradesh

RA10.1: Robotics & Automation- Autonomous Navigation & Marine Systems

9/5/2026

2:00 PM to 4:00 PM - CH09

Chair: DR. KU. SHITAL SUDHAKAR CHIDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Perception-Based Dynamic Obstacle Avoidance and Path Planning for Autonomous Coral Reef Farming, [IMECE-India2026-189767]

Technical Paper Publication

Sanjeev E - Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai

Koithapalli Lalitha Vishnu Kamesh - Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai

Piyush Pratap Singh - Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai

Abhishek Jha - Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai

Energy-Aware Autonomous Navigation: A Reinforcement Learning Velocity Control Strategy for Mobile Robots in Ros2, [IMECE-India2026-189833]

Technical Paper Publication

Rahul D Seervi - Dayananda Sagar University

Sanjay Ram M - Dayananda Sagar University

Akshay Senthil - Dayananda Sagar University

Dhanush A - Dayananda Sagar University

Henry Joel G - Dayananda Sagar University

Pramod Kumar Naik - Dayananda Sagar University

Puneeth N - Dayananda Sagar University

K. Sudha Deepthi - Dayananda Sagar University

An Autonomous Slam-Based Robotics Approach for Landfill Management, [IMECE-India2026-188226]

Technical Paper Publication

Vishal Purushothama - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Shakti P Jena - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Abhishek Jha - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Development and Simulation Based Validation of a Holistic Approach to Static and Dynamic Obstacle Handling and Path Planning for Quadcopter Uavs Using Matlab/simulink, [IMECE-India2026-187525]

Technical Paper Publication

Abhinav Anand - Visvesvaraya National Institute of Technology, Nagpur

Premansu Pradhan - Visvesvaraya National Institute Of Technology, Nagpur

Shital Chidharwar - Visvesvaraya National Institute Of Technology, Nagpur

A Minimal Sensing Mpc Approach for Structured Parking Scenarios, [IMECE-India2026-187732]

Technical Paper Publication

Pratik Chetan Kubal - Indian Institute of Technology, Bhubaneswar

Satyanarayan Panigrahi - Indian Institute of Technology, Bhubaneswar

Real-Time Underwater Fall Detection and Localization System, [IMECE-India2026-189933]

Technical Paper Publication

Sam Priyesh V - Department of Mechanical Engineering, Amrita

School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Dhanush S - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Piyush Pratap Singh - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

Abhishek Jha - Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Chennai, India

ATT9.1 - Computational and Experimental Heat Transfer - III 9/5/2026

2:00 PM to 4:00 PM - CH12

Chair: Narendran Balan -

Presentations:

Simulation Based Validation and Conceptual Cooling Framework for Heat Pipe Integrated Electric Motors, [IMECE-India2026-189479]

Technical Paper Publication

Adway Kedar Kulkarni - Vellore Institute of Technology

Ryszard Palka - West Pomeranian University of Technology in Szczecin, Szczecin, Poland

Marcin Wardach - West Pomeranian University of Technology in Szczecin

Bibin B. S - Vellore Institute of Technology (VIT)

Ashish Alex Sam - Vellore Institute of Technology (VIT)

Edison Gundabattini - Vellore Institute of Technology

A Computational Fluid Dynamics-Driven Synthetic Interferogram Generation for Systematic Non-Intrusive Investigations of Idealized Solar Receiver., [IMECE-India2026-189572]

Technical Paper Publication

Subhankar Ray - Indian Institute of Technology Bhubaneswar

Sudhansu Sekhar Sahoo - Odisha University of Technology & Research (OUTR), Bhubaneswar

Swarup Kumar Mahapatra - Indian Institute of Technology Bhubaneswar

Numerical Study on Radially Traversing Inclined Jet Impingement Cooling on a Vertically Oriented Rotating Disc With Uniform and Localized Heating, [IMECE-India2026-189660]

Technical Paper Publication

Adithyan V V - INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY

Dinesh D - INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY

Akhil Sivadas - INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY

Deepu M - INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY

Numerical Investigation of a Pcm-liquid Metal Hybrid Thermal Management System for Lithium-Ion Batteries, [IMECE-India2026-189768]

Technical Paper Publication

Jagadish Boddeti - National Institute of Technology Warangal

Nagendra Vanam - National Institute of Technology Warangal

Sampath Kumar Chinige - National Institute of Technology Warangal

Modelling of a Twelve Cylinder Turbocharged Diesel Engine and Presenting Modifications for Torque Enhancements, [IMECE-India2026-187746]

Technical Paper Publication

Divyakumar Bhavsar - Indian Institute of Technology Madras

Ravindra Kumar Meena - Engine factory Avadi

Mayank Mittal - Indian Institute of Technology Madras

Investigation of Partially Heated Rotating Cylinder in Buoyancy Driven Thermal Convection., [IMECE-India2026-195455]

Technical Presentation Only

ABHUTH VIJAYAN - IIST VALIYAMALA

PVP5.2 Operations, Applications & Components and PVP8.1 Welding Technology

9/5/2026

2:00 PM to 4:00 PM - CH03

Chair: Ashim Mandal - Honeywell

Chair: Parthapratim Brahma -

Chair: Sudhanshu Singhal - Honeywell UOP

Chair: Kamal Shah -

Chair: Rajesh Madhani -

Presentations:

Evaluation of Sealant Distribution Efficiency in Lubricated Plug Valves, [IMECE-India2026-189642]

Technical Presentation Only

Ramesh Kumar Punithanathan - Flowserve Corporation

Effect of Welding Parameters on Diffusible Hydrogen Content in Flux-Cored Arc Welding (Fcaw) by Utilizing Robotic Welding, [IMECE-India2026-188533]

Technical Paper Publication

Ashish Kumar Rai - ADOR WELDING LIMITED

Krishnakant Pandey - ADOR WELDING LIMITED

Submerged Arc Welding Procedure for Scr-0.5mo Steel for Low-Temperature Application, [IMECE-India2026-189901]

Technical Paper Publication

Prabhu Bala - Precision Equipments Private Limited

Krishnan Sivaraman - Fr. C. Rodrigues Institute of Technology

Premkumar P - Precision Equipments Private Limited

Arun Mugilan - Precision Equipments Private Limited

Raja Manikkam - Precision Equipments Private Limited

In-situ Rectification of Tube Failures in Waste Heat Boilers & Steam Surface Condensers: Challenges and Solutions, [IMECE-India2026-188383]

Technical Paper Publication

Raushan Gupta - L&T Heavy Engineering

Vivek Bangar - L&T Heavy Engg

Development, Qualification, and Implementation of a High-Power Diode Laser Welding Procedure for SS316L Weld Overlay on Large Carbon Steel Ring Components, [IMECE-India2026-187797]

Technical Paper Publication

Parag Tadhani - Larsen & Toubro Limited

Darshan Kava - Larsen & Toubro Limited

Effect of Critical Process & Design Parameters on Dissimilar Metal Welds, [IMECE-India2026-187510]

Technical Paper Publication

Rajesh Patel - Linde Engineering India Pvt. Ltd.

SSDM1.7 - Structures

9/5/2026

2:00 PM to 4:00 PM - CH07

Chair: Shahul Nazar - Technical Specialist, Airbus

Chair: Unnikrishnan Sreenivasan - Boeing India

Presentations:

Design and Optimization of Stiffened, Flat, Isotropic Panels Under Uniaxial, In-Plane Compressive Loads: A Numerical Approach, [IMECE-India2026-196257]

Technical Presentation Only

Owen Ovblebo - University of Washington

Avinkrishnan Ambika Vijayachandran - University of Washington

Study of Dynamic Behavior of Thermoplastics, [IMECE-India2026-189118]

Technical Presentation Only

Sachin B U - Collins Aerospace

Manoj M Shetty - Collins Aerospace

Sharad Anand Shivaprasad - Collins Aerospace

Fatigue Analysis of the Dental Implants, [IMECE-India2026-189535]

Technical Paper Publication

Nikhil Mahale - Manipal Institute of Technology

Gowrava Shenoy B. - Manipal Institute of Technology

S M Abdul Khader - Manipal Institute of Technology

Deflection Stress Analysis of Expansion Joint Bellows in Automotive Exhaust Lines, [IMECE-India2026-190039]

Technical Paper Publication

Nitin Pagar - MIT Art, Design & Technology University, Pune

Pratap Deshmukh - IBM Research Albany

Ganesh Kekan - MIT ART DESIGN AND TECHNOLOGY UNIVERSITY PUNE

Investigation of Stiffness-to-Weight Efficiency and Mechanical Performance of Topology-Optimised and Engineered Lattice Structure, [IMECE-India2026-189585]

Technical Paper Publication

Kishore Babu Dudla - National Institute of Technology Warangal

Ravi Kumar Y - National Institute of Technology Warangal

Cuf-Based Free Vibration Analysis of Functionally Graded Cylindrical Shells With Porosity, [IMECE-India2026-188211]

Technical Paper Publication

Satish Sahu - NIT Raipur

Rajana Suresh Kumar - NIT Raipur

SSDM2.8 - Structural Dynamics, Modelling & Simulation

9/5/2026

2:00 PM to 4:00 PM - CH13

Chair: Abhijit Chaudhuri - Airbus

Chair: Abhinav Ravindra Dehadrai -

Presentations:

Design and Analysis of a Deployable Truss for Curved and Hexagonal Space Structures, [IMECE-India2026-189729]

Technical Paper Publication

Shravani Ghadge - MIT-WPU

Mitul Kumar Salanki - Dr. Vishwanath Karad MIT World Peace University, Pune

A Portable Hydraulic Scissor Lift for Temporary Two-Stage Parking: Optimization and Structural Validation, [IMECE-India2026-189807]

Technical Paper Publication

Amit Kumar Mandape - National Institute of Technology Raipur

Srinivasu Gangi Setti - NIT Raipur

Hanumant Nethani - NIT Raipur

Lekhram Patel - NIT Raipur

Abhiroop Sharma - NIT Raipur

Kunal Dewangan - NIT Raipur

Influence of Grain Size and Orientation on Thermo-Mechanical Fatigue and Creep Life of Vanes in Gas Turbines, [IMECE-India2026-188122]

Technical Paper Publication

Saurabh Gorai - Siemens Energy India Ltd.

Pawan Kumar - Siemens Energy India Ltd.

Fathi Ahmad - Siemens Energy Global GmbH & Co.

Radan Radulovic - Siemens Energy Global GmbH & Co.

Debdulal Das - Siemens Energy India Ltd

Austin Back - Siemens Energy Inc.

Digital Twin for Operational Control and Maintenance of Fiber Reinforced Laminated Wind Turbine Blade, {IMECE-India2026-188522}

Technical Paper Publication

Ajaz Ahmed Deliwala - Tata Consultancy Services Limited

Harsh Shah - Tata Consultancy Services Limited

Saban Babu Beemaraj - Tata Consultancy Services

Sreehari Kumar Bhogineni - Tata Consultancy Services Limited

Amit Salvi - Tata Consultancy Services Limited

Optimization of Double-Arrow Cellular Metamaterials for Impact-Resistant Defence Application, {IMECE-India2026-188202}

Technical Paper Publication

Harsh Navangul - Vellore Institute of Technology, Chennai

Kushagra Kumar - Vellore Institute of Technology, Chennai

Awani Bhushan - Vellore Institute of Technology, Chennai

Bisheshwar Haorongbam - National Institute of Design Assam

Inderpal Singh Sandhu - Terminal Ballistics Research Laboratory (TBRL), DRDO

Rajnish Mallick - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, Chennai

Design and Analysis of Extended Skirt Structures for Mitigating Thermal Contraction in Cryogenic Launch Vehicles, {IMECE-India2026-188337}

Technical Paper Publication

Sai Abhishek M. - Vikram Sarabhai Space Centre (VSSC)

Mohammed Afzal Rafiq - Vikram Sarabhai Space Centre (VSSC)

Arun Jose K. A. - Vikram Sarabhai Space Centre (VSSC)

Shijo Xavier - Vikram Sarabhai Space Centre (VSSC)

Suresh R. - Vikram Sarabhai Space Centre (VSSC)

Beena Ap - Vikram Sarabhai Space Centre (VSSC)

VD&C6.1 - Structural Health Monitoring using Vibration and Acoustics

9/5/2026

2:00 PM to 4:00 PM - CH11

Chair: Dr. Shankar Ram -

Chair: Sathya moorthy -

Presentations:

DEFECT DETECTION IN FIBRE METAL LAMINATES USING FREQUENCY RESPONSE FUNCTIONS AND ML ALGORITHMS, {IMECE-India2026-188089}

Technical Paper Publication

Yugandhar Babu Parasa - National Institute of Technology Warangal

Sarthak Atkare - National Institute of Technology Warangal

Anuruddha Majumder - 3D Engineering Automation LLP

Srikanth Korla - National Institute of Technology Warangal

Bimodal Prediction Algorithm for Quantified Bolt Looseness Detection, {IMECE-India2026-188102}

Technical Paper Publication

Sarthak Atkare - National Institute of Technology Warangal

Yugandhar Babu Parasa - National Institute of Technology Warangal

Srikanth Korla - National Institute of Technology Warangal

Deep-Groove Ball Bearing Fault Detection and Remaining Useful Life Prediction Using a Digital Twin, {IMECE-India2026-188190}

Technical Paper Publication

Thota Yedukondalu - National Institute of Technology Calicut

Amit Kumar Singh - National Institute of Technology Calicut

T.Jagadeesha - National Institute of Technology Calicut

Damage Detection in 3d Printed Composite Plate Structures Using Wavelet Transform Based Modal Analysis, {IMECE-India2026-189413}

Technical Paper Publication

Raghuraman T - National Institute of Technology, Tiruchirappalli

Pankaj Chaupal - National Institute of Technology, Tiruchirappalli

Karthik S - Indian Institute of Technology, Palakad

Prakash Rajendran (Corresponding Author) - National Institute of Technology, Tiruchirappalli

Adaptive Simulation and Experimentally Tested Dynamic Vibration Suppression in PvdF-Based AI Plate and Beam Structures, {IMECE-India2026-189537}

Technical Paper Publication

Shaik Khaja Basha - National Institute of Technology Warangal

Krishna Prakash Yadav - National Institute of Technology Warangal

Influence of Data Size on Feature Variability for Vibration Based Intelligent Fault Diagnosis of Rolling Element Bearing, {IMECE-India2026-190004}

Technical Paper Publication

Ahmad Zakariya - Aligarh Muslim University

Mohd Atif Jamil - Aligarh Muslim University

Shoraim Rashid - Aligarh Muslim University

AM3D2.3- Applications and Impact

9/5/2026

2:00 PM to 4:00 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Effect of Feature Accuracy and Surface Roughness of Additively Manufactured Orifice on Flow Properties in Liquid Propellant Rocket Engine, {IMECE-India2026-188576}

Technical Paper Publication

Srinivasa Prakash Regalla - Birla Institute of Technology and Science-Pilani, Hyderabad Campus

Vishal Ranjan Gupta - Birla Institute of Technology and Science, Pilani, Hyderabad Campus

Studies on Additively Manufactured Triply Periodic Minimal Surface Structures, [IMECE-India2026-188180]

Technical Paper Publication

Thirumurugan Karuppiah - National Institute of Ocean Technology

Shanmuga Sundaram Karibeeran - College of Engineering, Guindy Anna University

Anand Thirunavukarasu - College of Engineering, Guindy Anna University

Balaji Ramakrishnan - National Institute of Ocean Technology, Chennai

Archimedean Shape-Driven Infill for Fdm: Computational Design, Experimental Validation, Mechanical Performance, [IMECE-India2026-189653]

Technical Paper Publication

Sabyasachi Talukdar - PDPM IIITDM JABALPUR

Rajiv Shrivastava - PDPM Indian Institute of Information Technology Design and Manufacturing Jabalpur

Kishor Singh - PDPM Indian Institute of Information Technology Design and Manufacturing

K. Ponappa - Indian Institute of Information Technology Design and Manufacturing-Jabalpur

Automating Post-Print Operations in Additive Manufacturing Using a Robotic Manipulator, [IMECE-India2026-189144]

Technical Paper Publication

Harshavadhan E - Amrita Vishwa Vidyapeetham

Rishi Kumar Kumar - Amrita Vishwa Vidyapeetham Chennai Campus

Experimental Investigation on Acoustic Performance of 3d-Printed Thermoplastic Polymer Materials, [IMECE-India2026-197792]

Technical Presentation Only

Ganesh Kekan - MIT Art Design and Technology University, Pune

Sachin Pawar - MIT Art Design and Technology University

Cradle-to-Gate Life Cycle Assessment of Dry and Hybrid Nano-Mql Drilling of Pbf-Lb Inconel 718: A Comparative Environmental Study, [IMECE-India2026-187630]

Technical Paper Publication

Tarang Lotwala - Institute of Infrastructure, Technology, Research and Management (IITRAM)

Prameet Vats - Indian Institute of Information Technology, Design and Manufacturing (IIITDM)

Kishor Kumar Gajrani - Indian Institute of Information Technology, Design and Manufacturing

Navneet Khanna - Institute of Infrastructure, Technology, Research and Management (IITRAM)

AM3D5.1- AM for Biomedical Applications and AM3D4.2 - Modeling & Simulation of AM

9/5/2026

2:00 PM to 4:00 PM - CH05

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Curvature-Aware Mathematical Modeling of Extrusion Flow for Multi-Axis 3D Bioprinting, [IMECE-India2026-188015]

Technical Paper Publication

Deepak Kumar - Academy of Scientific and Innovative Research

Dhruva Khanzode - Academy of Scientific and Innovative Research

Ranjan Jha - CSIR- Central Scientific Instruments Organisation

Development of Electrospun Pcl Fiber-Reinforced Composite Bioinks With Rheology-Based Prediction of Diw Printability, [IMECE-India2026-188400]

Technical Paper Publication

Shreeram Shinde - Defence Institute of Advanced Technology

Dinesh Singh Thakur - Defence Institute of Advanced Technology

Sunil Chandel - Defence Institute of Advanced Technology

Influence of Processing Route on the Mechanical and Biomedical Performance of Mg-ag-sn Alloy Processed via Melting-Heat Treatment and Lpbf, [IMECE-India2026-189127]

Technical Paper Publication

Ajit Kumar - New Age Maker's Institute of Technology

Muralidhar Yadav - NTU Singapore

Litton Bhandari - NAMTECH

Satyam Suwas - Indian Institute of Science

Kaushik Chatterjee - Indian Institute of Science

Time-Dependent Degradation of Additively Manufactured CoCrMo Alloy in Physiological Saline Solution Containing Lactic Acid and Its Influence on Compressive Mechanical Properties, [IMECE-India2026-189655]

Technical Paper Publication

Porika Rakesh - Indian Institute of Technology Madras

Jayaganthan R - Indian Institute of Technology Madras

Saravana Kumar G - Indian Institute of Technology Madras

Morphological and Fatigue Characterisation of Gyroid Tantalum Scaffolds Fabricated by Electron Beam Melting for Load-Bearing Orthopaedic Applications, [IMECE-India2026-188896]

Technical Presentation Only

Ridik S - S.A. Engineering College

Jeeva S - S.A. Engineering College

Prakash K - S.A. Engineering College

Computational Evaluation and Structural Assessment of a Distal Femoral Knee Prosthesis for Additive Manufacturing, [IMECE-India2026-190303]

Technical Presentation Only

Gopinathan Palani - College of Engineering, Anna University

Dr Shanmuga Sundaram Karibeeran - College of Engineering, Anna University, Chennai

Dr Shibu Gopalakrishnan - College of Engineering, Anna University, Chennai 600025

AM1.1 - Advances in Testing and Characterization of Materials

9/5/2026

2:00 PM to 4:00 PM - CH08

Chair: Ayan Bhowmik -

Chair: G V, Prasad Reddy -

Presentations:

Feature Assisted Stereo Correlation for Mapping Three-Dimensional Heterogeneous Deformation, [IMECE-India2026-189951]

Technical Paper Publication

N. Inian Thiruselvam - BITS PILANI K K BIRLA GOA CAMPUS

Sankara Subramanian - CEO, IndicVision, Chennai, India

Sankaran Shanmugam - Indian Institute Of Technology, Madras

Full-Field Experimental Characterization and Constitutive Modeling of Ultra-Soft Ecoflex Elastomers Across Shore Hardness Grades, [IMECE-India2026-187082]

Technical Paper Publication

Rajat Pawar - BITS Pilani, K K Birla Goa Campus

Inian Thiruselvam N. - BITS Pilani K K Birla Goa Campus

Sumit Basu - Indian Institute of Technology Kanpur (IITK)

Vikas Chaudhari - BITS Pilani K K Birla Goa Campus

Surface Engineering of Moisture-Resistant Natural Fiber-reinforced Polymer Composite Materials for Lightweight Non-Structural Aerospace Applications, [IMECE-India2026-189486]

Technical Paper Publication

Pooja M - Dayananda Sagar University

Radhika D R - Dayananda Sagar University

Ridhima Jain - Dayananda Sagar University

Shifali Shetty - Dayananda Sagar University

Bhavishya M Gowda - Dayananda Sagar University

Kartik Tandel - Dayananda Sagar University

Srinath R - Dayananda Sagar University

K Sudha Deepthi - Dayananda Sagar University

Synergistic Effects of High-Entropy Alloy and Graphene Reinforcement on Al7150 Based Hybrid Nanocomposites

Fabricated by Ultrasonic-Assisted Stir Casting, [IMECE-India2026-188727]

Technical Paper Publication

Deepak Kumar - IIITDM Jabalpur

Kedarnath G - IIITDM Kurnool

Seetharam R - IIITDM Kurnool

Microstructural Evolution of Aa2219 Aluminum Alloy in Cast and Homogenized Condition During Isothermal Compression Test, [IMECE-India2026-189649]

Technical Paper Publication

T M Anup Kumar - Indian Institute of Space Science and Technology

Chakravarthy P - Indian Institute of Space Science and Technology

Ravi Ranjan Kumar - Liquid Propulsion Systems Centre Valiamala

Narayana Murty S. v. S. - Mishra Dhatu Nigam Limited

Gadolinium-Assisted Cooling to Reduce the Thermal Response Time of Shape Memory Alloy Actuators, [IMECE-India2026-185856]

Technical Paper Publication

Raushan Kumar - Indian Institute of Technology Kanpur

Ankur Dwivedi - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

AM2.2 - Materials Modeling and Mechanics including AI/ML

9/5/2026

2:00 PM to 4:00 PM - CH14

Chair: K. v. Vamsi -

Chair: Pratik Ray -

Presentations:

Thermokinetic Approach to Decipher High Entropy Alloys, [IMECE-India2026-189494]

Technical Presentation Only

Sindhu P - Amrita School of Engineering, Chennai

Amal Sasi - Amrita School of Engineering, Chennai

Khushbu Dash - Amrita School of Engineering

Correlating Microstructural Attributes to the Thermo-Mechanical Fatigue Lives of Two Cast Iron Grades: Simo and Simoni, [IMECE-India2026-197679]

Technical Presentation Only

Girish Kulkarni - Cummins Technologies India Ltd

Anirban Patra - Indian Institute of Technology Bombay

Constitutive Model for Hot Deformation With Consideration for Dynamic Recrystallization, [IMECE-India2026-197390]

Technical Presentation Only

Alanka Mahesh - Indian Institute of Technology Bombay

Sanjay Chandra - Indian Institute of Technology

Anirban Patra - Indian Institute of Technology

Thermo-Mechanically Coupled Phase-Field Modelling of Defect-Driven Tensile Failure in C/sic Composites at Elevated Temperatures, [IMECE-India2026-188046]

Technical Presentation Only

Dillibabu S - Indian Institute of Technology Hyderabad

Chandra Prakash - Indian Institute of Technology Hyderabad

X-Ray Diffraction and Microstructural Characterization of Silicon Carbide-Enhanced Carbon Fiber/phenolic Ablative Composites, [IMECE-India2026-190482]

Technical Presentation Only

Praveen Kumar Basingala - National Institute of Technology Raipur

Ushakiran Sanivoda - Department of Mechanical Engineering, University of Minho,

Erry Srikanth - Indian Institute of Technology Hyderabad

Dhanunjayarao Borra N - Vignan's Institute of Information Technology(A)

Venkata Swamy Naidu Neigapula - National Institute of Technology Raipur

GT6.1 - GT Performance, Operability, Controls, Reliability and MRO

9/5/2026

2:00 PM to 4:00 PM - CH01

Chair: Anantha Ramesh -

Chair: Gautam Sukumaran -

Presentations:

Parametric Study of the Orc Working Fluid Selection Methodology Based on Heat Grade and Cycle Performance Estimation, [IMECE-India2026-187407]

Technical Paper Publication

Rohit Saha - TRIVENI TURBINES LIMITED

Shradharghya Shankar Adhikary - Triveni Turbines Limited

Saravanan V - Triveni Turbines Limited

Sudheer Valluri - Triveni Turbines Limited

Jayshankar Ray - Triveni Turbines Limited

Techno-Commercial Analysis of Advanced Gas Turbine Operation Strategy, [IMECE-India2026-188172]

Technical Paper Publication

Anubhav Sahu - SIEMENS ENERGY INDIA LIMITED

Pertik Kamboj - Siemens Energy India Limited

Pugalenth Nandagopal - Siemens Energy India Limited

Matthias Duerr - Siemens Energy

Thermodynamic Analysis of Combined Cycle Power Plant Firing Hydrogen or Ammonia Blends With Natural Gas, [IMECE-India2026-188518]

Technical Paper Publication

Prerit Sharma - GE Vernova

Anantha Ramesh - GE Vernova

Raman Nyls - GE Vernova

Muneeswara Babu Ummiti - GE Vernova

Suresh Mvji - GE Vernova

Raub W Smith - GE Vernova

Degradation-Aligned Uncertainty Quantification for Gas Turbine Turbofan Prognostics, [IMECE-India2026-188348]

Technical Paper Publication

Sagar Bansal - Defence Institute of Advanced Technology

Bharath Ramkrishna - Defence Institute of Advanced Technology

Industry 4.0 Aero-Thermal Gas Path Digital Degradation Simulation for Legacy Aero Engine Health Monitoring, [IMECE-India2026-188273]

Technical Paper Publication

Thennavarajan Subramanian - CSIR-National Aerospace Laboratories and IITM

Dilipkumar Bhanudasji Alone - CSIR-National Aerospace Laboratories

Nagabhushana Rao Vadlamani - Indian Institute of Technology Madras(IITM)

A Comprehensive Performance and Economic Analysis of Solar Powered Electrolysis and Green Hydrogen Utilization in Small Scale Gas Turbines, [IMECE-India2026-188936]

Technical Paper Publication

Sumit Pal - Siemens Energy India Limited

Pugalenth Nandagopal - Siemens Energy India Limited

Ashwani Singh - Siemens Energy India Limited

Matthias Duerr - Siemens Energy Global GmbH & Co. KG

GT8.1 - Space Propulsion

9/5/2026

2:00 PM to 4:00 PM - CH02

Chair: Prof Jaya chandran -

Chair: Dr. Biju Kumar -

Presentations:

3d Aerospoke Nozzle Design Optimization for Altitude-Adaptive Performance via Cfd Analysis, [IMECE-India2026-185821]

Technical Paper Publication

Mr Saswat Kumar Panda - Indian Institute Of Technology (IIT) Bhubaneswar

Dr. Pattabhi Ramaiah Budarapu - Indian Institute of Technology Bhubaneswar

Manas Mohan Mahapatra - Indian Institute Of Technology Bhubaneswar

Satyajit Panigrahy - Indian Institute Of Technology Bhubaneswar

Design and Demonstration of Atmospheric Ionic Thruster, [IMECE-India2026-187248]

Technical Paper Publication

Haneesh M - M S Ramaiah University of Applied Sciences

Lakshmi P. V. - M S Ramaiah University of Applied Sciences

Nuchhrin Alexander - M S Ramaiah University of Applied Sciences
A. T. Sriram - M S Ramaiah University of Applied Sciences

Shock Recirculation Synergy in Scramjet Combustors With the Effects of Strut Wedge Angle and Cavity Assisted Flame Stabilization, {IMECE-India2026-187832}

Technical Paper Publication

Hema Latha K - MJCT

Shehabaz S Md - NIT Andhra Pradesh

Santhosh Kumar Gugulothu - National Institute of Technology Andhra Pradesh

Raju Muthyala - SVES Suryapet

Praveen Barmavatu - Universidad Tecnológica Metropolitana, Santiago, Chile

Sailaja Sinha G - MJCT

Numerical Investigation on the Effect of Splitter Plate Slanting Edge Thickness on Supersonic Shear Layer Characteristics, {IMECE-India2026-189319}

Technical Paper Publication

Akhil Sivadas - Indian Institute of Space Science and Technology

Deepu M. - Indian Institute of Space Science and Technology

Experimental and Computational Investigation of Microbubble-Induced Thermoacoustic Softening and Multiphase Flow Choking in Hybrid Rockets Within the Sanal Flow Choking Framework, {IMECE-India2026-189907}

Technical Paper Publication

Dhruv Panchal - Amity University

Raunak Sharma - Amity University

Anmish Varma - Amity Institute of Aerospace Engineering

Debayan Roy - Amity Institute of Aerospace Engineering

Maansi Srivastava - Amity Institute of Aerospace Engineering

Yaman Vohra - Amity Institute of Aerospace Engineering

Sanjay Singh - Amity University Uttar Pradesh

Rakesh Kumar - Punjab Engineering College (Deemed to be University), Chandigarh

SANALKUMAR VR - Amity Institute of Aerospace Engineering

Aircraft Hydrogen Propulsion: An Environmental and Regulatory Perspective, {IMECE-India2026-189992}

Technical Paper Publication

Proloy Jyoti Naskar - Infosys Limited

KP Arun - Infosys Limited

**VD&C1.4: Linear and non-linear dynamics and control and
VD&C2.1: Multi-body Dynamics: Systems and Applications**
9/5/2026

2:00 PM to 4:00 PM - CH16A

Chair: Chandramouli Padmanabhan -

Chair: I R Praveen Krishna -

Presentations:

NUMERICAL EVALUATION OF HYDRODYNAMIC DRAG ON SLAT SCREENS IN A RECTANGULAR TANK UNDER REGULAR SLOSHING, {IMECE-India2026-187759}

Technical Paper Publication

Abirami G - Indian Institute of Technology Madras

Deepak Kumar - Indian Institute of Technology Madras

Murali K - Indian Institute of Technology Madras

On Synchronization of Similar and Dissimilar Mechanical Systems via Indirect Vibrational Coupling, {IMECE-India2026-187891}

Technical Paper Publication

Anubhab Sinha - Institute of Engineering & Management

Anirban Mondal - Institute of Engineering & Management

Aritra Das - Institute of Engineering & Management

Sayan Mandal - Institute of Engineering & Management

Vibration Response of Bifacial Solar Pv Module Under Metro-Induced Base Excitation, {IMECE-India2026-188801}

Technical Paper Publication

Saksham Abrol - Visvesvaraya National Institute of Technology, Nagpur

Dr. Atul B. Andhare - Visvesvaraya National Institute of Technology, Nagpur

Structural Assessment of a Cantilever Sensor Housing Assembly to Be Fitted in Jet Powered Medium -Range Aircraft, {IMECE-India2026-188972}

Technical Paper Publication

Kummara Siva Kumar - Defence Research Development Organization (NPOL)

Anu N Vincent - Defence Research Development Organization (NPOL)

Samuel Theophilus M - Defence Research Development Organization (NPOL)

Analysis of Energy Harvesting Backpack Power Output, {IMECE-India2026-189837}

Technical Paper Publication

Farhaan Nasir - Indian Institute of Technology Dharwad

Prajwal Koppad - Indian Institute of Technology Dharwad

Punnag Chatterjee - Indian Institute of Technology Dharwad

GT3.4 - Fluid Dynamics, Heat Transfer and Thermal Engineering

9/5/2026

2:00 PM to 4:00 PM - CH15

Chair: Sendilkumaran Soundiramourty -

Chair: Prof Kameswararao Anupindi -

Presentations:

Design and Numerical Assessment of Serrated Leading Edges for Quiet Uav Propulsion Systems, {IMECE-India2026-189397}

Technical Paper Publication

Deeban Balaaji At - Hindustan Institute of Technology and Science,
Sathish Sivasubramanian - Hindustan Institute of Technology and
Science, formerly Hindustan College of Engineering, is a private
deemed university

John Presin Kumar A - Hindustan Institute of Technology and
Science

Sivasankar Arumugam - Hindustan Institute of Technology and
Science

Samuel James - Hindustan Institute of Technology and Science

Vellanki Ajay - Hindustan Institute of Technology and Science

Jacob S - Vels Institute of Science, Technology & Advanced Studies

Seralathan S - Hindustan Institute of Technology and Science,
formerly Hindustan College of Engineering, is a private deemed
university

Experimental and Analytical Characterization of Wall-Friction-
Induced Cavitation and Acoustic Softening in Cryogenic Rocket
Fuel Lines Under Reduced Pressure Conditions, [IMECE-
India2026-189750]

Technical Paper Publication

Sameeha Khan - Amity Institute of Aerospace Engineering

Shivansh Rana - Amity Institute of Aerospace Engineering

Yaman Vohra - Amity Institute of Aerospace Engineering

Raunak Sharma - Amity Institute of Aerospace Engineering

V. R. Sanal Kumar - Amity Institute of Aerospace Engineering

Unified Analytical Model for Critical Mass Flux in Two-Phase
Choked Flow Incorporating Void Fraction and Boundary-Layer
Blockage, [IMECE-India2026-189766]

Technical Paper Publication

Shivansh Rana - Amity Institute of Aerospace Engineering

Sameeha Khari - Amity Institute of Aerospace Engineering

Numerical Investigation of Mach Number Distribution Under
Choked and Unchoked Conditions for Annular Cascade, [IMECE-
India2026-189808]

Technical Paper Publication

Bhavana Kokkonda - Gas Turbine Research Establishment

Priyush Bharti - Gas Turbine Research Establishment

Ravitej M - Gas Turbine Research Establishment

Batchu Suresh - Gas Turbine Research Establishment

Aero-Propulsive Multi-Objective Optimization of a Flush-Mounted
S-Duct Intake for Cruise Missiles at High Subsonic Conditions,
[IMECE-India2026-189978]

Technical Paper Publication

Maitik Parikh - Defence Institute of Advanced Technology

S. Kandasamy - Research Centre Imarat

K. Jayaprakash - Research Centre Imarat

Niladri Pahari - Research Centre Imarat

Ganapati Joshi - Defence Institute of Advanced Technology

Hari Om Verma - Defence Institute of Advanced Technology

Computational Optimization of Rear Geometry for Thrust
Enhancement in a Pneumatically Driven Cargo Hyperloop Pod,
[IMECE-India2026-189401]

Technical Presentation Only

Ajeet Bharti - Indian Institute of Technology Kanpur

Sanu Chakraborty - Indian Institute of Technology Kanpur

Bijaya Bikram Samal - Indian Institute of Technology Kanpur

Ravi Kumar - Indian Institute of Technology Kanpur

Suraj Kumar Mishra - Indian Institute of Technology Kanpur

S Adarsh - Indian Institute of Technology Kanpur

Jefin T Jacob - Indian Institute of Technology Kanpur

Bishakh Bhattacharya - Indian Institute of Technology Kanpur

Rajesh Rarijan - Indian Institute of Technology Kanpur

PVP8.2 Welding Technology

9/5/2026

4:30 PM to 6:30 PM - CH03

Chair: Kamal Shah -

Chair: Parthapratim Brahma -

Chair: Rajesh Madhani -

Presentations:

Occupational Health in Welding, [IMECE-India2026-189065]

Technical Paper Publication

Rakesh Subramanian N Nagarajan - TWI INDIA PVT LTD

Understanding Criticality in Welding of Dissimilar Ferritic
Materials, [IMECE-India2026-188213]

Technical Presentation Only

Jignesh Desai - Fluor Daniel India Ltd

Harsh Chavhan - Fluor Daniel India Ltd

Fabrication of Hydrotreatment Reactors With Cr Mo and Cr Mo v
Steels With Latest Techniques, [IMECE-India2026-187839]

Technical Presentation Only

Prasad Thangavelu - Godrej & Boyce Manufacturing Company
Limited

Alex Tellis - Godrej & Boyce Manufacturing Company Limited

Manufacturing Challenges and Metallurgical Considerations in
the Fabrication of Nitric Acid Absorption Column, [IMECE-
India2026-188048]

Technical Presentation Only

Prasad Thangavelu - Godrej & Boyce Manufacturing Company
Limited

Alex Tellis - Godrej & Boyce Manufacturing Company Limited

Comparative Assessment of Carbon Steel and Low Alloy Flux
Cored Wires Under Industrial Pwht Conditions for Welded
Structures, [IMECE-India2026-187425]

Technical Presentation Only

Abhishek Vyas - voestalpine Bohler Welding India Pvt Ltd

Kamal Shah - voestalpine Bohler Welding India Pvt Ltd

Optimization of Ferrite Number and Elemental Dilution in a 6mm
Multi-Layer Overlay Using Er309lmo and Er316l Using Gmaw

Process, {IMECE-India2026-187422}
Technical Presentation Only
Khanitl Gurjar - voestalpine Bohler Welding India Pvt. Ltd.
Kamal Shah - Voestalpine Bohler Welding India Pvt. Ltd.

Influence of Welding Processes on Charpy Toughness of Austenitic Stainless Steels for Cryogenic Applications, {IMECE-India2026-188524}

Technical Paper Publication
Yakinkumar Patel - Praj Industries Limited
Rushikeshkumar Raval - Praj Industries Limited
Subhash Khasiya - Praj Industries Limited

SSDM1.8 - Structures

9/5/2026

4:30 PM to 6:30 PM - CH07

Chair: Joseph J Kakkassery - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Chair: Shashidhar Shivarudrappa - COLLINS AEROSPACE

Presentations:

Structural Design Optimization of Braided Nitinol Pda Occluders: A Parametric Doe Approach to Radial Compliance, {IMECE-India2026-188455}

Technical Presentation Only
Samruddhi S. Phadatare - IIT Madras
Sruti Thakur - IIT Madras
Vishnu S. Prasad - SCTIMST
Subhash N. N. - SCTIMST

From Terahertz Signals to Aging-Induced Degradation: Physics-Based Non-Destructive Evaluation of Ultrasonic Cardiovascular Implants, {IMECE-India2026-188730}

Technical Presentation Only
Subhash N N - SCTIMST
Muraleedharan C V - SCTIMST
Krishnan Balasubramanian - IIT Madras

Adaptation of Conventional Methods to Include Effect of Creep in High Cycle Fatigue Analysis for Elevated Temperature Operation of Steam Turbine Rotors, {IMECE-India2026-188071}

Technical Paper Publication
Maneesh Batrani - Bharat Heavy Electricals Ltd.
Jatinder Mohan - Bharat Heavy Electricals Ltd.
Gopalakrishnan V - Bharat Heavy Electricals Ltd.
N C Bhatt - Bharat Heavy Electricals Ltd.
Mukesh Kumar Verma - Bharat Heavy Electricals Ltd.

Thermo-Structural Analysis of Truncated Ogival Shells by Finite Element Method, {IMECE-India2026-189409}

Technical Paper Publication
Bikramjit Podder - DRDO
Arindam Sarkar - DRDO

Dynamics of Adaptive Wing Structure Under External Periodic Forcing, {IMECE-India2026-189699}

Technical Paper Publication
Manoj Prabhakar - Indian Institute of Technology Madras
Senthil Murugan - Indian Institute of Technology Madras

Prediction of Maximum Tension and the Sag Location in Track Rope of Rapeway System Using Numerical Method, {IMECE-India2026-187559}

Technical Paper Publication
J Deepanshu - Indian Institute of Technology Mandi
Rajeev Kumar - Indian Institute of Technology Mandi
Kumar Sambhav - UPID Noida

SSDM2.9 - Structural Dynamics, Modelling & Simulation

9/5/2026

4:30 PM to 6:30 PM - CH13

Chair: Krishnamurthy GS - Royal Enfield

Chair: Abhinav Ravindra Dehadrai -

Presentations:

Physics-guided Geometric Deep Learning for Vibration-Induced Leakage Prediction in EV Inverter Housing using Virtual Fluid Mass CAE Simulation, {IMECE-India2026-187751}

Technical Paper Publication
Devi Prasad Routu - ZF India Private Limited
P Pancham Alva - ZF India Private Limited
Shirish Moturu - ZF India Private Limited

Cfd Evaluation of Aerodynamic Performance of a Marlin-Inspired Aircraft Fuselage, {IMECE-India2026-188701}

Technical Paper Publication
Balaji Ganesan - Hindustan Institute of Technology and Science
Barathkumar Aakash G - Hindustan Institute of Technology and Science
Mohammed Aadil - Hindustan Institute of Technology and Science
Sarguna S - Hindustan Institute of Technology and Science
Vijayanandh Raja - Kumaraguru College of Technology
Boopathy Govindarajan - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Technology and Science, Chennai
Santhosh Kumar Ganesan - University College of Engineering, Bharathidasan Institute of Technology Campus, Anna University
Prince Raj Lawrence Raj - Indian Institute of Engineering Science and Technology (IIEST)
Balaji K - Parul Institute of Engineering and Technology, Parul University
Vigneshwaran C M - Ramaiah Institute of Technology
Joseph J Kakkassery - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Technology and Science, Chennai

Cfd Investigation of Aerodynamic Interference Effects Due to Booster Placement on a Supersonic Missile Configuration, {IMECE-India2026-189294}

Technical Paper Publication

Aviva Nava Arieli Singampalli - Hindustan Institute of Technology and Science, Padur, Chennai

Bhavana Reddy Lankapothu - Hindustan Institute of Technology and Science

Balaji Ganesan - Hindustan Institute of Technology and Science

Vijayanandh Raja - Kumaraguru College of Technology,

Boopathy Govindarajan - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Technology and Science,

Santhosh Kumar Ganesan - University College of Engineering, Bharathidasan Institute of Technology Campus, Anna University

Seralathan S - Hindustan Institute of Technology and Science

Muthuram A - SRM Institute of Science and Technology

Prasad G - Chandigarh University

Surendra Bogadi - Rajalakshmi Engineering College

Sathish Kumar K - Nehru Institute of Engineering and Technology

Development of a Swallow-Tailed Kite Inspired Dual-Vane Vortex Generator for Passive Flow Separation Control in Subsonic Uav Wings, (IMECE-India2026-189986)

Technical Paper Publication

Barathkumar Aakash G - Hindustan Institute of Technology and Science, Padur, Chennai-603103, Tamil Nadu, India,

Swetha V D - Hindustan Institute of Technology and Science

Sivaranjani M - Hindustan Institute of Technology and Science

Balaji Ganesan - Hindustan Institute of Technology and Science

Vijayanandh Raja - Kumaraguru College of Technology

Boopathy Govindarajan - Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Technology and Science

Santhosh Kumar Ganesan - University College of Engineering, Bharathidasan Institute of Technology Campus, Anna University

Prince Raj Lawrence Raj - School of Mechanical Engineering, SASTRA Deemed University

Nadaraja Pillai S - School of Mechanical Engineering, SASTRA Deemed University,

Pandimeena C - Department of Electronics and Communication Engineering,

Anbarasu B - Hindustan Institute of Technology and Science

Computational Modelling of Shock-Induced Spallation and Interlaminar Delamination in Multi-Material Structures, (IMECE-India2026-189722)

Technical Presentation Only

Poliboina Dharani - Indian Institute of Technology Hyderabad

Chandra Prakash - Indian Institute of Technology Hyderabad

Leveraging Physics Based Cfd-Mbs Co-Simulation Technique for Aircraft Control Surfaces Evaluation, (IMECE-India2026-187550)

Technical Paper Publication

Kartikesh Bagmare - Airbus India Private Ltd

Mandar Chikate - Airbus India Private Limited

AM3D3.4- Materials & Characterization for AM

9/5/2026

4:30 PM to 6:30 PM - CH04

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Investigation of High Temperature Oxidation Behavior of Laser Directed Energy Deposited Inconel 625, (IMECE-India2026-188138)

Technical Paper Publication

Jitender Chaurasia - Liason Engineers Private Limited

Jinsyam Sasindran - National Institute of Technology Karnataka

Jinoop Narayanan - Teesside University

Paul c.p. - Raja Ramanna Centre for Advanced Technology

Srikanth Bontha - National Institute of Technology Karnataka

Post-Treatment of Additively Manufactured H13 Tool Steel by Using Electrochemical Polishing, (IMECE-India2026-189446)

Technical Paper Publication

KUDUMULA VENKATA PAVAN KUMAR REDDY - JNTUA College of Engineering Kalikiri

Veela Sai Surendra - Indian Institute Of Technology Tirupati

Mamilla Ravi Sankar - Indian Institute of Technology Tirupathi

MICROSTRUCTURAL EVOLUTION AND HARDNESS VARIATION IN CU-SS SANDWICH STRUCTURES FABRICATED BY PLASMA WIRE ARC ADDITIVE MANUFACTURING, (IMECE-India2026-189942)

Technical Paper Publication

Umesh Melkani - IIT Guwahati

Sathesh Raja - IIT Guwahati

Sajan Kapil - IIT Guwahati

Swarup Bag - IIT Guwahati

Effects of Build Orientation-Induced Defects and Heat Treatment on the Anisotropic Fatigue Response of Selective Laser Melted Ti-6Al-4V ELI Alloy, (IMECE-India2026-189172)

Technical Presentation Only

Mintu Pal - Indian Institute of Technology Madras

Anil Meena - Indian Institute of Technology Madras

Ashwin Polishetty - Auckland University of Technology

Recycling of Waasted Titanium Alloy Machining Chips Into Powder: A Circular Manufacturing Concept, (IMECE-India2026-187690)

Technical Paper Publication

Sachin Sharma - Institute of Infrastructure, Technology, Research And Management,

Tarang Lotwala - Institute of Infrastructure, Technology, Research

And Management.

Mahuya Bandyopadhyay - Institute of Infrastructure, Technology, Research And Management.

Santosh Kumar Tamang - North Eastern Regional Institute of Science and Technology.

Navneet Khanna - Institute of Infrastructure, Technology, Research And Management.

Examination of Mechanical Performance of 3d Printed Lattice Structures for Next- Gen Mechatronic Devices, {IMECE-India2026-188232}

Technical Paper Publication

Aruna Veerasamy - Sathyabama Institute of Science and Technology

Balasubramanian Esakki - National Institute of Technical Teachers Training and Research (NITTTR)

Ram Prakash S - Sathyabama Institute of Science and Technology

Madhanagopal Manoharan - Università Campus Bio-Medico di Roma

Revathi K - Sathyabama Institute of Science and Technology

Vijayaraj P - Sathyabama Institute of Science and Technology

AM3D4.3 - Modeling & Simulation of AM

9/5/2026

4:30 PM to 6:30 PM - CH05

Chair: Suryakumar Simhambhatla - Indian Institute of Technology - Hyderabad

Chair: Navneet Khanna - IITRAM

Chair: ANKUR GUPTA - IIT Jodhpur

Chair: Boopathy Saravanan - COLLINS AEROSPACE

Chair: Mariappan R - Honeywell

Presentations:

Development of an Integrated Computational Framework for Metal Additive Manufacturing Process, {IMECE-India2026-187853}

Technical Paper Publication

Narala Manikanta - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Shricharan R G - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Mariyappan Arul Kumar - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

A Finite Element-guided Framework for Design of Functionally Graded Metamaterials for Additive Manufacturing, {IMECE-India2026-188099}

Technical Paper Publication

Vivek Prabhakar - UR Rao Satellite Centre, Indian Space Research Organisation

Vimlesh Kumar Singh - Indian Institute of Space Science and Technology, Valiamala, Thiruvananthapuram

Praveen Krishna I R - Indian Institute of Space Science and Technology, Valiamala, Thiruvananthapuram

Subba Rao P - UR Rao Satellite Centre

Analysis of Process Maps in Laser Powder Bed Fusion of Nickel-Based Superalloys Using Machine Learning, {IMECE-India2026-188244}

Technical Paper Publication

Prakash Elumalai - IITDM Kancheepuram

Senthilkumaran Kumaraguru - Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Numerical and Experimental Analysis of Extruder Materials and Induction Coil Geometries for Printing Aluminium 4043 Alloy Through Extrusion Based Semi-Solid Metal Additive Manufacturing, {IMECE-India2026-188325}

Technical Paper Publication

Rahul Kumar Choubey - PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur

Prashant Kumar Jain - PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur

Biranchi Panda - IIT Guwahati

Multiclass Material Classification in Additive Manufacturing Using Supervised Learning: A Comparative Framework With Performance Benchmarking and Explainable AI, {IMECE-India2026-189123}

Technical Paper Publication

Kunal Dewangan - National Institute of Technology Raipur

T Ram Prabhu - DRDO

Srinivasu Gangi Setti - NIT Raipur

Enhancing Prediction of Bead Geometry for Ss316L Prepared With Wire Arc Additive Manufacturing via Data Augmentation and Multi-Output Machine Learning, {IMECE-India2026-189166}

Technical Paper Publication

Amit Kumar Mandape - NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

Jose Immanuel - IIT Bhilai

Srinivasu Gangi Setti - NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

Kunal Dewangan - NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

AM4.1 - Advanced Materials for Energy

9/5/2026

4:30 PM to 6:30 PM - CH08

Chair: Shobit Omar -

Chair: Parag Bhargava -

Presentations:

A Comparison of Hydrogen Embrittlement in Conventionally Processed and Additively Manufactured Austenitic Stainless Steel 316L, {IMECE-India2026-187857}

Technical Paper Publication

Tanwesh Kumar - IIT Bombay

Shweta Shukla - NIT Rourkela
Nagamani Jaya Balilo - IIT Bombay

Surface-Engineered $\text{TiO}_2/\text{SiO}_2$ Nanocoated Teflon-Acrylic
Triboelectric Materials for Sustainable Micro-Energy Conversion,
[IMECE-India2026-189433]

Technical Paper Publication

Manogyna N - RV College of Engineering
Prashanth K S - RV College of Engineering
Rohith S - RV College of Engineering
Rachit Mittal - RV College of Engineering
C K Nagendra Gupta - RV College of Engineering
Anjaneya G - RV College of Engineering

Advanced Austenitic Alloy UNS N08935 as a Cost-Effective
Alternative to Nickel Alloys in Seawater Applications, [IMECE-
India2026-189815]

Technical Presentation Only

Jyoti Shankar Jha - Alleima India Pvt Ltd
Ganesh Prasad - Alleima India Pvt Ltd

Influence of Powder Alloying Route on Densification and Phase
Stability of Nonequiatomic High Entropy Alloys, [IMECE-
India2026-190510]

Technical Presentation Only

Amal Sasi - Amrita School of Engineering, Chennai

Material Selection and Cost Optimization in Hydrogen Service,
[IMECE-India2026-195447]

Technical Presentation Only

Ankit Mittal - Fluor Daniel India Private, Ltd.
Vijai Subramanian - Fluor Arabia Limited
Reza Beheshty - Fluor International Limited

A Coupled Electro-Chemo-Mechanical Framework for Interfacial
Degradation in Structural Composite Battery Anode, [IMECE-
India2026-191709]

Technical Presentation Only

Prakash kumar - IIT Ropar
Prabhat K Agnihotri - IIT Ropar

Raman Spectroscopic Residual Stress Monitoring in Thermal
Barrier Coatings, [IMECE-India2026-189790]

Technical Presentation Only

Srikanth Batna - IIT Bombay
Dheepa Srinivasan - Baker Hughes
Ashutosh S. Gandhi - IIT Bombay

AM5.3 - Composite materials – polymer, ceramic, bio- and
hybrid composites and AM3.3 - Materials Degradation -
Fatigue, Creep, Corrosion, Wear and Failure Analysis

9/5/2026

4:30 PM to 6:30 PM - CH14

Chair: A. deepa -

Chair: Amol Bhanage -

Presentations:

Short Coir Fibre Reinforced Polylactic Acid Biocomposites for
Promoting Sustainability and Circular Economy in Health Care,
[IMECE-India2026-187791]

Technical Presentation Only

Gijo Raj - Sree Chitra Tirunal Institute for Medical Sciences and
Technology Trivandrum

Subhash N. N. - Sree Chitra Tirunal Institute for Medical Sciences
and Technology

Roy Joseph - Sree Chitra Tirunal Institute for Medical Sciences and
Technology Trivandrum

Mriganshu Guha - Tata Steel Limited

Subrata Mukherjee - Tata Steel Limited

Monika Nidhi - Tata Steel Limited

Development of Hybrid Composite Boards From Sawdust-
Reinforced Mixed Polyolefin Waste: Influence of Processing Route
on Filler Dispersion and Mechanical Behaviour, [IMECE-
India2026-190462]

Technical Presentation Only

Devika K. - Indian Institute of Technology Madras

Lakshminath Kundanati - Indian Institute of Technology Madras

S. Ganga Prasath - Indian Institute of Technology Madras

Understanding the Effect of Carbon Dots on the Corrosion Behavior
of SLM-Built Inconel 718 Alloy, [IMECE-India2026-188928]

Technical Presentation Only

Deeksha - Defense Institute Of Advanced Technology, Pune.

Microstructural Influence on Hydrogen Transport and Distribution
in Dual-Phase Steels, [IMECE-India2026-189051]

Technical Presentation Only

Muhyayuddin Muhyayuddin - Indian Institute of Technology,
Madras

Ilaksh Adlakha - Indian Institute of Technology, Madras

Anand K Kanjarla - Indian Institute of Technology, Madras

Coupled Effects of Hydrogen Penetration Carbide Morphology,
and Grain Size on Strain Hardening and Embrittlement of
Mn-ni-mo Steel, [IMECE-India2026-188880]

Technical Presentation Only

Shivam Prasad - Indian Institute Of Technology - Madras

Anil Meena - Indian Institute Of Technology - Madras

Influence of Gtaw on Residual Stress, Dislocation Density, and
Macro Texture Evolution in Haynes 282 Superalloy, [IMECE-
India2026-187979]

Technical Paper Publication

Pushpendra Kumar Dwivedi - Indian Institute of Technology Madras

Barun Bhargadwaj Dash - Indian Institute of Technology Madras

S. Sankaran - Indian Institute of Technology Madras

Failure Analysis of Metal Dusting Damage (A Case Study) and Evaluation of Advance Materials for Deep Metal Dusting Environments, {IMECE-India2026-187843}

Technical Paper Publication

Bhavesh Chaudhari - KBR, Inc.

Amarnath Chanda Roy - KBR, Inc.

M S Raju - KBR, Inc.

GT9.3 - AIGL in Gas Turbine Design, Operation and Maintenance and GT2.3 - Turbines

9/5/2026

4:30 PM to 6:30 PM - CH02

Chair: Mr. RD Bharatan -

Chair: Rajesh Ranjan -

Chair: Harshal Akolekar -

Chair: Sundar Krishnaswamy -

Presentations:

Chaboche Visco Plastic Modeling of Disc Alloy, {IMECE-India2026-188748}

Technical Presentation Only

Aangeerasaa S - IIT Ropar

Abhishek Tiwari - IIT Ropar

Hydraulic Power Recovery Turbines (Hprt) for Petrochemical Industries, {IMECE-India2026-197793}

Technical Presentation Only

Uttam Sangade - RIL

Discrete-Event Simulation Based Surrogate Model Framework for Aircraft Engines, {IMECE-India2026-188864}

Technical Presentation Only

Surya Neelakandan - Indian Institute of Science

Aditya Konduri - Indian Institute of Science

AI-Enabled Morphing Inlet and Nozzle System for Adaptive Gas Turbine Performance Optimization, {IMECE-India2026-197452}

Technical Presentation Only

Supriya Shivakumar - M. S. Ramaiah University of Applied Sciences

RA13.1: Robotics & Automation

9/5/2026

4:30 PM to 6:30 PM - CH09

Chair: DR. KU. SHITAL SUDHAKAR CHIDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Parametric Analysis and Decomposition of Mechanical Advantage in Antiparallelogram Loop Mechanisms, {IMECE-India2026-189895}

Technical Presentation Only

Nayan Shaji - Indian Institute of Space Science and Technology

Sam Noble - Indian Institute of Space Science and Technology

EXPERIMENTAL INVESTIGATION OF THE EFFECT OF INFILL DENSITY AND PATTERN ON THE STIFFNESS OF A TENDON-DRIVEN CONTINUUM ROBOT, {IMECE-India2026-189230}

Technical Presentation Only

Aayush Vats - Indian Institute of Technology Goa

Ameya Bhagwat - Indian Institute of Technology Goa

Keval Ramani - Indian Institute of Technology Goa

Intruder Navigating a Crowd: Beyond the Nearest Neighbour Interaction, {IMECE-India2026-189254}

Technical Presentation Only

Danny Raj M - Indian Institute of Technology Madras

Elambirai Ravichandran - Indian Institute of Technology Madras

Safety Focused Design and FEA Validation of High Payload Robotic End of Arm Tooling, {IMECE-India2026-189597}

Technical Presentation Only

Nilesh Warad - John Deere India Pvt Ltd

Akshay Mp - John Deere India Pvt Ltd

Nageswara Rao - John Deere India Pvt Ltd.

Design and Fabrication of a Gps-Integrated Return-to-Home Delivery Drone for Lightweight Logistics Applications, {IMECE-India2026-189067}

Technical Presentation Only

Elayavan K - S.A. Engineering College

Santhosh P - S.A. Engineering College

Prasanth G - S.A. Engineering College

Joshua S - S.A. Engineering College

An Intelligent AI Enabled Autonomous Mobile Robot for Inspection of Power Substation Infrastructure, {IMECE-India2026-188660}

Technical Paper Publication

Anirudha Bhattacharjee - IIT Kanpur

Nayan Baishya - IIT Kanpur

Pradeep Chauhan - Power Grid Corporation of India Limited

Subir Sen - Power Grid Corporation of India Limited

Shashank Gautam - IIT Kanpur

Jefin Jacob - IIT Kanpur

Bishakh Bhattacharya - IIT Kanpur

Chair: DR. KU. SHITAL SUDHAKAR CHIDARWAR -

Chair: Ramalingam VENKATESAN - Caterpillar India

Presentations:

Hybrid Dynamic Learning-based Cuckoo Search and Parrot Optimization for Multi-Mobile Robot Path Planning Using Petri Net Coordination, {IMECE-India2026-186856}

Technical Paper Publication

Godavarthy Krishna Teja - National Institute of Technology, Arunachal Pradesh

Prases K Mohanty - National Institute of Technology

Shubhajit Das - Department of Mechanical Engineering, School of Manufacturing and Construction, Assam Skill University

Ai-Enabled Driver Surveillance With Integrated Night-Vision and Emergency Response System, {IMECE-India2026-189453}

Technical Paper Publication

Hemnath Anandan Kumar - Amrita Vishwa Vidyapeetham, Chennai campus

Sidharth Sathesh - Amrita Vishwa Vidyapeetham, Chennai Campus

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3. Faculty & Research Advanced FDPs, teaching resources, research mentorship and publication support to improve academic capability.	4. Career Readiness Career accelerator support through aptitude prep, portfolios, resumes, LinkedIn profiles and mock technical interviews.
5. Innovation & Institutional Branding Innovation sprints, IP awareness, partner recognition, conclaves and showcase platforms to build visibility, industry linkages and institutional brand value.	

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For Details Contact

ASME INDIA PVT. LTD.

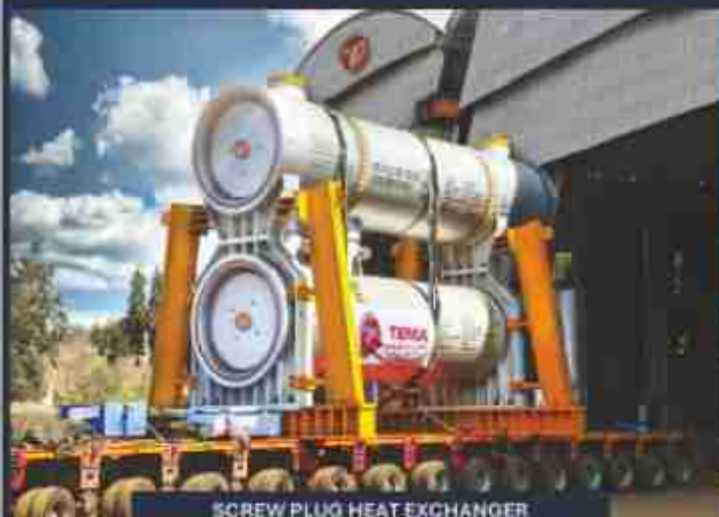
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Phone: +91.124.43.56440/08411 Email: Info-India@asme.org

ENGINEERING EMPOWERED BY INNOVATION

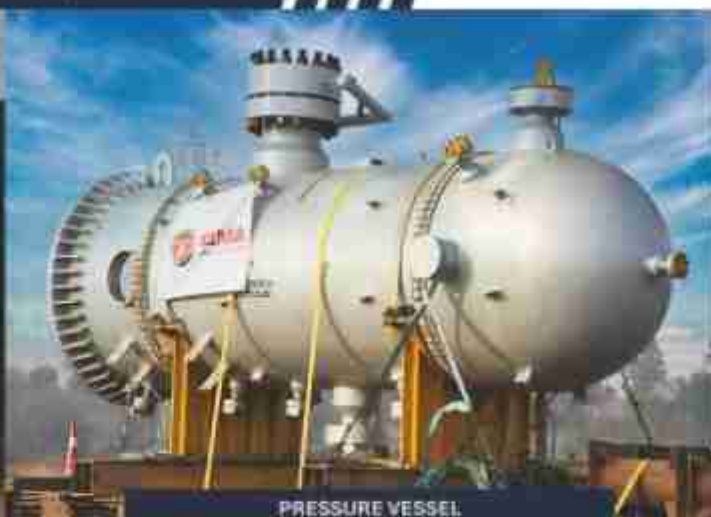
WORLD-CLASS MANUFACTURING PARTNER FOR CRITICAL HEAT-TRANSFER AND PROCESS EQUIPMENT



TEMA
INDIA PVT. LTD.



SCREW PLUG HEAT EXCHANGER



PRESSURE VESSEL

50+

YEARS EXPERIENCE

10,000+

INSTALLATIONS

100+

TOP-TIER CLIENTS

30+

COUNTRIES SERVED

ONE INTEGRATED MANUFACTURING PLATFORM

Tema India is a leading manufacturer of process-plant equipment for high-pressure, high-temperature, hazardous, corrosive and dirty-service applications.

INNOVATION-LED PORTFOLIO



SRX™ Shrink Ring
Screw-Plug Exchangers



RedLok™ Compact
Clamped Connectors

4-UNIT NETWORK

Achhad - Kherdi - Panoli - Mumbai Waterfront

METALLURGY DEPTH

Titanium - Zirconium - Aluminium - Nickel Alloys (Monel/ Inconel/ Incoloy) - Hastelloy - Admiralty Brass - Cupro Nickel - Duplex - Super Duplex - Stainless Steel - Carbon Steel - All Clad Combination

CERTIFIED SYSTEMS

ISO 9001/14001/45001 - ISO 3834 - ASME U/U2/U3 - PED - AD 2000 - NB - R - S - IBC - NABL ACCREDITED

MANUFACTURING FACILITIES & INFRASTRUCTURE



Tema Achhad
Equipment upto 400MT



Tema Kherdi (Unit - II)
Equipment upto 150 MT



Tema Panoli (Unit - III)
Equipment upto 100 MT

UNIT	AREA	PORT ACCESS
Achhad (AMU)	Total 150K sqm Covered 30K sqm	Mumbai 109 km Hazira 185 km
Kherdi (KMU)	Total 14K sqm Covered 8K sqm	Mumbai 188 km Hazira 191 km
Panoli (PMU)	Total 20K sqm Covered 12K sqm	Mumbai 229 km Hazira 80 km

Over Dimensional Equipment are manufactured at Tema's Waterfront Facility in Mumbai

WHY TEMA: INTEGRATED ENGINEERING AND MANUFACTURING

01. ENGINEERING

02. PROCUREMENT

03. MANUFACTURING

04. INSPECTION & TESTING

05. PACKING & LOGISTICS

FOR MORE DETAILS:

VISIT: www.temaIndia.com
EMAIL: enquiries@temaIndia.com
CONTACT US: +91 2248248950

BROCHURE QR CODE:



COMPLETE PROCESS EQUIPMENT SOLUTION

FROM HEAT TRANSFER AND PRESSURE CONTAINMENT TO REACTORS AND PROPRIETARY PACKAGES



TEMA
INDIA PVT. LTD.



EVAPORATOR

TEXAS TOWER

PRODUCT GROUPS

SHELL & TUBE HEAT EXCHANGERS

Core Heat Transfer Duties

PRESSURE VESSELS

Horizontal, Vertical, Scrubber, Crystallizer, Evaporator, Umpet Coil & Jacketed Vessels

POWER PLANT EQUIPMENT

HP & LP Feed Water Heater, Surface Condenser, Desalters

PIPE SPOOLS

Fabricated Piping Assemblies

SCREW PLUG HEAT EXCHANGERS

High-Pressure, High Temperature & Severe Service

REACTORS

Tubular, Agitator & Critical Service

RADIANT COILS & REFORMER TUBES

High-Temperature Furnace & Reforming Service

PROPRIETARY EQUIPMENT

Licensor-Driven Critical Packages

AIR COOLED HEAT EXCHANGERS

Forced And Induced Draft

COLUMNS & TOWERS

Process Columns & Internal Separators

PIPING CONNECTORS

Compact Clamped Connector Solutions

ODG / MODULAR EQUIPMENT

Skids, Modules & ODG Environments

INDUSTRY EXPERIENCE

OIL & GAS

REFINING

PETROCHEMICALS

FERTILIZERS

POWER & NUCLEAR

BIOFUELS

FPSO / FLNG / FSRU

HYDROGEN & SYNGAS

WASTE TO ENERGY

DATA CENTRES

SPECIALTY CHEMICALS

LNG / OFFSHORE

GLOBAL CLIENTS

IOCL

BPCL

HPCL

EIL

HURL

HMEL

RELIANCE

L&T

TATA CHEMICALS

ADNOC

CHEVRON

EXXONMOBIL

PETROBRAS

SBM OFFSHORE

TECHNIP ENERGIES

ENGINEERING TO EXECUTION:

DESIGN

In House – 89 Engineers (Thermal, Mechanical, Fea Analysis & Drafting 3D Modeling)
HTRI - PV ELITE - ANSYS - AUTOPIPE - NOZZLEPRO - AUTOCAD - SOLIDWORKS - STAAD PRO

MACHINING

CNC - Boring - Drilling (Gun / Deep Hole) - Milling - Lathes - Turning (Horizontal / Vertical) - Tread Cutting - Precision Work

FABRICATION

Cutting (Plasma / Waterjet) - Rolling - Welding (TIG / MIG / SAW / SMAW/ Orbital) - Cladding (Strip / Weld Overlay) - Heavy Assembly

TESTING

NDT (RT / UT/ PT/ MT) - Hydrotest - Vacuum Drying - Sand Blasting - Pickling & Passivation - Painting - Coating - Nitrogen Purging

LOGISTICS

Waterfront Access - Export Preservation - In House Logistic Solutions

LIFECYCLE SUPPORT

Modification - Refurbishment - Spares - Site Service

FOR MORE DETAILS:

VISIT: www.temaindia.com
EMAIL: enquiries@temaindia.com
CONTACT US: +91 2248248950

BROCHURE QR CODE:



ENGINEERING EDUCATION SYMPOSIUM

Engineering Education Reimagined: From "TELL" to "ASK"

Moving away from the traditional broadcast approach of operating in a "TELL" model where experts prescribe solutions, MEEEd India 2026 proposes a strategic shift to an "ASK" model. This transforms the symposium into a participatory, collaborative, and co-created agenda-setting platform.

VENUE: CUIC AUDITORIUM, ANNA UNIVERSITY, CHENNAI DATE: 2ND SEPTEMBER 2026			
TIME	SESSION TITLE	DESCRIPTION	SPEAKERS/PANELISTS
09:00 – 09:30	Registration & Networking	Participant registration and networking	
09:30 – 09:45	MEEEd Reports Sharing	Slideshow of Past MEEEd	MEEEd Film or Slideshow
09:45 – 10:00	Real Case Experience Sharing - Industry		Someone from MathWorks- Industry relevant case study
10:00 – 11:00	Real Case Experience Sharing - Academia + Industry	Data - Driven Design for Optimization	1 - Mr. Panduranga Rao, Consultant, Advisor (Industry) 2 - Dr. R. Muthalagu, Assistant Professor, ME, Vishnu Women University Mr. Manoneet Singh, Project Manager, Vishnu Motorsports 3 - Ms. Manasa Kukkadapu (Senior Associate Engineer - Engine Design, Caterpillar Pvt Ltd)
11:00 – 11:40	Q&A Session	Questions from Students, Academia & Industry	Facilitator- Mr. Abhimanyu Singh and Dr. Souwick Chatterjee
HIGH TEA AND NETWORKING			
11:40 – 12:00		MBSE Across the V-Model Lifecycle: From System Architecture to Co-Simulation	Mr. Ashish Vijay, Technical Fellow, System Engineering - Collins Aerospace
12:00 – 12:20	Real Case Experience Sharing - Industry		Mr. Vinayak, P. Khatawale, Assistant Professor, KLE Technology University
12:20 – 12:40	Real Case Experience in Curriculum Design, implementation and students Outcomes		Facilitator- Dr. Rajul K Gajjar
12:40 – 13:20	Q&A Session		
LUNCH BREAK			
13:20 – 14:00		AI in Engineering Education	Dr. Pierre Larocheille, SVP, Public Affairs and Outreach Council
14:00 - 14:20	Invited Talk	Highlighting project-based assessment, Industry and academia-led training models and large-scale workforce preparation	TBD - Industry Prof Andrew Thangaraj, IIT Madras
14:20 – 15:00	Assessment: What gets measured, gets done	Questions from Students, Academia & Industry	Facilitator - Dr. B Gurumoorthy
15:00 - 15:40	Q&A Session	Interactive discussion	All Participants + Facilitator + Speakers
15:40 – 16:00	Open House		
16:00 – 16:15	Closing Remarks	Summary and next steps	Dr. PVM Rao
16:15 – 16:30		TEA BREAK	

At IMECE India 2026, the Women in Engineering interest group is curating a spotlight panel on the strategic pillars of energy, mobility, manufacturing and digitization that is shaping a sustainable future of India with a magnificent lens of Diversity, Equity and Inclusion (DEI).

PROGRAM SCHEDULE - WOMEN IN ENGINEERING

"Workforce Development for Women Entrepreneurs"

3rd Sept 2026 | CTC, Chennai Trade Center, Chennai | 4:30 pm - 6:30 pm

TIME	SESSION TITLE	PANELLIST
4:30 PM - 4:45 PM	Introduction to purpose of discussion by Moderator	Ms Alvina Nirmalraj
4:45 PM - 5:00 PM	Introduction of Panellist	Ms. Shaviee Malik Ms. Aishwarya Karnataki Ms. Neha Jain Dr. Neeta Trivedi (TBC)
5:00 PM - 6:00 PM	Panel Discussion Starts	
6:00 PM - 6:20 PM	Q&A	
6:20 PM - 6:30 PM	Summary & Closing by the moderator followed by Facilitation & Acknowledging	Ms. Alvina Nirmalraj

*Networking and high tea served during the entire discussion.

STUDENT ENGAGEMENTS

Brain Bolt – The Engineers Sprint : 2026 Edition

Brain Bolt – The Engineers Sprint 2026 Edition is a multi-stage national engineering make-a-thon designed to evaluate students on problem-solving ability, engineering design thinking, and execution skills.

TIME	ACTIVITY
Day 1 – 1 September 2026	
8:00 AM - 9:30 AM	Check-Ins
9:30 AM - 11:00 AM	Welcome, Industry Intro, Rules Explained & Briefing by each problem statement provider
	15 mins each
11:00 AM - 12 Noon	Design Thinking Workshop
12 Noon - 4:00 PM	Core Working Phase & Mentoring (ideation, solution building, modelling)
4:00 PM - 7:00 PM	On table Discussion with Jury
Day 2 - 2 September 2026	
9:30 AM - 10:00 AM	Round 1: National Screening Round Submissions
10:00 AM - 1:00 PM	Presentation Preparation
1:00 PM - 1:30 PM	Top 10 Teams will be announced who reach the Final Presentation Round for The National Final Round
FINAL PRESENTATION ROUND	
2:00 - 2:15 PM	Presentation 1
2:15 - 2:30 PM	Presentation 2
2:30 - 2:45 PM	Presentation 3
2:45 - 3:00 PM	Presentation 4
3:00 - 3:15 PM	Presentation 5
BREAK - 3:15 PM - 3:30 PM	
3:30 - 3:45 PM	Presentation 6
3:45 - 4:00 PM	Presentation 7
4:00 - 4:15 PM	Presentation 8
4:15 - 4:30 PM	Presentation 9
4:30 - 4:45 PM	Presentation 10
Results will be announced on September 4, 2026, Awards Ceremony at IMECE India 2026 at Chennai Trade Centre	

S. NO	PARTICULARS		TIMINGS	HALL NO
3rd September 2026				
1	Day 1 Opening Plenary & Keynote Address		9:30 AM - 10:30 AM	Hall 5
2	Opening of Expo & Posters with Tea / Coffee Break		10:30 AM - 11:00 AM	
3	Introductions	Welcome Note by Ms Avni Malhotra	11:30 AM - 12:15 PM	Hall 2
		Keynote by Dr. Shallaja Donempudi, CSIRO		
		Distinguished Scientist		
		Head, Business Development Group (BDG)		
		Council of Scientific & Industrial Research (CSIR)		
		Team Introductions		
		Judges Introductions		
4	Pitches from Participants		12:15 PM - 1:00 PM	Hall 2
	LUNCH		1:00 PM - 2:00 PM	Hall 2
5	Round Robins with the Judges		2:00 PM - 04:30 PM	Hall 2
	TEA BREAK		04:30 PM - 05:00 PM	Hall 2
5	Round Robins with the Judges		05:00 PM - 07:00 PM	Hall 2
4th September 2026				
6	Judges Deliberations		11:30AM - 1:00 PM	Hall 2
7	Award Ceremony		6:30 PM - 8:30 PM	Hall 5
8	Networking Dinner		8:30 PM onwards	Hall 4



Collins Aerospace

An RTX Business



Collins Aerospace is a leader in technologically advanced, intelligent solutions that help to redefine the aerospace and defense industry. We dedicate our capabilities, comprehensive portfolio and expertise to solving customers' toughest challenges and meeting the demands of the global market.

Collins Aerospace includes six strategic business units formed to meet customer needs while representing the best in innovation, technology and expertise. These SBUs primarily serve customers across the commercial, regional and business aviation, defense and space sectors.

ADVANCED STRUCTURES



Based in Charlotte, North Carolina, Advanced Structures leverages leading material and manufacturing technologies to create landing systems, actuation, nacelles, flight controls, pilot controls, doors & composites and other highly engineered aerospace structures.

AVIONICS



Based in Cedar Rapids, Iowa, Avionics includes: Business & Regional Avionics, Commercial Avionics and Military Avionics & Helos

INTERIORS



Based in Winston-Salem, North Carolina, Interiors includes aircraft seating; evacuation systems; galleys and galley inserts; lavatories; life rafts; lighting; veneers; potable water systems; and de-icing products.

MISSION SYSTEMS



Based in Cedar Rapids, Iowa, Mission Systems includes solutions for secure military communication, navigation, and guidance; missile actuation; simulation, training, and range instrumentation; strategic command and control; unmanned aircraft systems; electronic warfare; ejection seats and propulsion; intelligence, surveillance, and reconnaissance; and space solutions.

POWER & CONTROLS



Based in Windsor Locks, Connecticut, Power & Controls includes: electric systems; engine controls; air management; and airframe controls.

2.5M

Unique Products

#1 or 2

In 70% of product segments

110k+

Aircraft with Collins equipment

\$30.2B

net sales

250+

Global Site



Collins Aerospace

An RTX Business



Legacy

AVIONICS AND COMMUNICATIONS



Arthur Collins



ELECTRIC SYSTEMS



David Sundstrand



ENVIRONMENTAL CONTROL SYSTEMS



Thomas Hamilton



LANDING SYSTEMS



Benjamin Goodrich



NACELLES



Fred Rohrer



PROPELLER SYSTEMS



Paulin Ratier



7 Strategic Initiatives

Autonomous Operations



- Increased readiness, efficiency and safety
- Maximized efficiency in operations
- Improved flexibility and quality of operations

Cabin Experience



- ~2.5 million of our seats are flying globally across first, business and main cabins
- First – and only – supplier to offer virtual windows for center seats in the super first-class cabin
- Up to 20% reduction in airline operating and maintenance costs

Connected Battlespace



- Maximizing millions of dollars through joint service technology development
- Connecting 100s of networks into one global network
- Improving mission duration: making from hours to seconds

Connected Ecosystem



- ~30% decrease in potential delays¹
- Save 12,000 gallons of fuel per aircraft, per year, with data-optimized flight paths
- >20% decrease in unscheduled maintenance²

Electrified Aircraft



- Up to 85% reduction in aircraft noise
- Up to 30% reduction in fuel consumption
- >20% reduction in carbon emissions
- Up to 20% reduction in airline operating and maintenance costs

Integrated Solutions



- 20% savings in weight, drag, parts required and cost³
- 30,000 patents in force and pending, enabling limitless integration possibilities
- Nearly \$18 billion investment over the next five years

Structural Technologies



- Up to 50% weight reduction with composites and thermoplastics compared to metallics
- 4x more landings with carbon-carbon brakes for extreme environments
- Up to 50% reduction in propeller maintenance labor hours due to reliability
- ~28 dB lower airframe noise and vibration using the NP2000 propeller system

¹ Based on Collins Aerospace components, 20% decrease in potential delays and cancellations related to components and gate time consideration for the Boeing 787 Dreamliner.
² Based on Collins Aerospace components, 20% decrease in unscheduled maintenance for various components on the Boeing 737 MAX 8.

³ Estimated based on technology demonstration to date.



With over 6,500 employees in the country, Our breadth and depth in aviation products and capabilities enable us to offer global, end-to-end manufacturing, engineering, and supply chain services from India. We have partnered with local companies, startups, and educational institutes to live up to our commitment to supporting and developing the local region.

Innovative engineering, design, manufacturing operations and product development services

Collins Aerospace has established a presence in the country since 1997. The business is building an end-to-end global manufacturing, engineering, and supply chain, including the India Design Center in Hyderabad and the Global Engineering & Technology Center in Bengaluru. The business is one of the nation's largest exporters of aerospace products. It also offers an entire international business team to champion sales, marketing, strategy, engineering, operations, services, and support.

Collins is one of India's largest exporters of aerospace products, our sites in India serve a substantial customer base, including local and international governments, aerospace original equipment manufacturers (OEMs), and defense contractors. We provide operations, engineering, marketing, and technical support services to achieve a shorter time to market, lower program or project life-cycle costs and innovative solutions.

MAJOR FACILITIES IN INDIA

BANGALORE

Engineering,
Manufacturing &
Digital Technology

HYDERABAD

Engineering &
Digital Technology

DELHI (Gurgaon)

Marketing, Sales,
After Market &
Technical Support



Corporate Social Responsibility (CSR)

Collins Aerospace India is committed to Corporate Social Responsibility (CSR) and has partnered with non-government organizations in support of several charitable and philanthropic activities.

Inspiring Our Youth

STEM Education – 11 Projects



Strengthening Our Communities

Rural Development, Skill Development, Environment Conservation – 7 Projects



India Capabilities

Collins Aerospace in India supports all Business Units across the globe

Engineering

- Systems Engineering
- Project Engineering
- Software Development
- Mechanical Engineering
- Electronics Engineering
- Technical Publications
- Testing & Qualification

Manufacturing

- Electronic components assembly
- Mechanical components assembly
- Special fabric and silicone heaters
- Special processes
- Supply Chain Management

Digital Technology

- Web & Mobile Development
- Data Science & Analytics
- Advanced Digital Technologies
- Product Development
- Cyber Security Risk Management

Expertise in technology transfers and product transitions

Air worthiness certificate issuing authority to ship products directly to OEM customer

- Federal Aviation Administration (FAA) Organization Designation Authorization (ODA)
- FAA Designated Manufacturing Inspection Representative (DMIR)
- Directorate General of Civil Aviation (DGCA) Civil Aviation Requirement (CAR) 21 production organization approval

Site Certifications

- AS9100 Rev D (Bengaluru and Hyderabad)
- NADCAP certifications for fusion welding, brazing, digital radiography and chemical processing (Bengaluru)

Focused on Innovation

1000+ 150+

Patents Filled

Trade Secrets

Indian Ecosystem Collaboration

- Academia
- Startups
- Test & R&D Labs
- Suppliers

Major customers supported

- Indian Airlines
- Indian Airports
- Commercial & Defence manufacturers:
 - Hindustan Aeronautics Limited
 - DRDO
 - Boeing
 - Airbus
 - Lockheed Martin
 - Embraer
 - Rolls-Royce
 - Pratt-Whitney
 - Thales
 - Bombardier
 - Gulfstream



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PIPELINE & EQUIPMENT GASKETS

Precision Sealing for Critical Performance



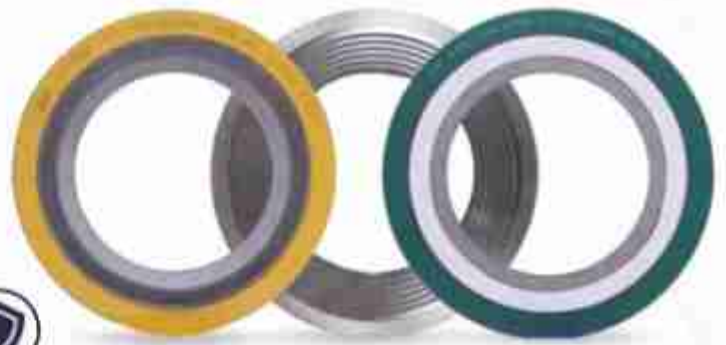
Turnaround
Service Support



Technical
Solutions



On-Site Service
and Shutdown Support



RING GASKETS

Reliable Sealing



MONOLITHIC INSULATION JOINTS (MIJ) & INSULATION KIT



EMPOWERING INFRASTRUCTURE,

To support our manufacturing business,
we have a state-of-the-art infrastructure featuring:



A machine shop
with 40+ CNCs



Integrated testing
facilities, with CMMs
and spectrometers



In-house centrifugal
casting, forging,
and heat treatment





Harness the power of precision welding with

D&H Sécheron

Crafted for strength, built for success.



Innovative products for complete welding support

60

Years of Experience

50+

Applications Catered

25+

Countries Covered

500+

Employees

800+

Products

2000+

Skus

D&H Sécheron Electrodes Pvt. Ltd.

• Corporate Office: 5th Floor, Merchant Chambers, S.V. Thackersey Marg, 41, New Marine Lines, Mumbai- 400020

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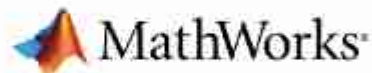


Knowledge Partners



OUR PARTNERS

Exhibitors



THE VENTURE STUDIO MODEL: BUILDING INDIA'S NEXT GENERATION OF ENTERPRISES

India has no shortage of entrepreneurs, businesses or ambition. What remains scarce is the combination of capital, capability and institutional support required to take promising businesses to their next level of scale.

This is particularly relevant for India's MSMEs. Many have built strong products, deep domain expertise and enduring customer relationships, but moving from a successful operating business to a scalable institution requires more than capital. It requires stronger governance, technology, talent, market access and strategic execution.

This is where the **Venture Studio model** offers a different approach.

Unlike a traditional investment model, a Venture Studio works alongside founders and management teams to build businesses - combining capital with strategic, operational and institutional support. The emphasis is on **co-building rather than simply backing**.

For MSMEs and emerging enterprises, this can create a meaningful pathway to professionalise operations, strengthen capabilities, access new markets and build the foundations for sustained scale, without losing the entrepreneurial DNA that made the business successful.

This philosophy lies at the heart of **Innovations Venture Studio (IVS)**, founded by **Manish Khurana**. His vision is rooted in a simple conviction: India does not only need more startups; it needs more **enduring enterprises** capable of creating employment, building capabilities and contributing to long-term economic value.

IVS is a sector-agnostic venture studio and investment platform that partners with founders and businesses to build, scale and institutionalise high-potential enterprises. Its co-build approach brings together strategic capital, operating expertise, governance, market access and institutional capabilities around the businesses it partners with.

The objective is not simply to help companies launch. It is to help them **build the capabilities required to scale to their next level**.

India's next economic chapter will be shaped not only by how many businesses are created, but by how many can scale, compete and endure.

The Venture Studio model can help bridge that gap - bringing capital and capability together to turn entrepreneurial potential into enduring enterprise value.

Innovations Venture Studio

Building businesses. Scaling capabilities. Creating enduring enterprise value.

ENGINEERED TO SEAL

1600+

Custom Engineered parts

57

Material Grades

4 MILLION

Components/Year

4,500+

Tonnes of ready stock

58+ COUNTRIES

Trusted Worldwide By major EPC's
OEM's & end users

**API 6A &
17D**

Certified



Scan to explore
our products



DRIVEN BY INNOVATION DEFINED BY EXCELLENCE

Trenchless Engineering Services Pvt Ltd (TES) is a leader in trenchless technology. Our in-house expertise and state-of-the-art equipment set the benchmark for reliable solutions in oil and gas, water, sewage, power, telecommunications and more.

- ✓ Horizontal Directional Drilling (HDD)
- ✓ Microtunneling (MT)
- ✓ Pipe Ramming
- ✓ Engineering Consultancy

ONE OF THE LARGEST EQUIPMENT FLEETS

All German or American made

25 HDD RIGS (30-500 TONS)

09 MT MACHINES (700-2500 MM)

04 PIPE THRUSTERS (150-750 TONS)

In our portfolio:

- ▶ 35+ crossings exceeding 2,000m, half averaging over 3,000m
- ▶ World's longest and deepest HDD crossings
- ▶ Offshore MT and HDD installations with in-house sea recovery operations

25 YEARS UNMATCHED EXPERIENCE

RECORD SETTER

WE INSTALLED 4.05KM OF 26" STEEL —
THE WORLD'S LONGEST HDD
INSTALLATION OF ITS KIND



CAPABILITIES

HDD

- Diameters: up to 56 inches | Lengths: up to 5000 m.
- Offshore HDD & beach pulls.

MT

- Pipe jacking with precision guidance.
- Diameter range: 500 mm - 3000 mm.

- ▶ Known among major oil & gas and infrastructure companies as the team that always sees the job through with the best safety standards.

- ▶ Expanding International Footprint: Headquartered in New Delhi, India, operating worldwide

Every project is backed by a dedicated HSE team to meet and exceed HSE standards



Proud to have supported the Silkyara Tunnel Rescue Mission in 2023

TRENCHLESS
ENGINEERING SERVICES PRIVATE LIMITED



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+91-9871006754



info@trenchless.in



HQ in New Delhi, India |
Operating worldwide



SCAN TO EXPLORE
OUR WORK