

EVENT 2 – AGENDA

Date: Wednesday 21st to Friday 23rd of May, 2025

Location: CEITEC BUT, Purkyňova 656/123, 612 00 Brno
Building S, conference room S2.02



Wednesday, 21 st of May, 2025	
Day 1 – Afternoon session – Module 1: Processing and properties of glass and ceramic powders	
14:00 – 14:10	Welcome, Introduction, Overview and Outline of the Module 1 <i>Assoc. prof. Ladislav Čelko, Ph.D., head of RG HPMC_{4I} @CEITEC BUT</i>
14:30 – 14:50	Introduction to the world of conventional and advanced glass and ceramic powders <i>M.Sc. Edgar Benjamin Montufar Jimenez, Ph.D., HPMC_{4I} @CEITEC BUT</i>
14:50 – 15:50	Chemical and mechanochemical routes of glass and ceramic powders processing and modification <i>Assoc. prof. Ladislav Čelko, Ph.D., head of RG HPMC_{4I} @CEITEC BUT</i>
15:50 – 17:20	Morphology, structure and properties of glass and ceramic powders <i>Serhii Tkachenko, Ph.D., RG HPMC_{4I} @CEITEC BUT</i>
17:20 – 17:50	Tutorial and concluding remarks <i>Assoc. prof. Ladislav Čelko, Ph.D., head of RG HPMC_{4I} @CEITEC BUT</i>
17:50	End of the Day 1 – Afternoon session and Module 1

Thursday, 22 nd of May, 2025	
Day 2 – Morning session – Module 2: Sintering and densification of ceramics	
8:30 – 8:40	Welcome, Overview and Outline of Module 2 <i>Blahomír Skoupý – GlaCerHub project manager @CEITEC BUT</i>
8:40 – 9:50	Basics of sintering (60 min + 10 min panel discussion) <i>prof. RNDr. Karel Maca, Dr., head of RG211 @CEITEC BUT</i>
9:50 – 10:30	Fast Firing (30+10 min) <i>Ing. Vladimír Prajzler, Ph.D., junior researcher of RG211 @CEITEC BUT</i>
10:30 – 11:20	Sintering models – Master Sintering Curve (40 + 10) <i>Assoc. prof. Václav Pouchlý, Ph.D., senior researcher of RG211 @CEITEC BUT</i>
11:20 – 12:30	Flash Sintering & Ultrafast High-temperature Sintering (25+10 & 25+10) <i>Ing. Vladimír Prajzler, Ph.D., junior researcher of RG211 @CEITEC BUT</i>
12:30	End of the Morning session and Module 2

Day 2 – Afternoon session – Module 3: Surface treatments of glass and ceramics	
13:30 – 13:40	Welcome, Overview and Outline of the Module 3 <i>Assoc. prof. Ladislav Čelko, Ph.D., head of RG HPMC_{4I} @CEITEC BUT</i>
13:40 – 14:00	Surface of materials, Intrinsic and extrinsic factors and requirements on glass and ceramic surface treatments <i>Serhii Tkachenko, Ph.D., RG HPMC_{4I} @CEITEC BUT</i>
14:00 – 15:20	Thin films technology in glass and ceramic surface treatments manufacturing <i>Rajesh Mundotia, Ph.D., Researcher Department of Coating Processes @FunGlass Centre, Slovakia</i>
15:20 – 16:00	Coatings technology in glass and ceramic surface treatments manufacturing <i>Assoc. prof. Ladislav Čelko, Ph.D., head of RG HPMC_{4I} @CEITEC BUT</i>
16:00 – 17:00	Applications, working principles and properties of glass and ceramic surface treatments <i>M.Sc. Edgar Benjamin Montufar Jimenez, Ph.D., HPMC_{4I} @CEITEC BUT</i>
17:00 – 17:30	Tutorial and concluding remarks <i>Assoc. prof. Ladislav Čelko, Ph.D., head of RG HPMC_{4I} @CEITEC BUT</i>
17:30	End of the Day 2 Afternoon session and Module 3

Friday, 23rd of May, 2025	
Day 3 – Morning session – Module 4: Properties and applications of glass and ceramics	
8:30 – 8:40	Welcome and Overview <i>Blahomír Skoupý – GlaCerHub project manager</i>
8:40 – 09:25	Theoretical background of mechanical computation in the field of ceramic and composites <i>Dr. Ing. Filip Šiška, Ph.D., researcher @ Brittle Fracture Group, IPM AS CR</i>
9:30 – 10:25	Experimental fracture mechanics of ceramics and composites <i>Ing. Luca Bertolla, Ph.D., researcher @ Brittle Fracture Group, IPM AS CR</i>
10:35 – 11:30	Indentation technique as a tool for local characterisation of ceramics <i>Ing. Hynek Hadraba, Ph.D., researcher @ Brittle Fracture Group, IPM AS CR</i>
11:30 – 12:25	Strength and Fractography of ceramics <i>Ing. Zdeněk Chlup, Ph.D., head of the Brittle Fracture Group, IPM AS CR</i>
12:25 – 12:40	Cases in touch – examples – comments – discussion
12:00 – 12:30	Concluding remarks
12:30	End of the Day 3 – Morning session and Module 4 – and EVENT 3

Registration link:

<https://forms.office.com/e/Y72s9zZL0p>