

TESTBEDS

Networked Shared Resources for Prototyping Development & Testing

A major bottleneck for innovators and entrepreneurs in the battery industry today is the lack of easily accessible, geographically co-located infrastructure resources for prototyping, manufacturing, testing, and metrology. Companies often have to work in multiple states and countries to build a single prototype. The NSF Engines: Upstate New York Energy Storage Engine is equipped to tackle this issue and help accelerate the technology, manufacturing, and commercial readiness of new technologies through its state-of-the-art best in-nation, test bed infrastructure for battery prototyping, development, and safety testing.

On top of our already rich set of resources, we are investing in the latest facilities for battery prototyping and development and for advanced safety testing. Funded by the EDA-BBBRC grant and the NSF Engine's award, respectively, the 30MWh Battery-NY center in Johnson City, and the Advanced Safety testing center in Rochester, will open their doors for customers in 2026. Accessible to all our partners across the region and beyond, this integrated set of resources makes us the only place in the country to offer a complete end-to-end suite of services to meet the industry's needs, all in one region.

CONTACT US

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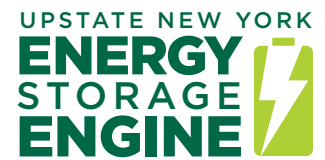


Above: The Analytical and Diagnostics Laboratory at Binghamton University, is home to a HArd X-ray PhotoElectron Spectroscopy (HAXPES) that's useful for electrode studies.

Top: Battery-NY, a first-of-its-kind facility for prototyping and developing batteries, is scheduled to open in 2026 in Johnson City. It's designed to support a variety of different battery cell formats and chemistries.



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ITEM	FACILITY & LOCATION	DESCRIPTION	CONTACT
CELL MAKING			
Battery Prototyping at the Manufacturing Level	Battery-NY Center Johnson City, NY	A lithium battery technology development and prototyping center focusing on advancing the scale-up and manufacturing of batteries for various sectors.	Paul Malliband Executive Director pmalliband@binghamton.edu
Battery Prototyping Facility	NECCES Dry Room Johnson City, NY	Located at Binghamton University, this open-user facility provides a state-of-the-art lab environment for lithium battery making and testing.	Hui Zhou Battery Facility Manager zhouh@binghamton.edu
Battery Prototyping Facility	Battery Development Center Rochester, NY	A research and rapid prototyping facility focused on the development and qualification of emerging energy storage technologies.	Matthew Ganter Director mjgvpr@rit.edu
Full Size Electrode Coating Making	Kodak R2R Rochester, NY	The Kodak R2R site will serve battery and capacitor development and production companies. The new lines will complement existing roll-to-roll coating capability and expertise at Kodak.	Rusty Coleman Operations Manager rusty.coleman@kodak.com
Lab Scale Solid-State Cell Making	Center for Solid-State Electric Power Storage (CEPS-IUCRC) Syracuse, NY	A National Science Foundation supported Industry-University Collaborative Research Center (IUCRC) focused on developing eco-friendly, safe, and feasible solid-state energy storage technologies.	Quinn Qiao Syracuse University Site Director quqiao@syr.edu
METROLOGY			
Operando Cell Studies	Cornell High Energy Synchrotron Source (CHESS) Ithaca, NY	A research facility providing high-intensity X-rays for scientific research, supporting studies in physics, materials science, biology, engineering, and more.	Joel Broc Director CHESSDirector@cornell.edu
Operando Cell Studies	Brookhaven National Laboratory: High Energy Engineering X-ray Scattering (HEX) Upton, NY	National Synchrotron Light Source (NSLS) produces very intense x-rays and ultraviolet light facilitating analysis of the molecular structure at the atomic scale.	Michael Drakopoulos HEX Lead Beamline Scientist drakopoulos@bnl.gov
Characterization of Materials	Analytical and Diagnostics Laboratory Binghamton, NY	The ADL is a collection of centralized, interdisciplinary, multi-user laboratories created to provide easy, affordable access to advanced instrumentation and technical support for academic and industry researchers.	Jennifer Sammakia Director jamey@binghamton.edu
Characterization of Materials	Cornell Center for Materials Research Ithaca, NY	CCMR offers unique characterization and metrology tools in a central facility for studying battery liquid/solid interfaces from the millimeter down to the atomic scale. This includes sample preparation and inspection by focused ion beam, cryo-electron microscopy and spectroscopy for mapping chemistry.	David Muller Co-Director david.a.muller@cornell.edu
BATTERY TESTING/SAFETY			
Cell Safety Testing Facility	RIT Advanced Safety Testing Center Rochester, NY	A safety test room that conducts safety, abuse, and thermal runaway tests on battery cells up to 500Ah capacity as part of the RIT BDC.	Martin Plass Director Energy Storage Testing mpvpr@rit.edu
Cell Safety Testing Facility	Intertek Cortland, NY	From electric vehicles and personal electronics to renewable energy, Intertek offers total quality assurance in battery testing and certification services, ensuring energy storage technologies meet performance, reliability, and safety criteria.	Brian Merrell Sales Representative Energy & Industrial 607.345.7221