The University of Pittsburgh is actively seeking corporate collaboration at the EIC. For more information, contact PRASHANT N. KUMTA, Ph.D, Edward R. Weidlein Chair Professor, Swanson School of Engineering. 412-648-0223 pkumta@pitt.edu

The Energy Innovation Center will enable the University of Pittsburgh to establish a public-private collaborative laboratory and incubator space to expand research in energy and energy-related programs. Located at the Energy Innovation Center in Pittsburgh’s Hill District, these laboratories will house some of Pitt’s most extensive energy research in more than 20,000 square feet of space, and create an incubator for faculty and student startups. Our goal is to help establish Pittsburgh as the world’s leader in groundbreaking, sustainable, and economical energy and electric power research, development, and demonstration.

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See other side for technical specifications > > >
Nanomaterials for Energy Conversion and Storage Technology

MATERIALS SYNTHESIS
- Wet-chemical, vapor phase, high pressure, solvothermal, and sol-gel synthesis
- Inert-gas Schlenk-line and air-sensitive chemical handling
- Mechanical milling and cryo-milling

PROCESS/HIGH TEMPERATURE CAPABILITY
- Chemical vapor deposition (CVD)
- Low-pressure CVD, Plasma CVD and Fluidized bed
- Carbon-nanotube, graphene and Silicon CVD capabilities
- Pulsed LASER deposition and Sputter deposition

MATERIALS CHARACTERIZATION FACILITIES
- X-ray diffraction with in-situ capabilities and high temperature stage
- Pore and surface area analysis, Infrared and Inductively Coupled Plasma characterization

BATTERY AND FUEL CELL PROTOTYPE TESTING FACILITY
- 3-electrode half-cell and 2-electrode coin-cell facilities
- Pouch cell facilities
- Multiple potentiostats with extensive current ranges
- Mechanistic analysis using electrochemical impedance

FEATURES
- Flexible battery materials synthesis
- In-situ battery characterization and phase-analysis capability
- Pouch cell fabrication and testing facilities
- Electrocatalyst engineering facility
- Membrane electrode assembly capability
- Fuel cell prototyping
- Photoelectrochemical semiconductor fab and testing
- Lithium, sodium and magnesium battery testing
- Lithium-sulfur and lithium-air battery materials engineering and testing

RESEARCH PARTNERS AND FUNDING AGENCIES

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