



For Immediate Release:

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Cornell Center for Materials Research Co-Sponsors Materials Science M.Eng. Projects with New York State Companies

Ithaca, NY - The Cornell Center for Materials Research Industrial Partnerships Program is designed to help New York State's businesses access world-class capabilities, solve technical challenges; and develop and improve their products, with the ultimate goals of revenue growth and job creation.

The Master of Engineering (M.Eng.) program of the College of Engineering's Materials Science and Engineering Department is designed to provide hands-on applications to burgeoning engineers, as well as an opportunity to explore unique interests and pursue professional goals. As such, the CCMR and the Materials Science and Engineering Department are in a unique position to collaborate and offer special opportunities to both students and industry partners. While collaborating on crucial needs, industries gain access to highly skilled labor, and students receive professional experience.

This year, CCMR will co-sponsor four selected industry-funded Materials Science M.Eng. projects. The companies benefitting from the program are:

- **Capsulated Systems (CSI) – Ithaca:** CSI's goal is to develop a method for microencapsulation using calcium carbonate, the biocompatible material eggshells are made of, for applications in the food and drug markets. Cornell Engineering student Colin Ford will have the opportunity to work with CSI.
- **Light Green Machines – Ithaca:** The company's focus for this project is on the development of a highly conductive and sustainable window glass technology using nanomaterials to alter the thermal properties of the glass and facilitate deicing. Cornell Engineering student Joshua Katz will work with Light Green Machines.
- **Universal Instruments – Conklin:** The project will be dedicated to the analysis of the thermal cycle stability of solid-liquid hybrid (SLH) thermal interface materials (TIM) used for heat dissipation in semiconductor packaging. Cornell Engineering student Andra Chen will work with Universal Instruments and Indium Corporation in Clinton.
- **Vergason Technology – Van Etten:** The company will develop a model to predict in-plane stress generated in the company's proprietary chromium physical vapor deposition coating. Cornell Engineering student Enze Qi will work with Vergason.

The CCMR provides 33% of matching funds not to exceed \$5,000 per project. The program is also supported by Empire State Development's Division of Science, Technology and Innovation (NYSTAR). New York State manufacturing and research and development businesses from the following industry sectors are eligible: materials, chemistry, energy, pharmaceuticals, food and textile.

About the Cornell Center for Materials Research (CCMR)

The Cornell Center for Materials Research is a National Science Foundation and New York State funded interdisciplinary research center at Cornell University whose mission is to advance, explore, and exploit the forefront of the science and engineering of advanced materials. The CCMR pursues this objective through fundamental, experimental and theoretical studies. Three other complementary functions complete the CCMR's mission: educational outreach; industrial outreach; and the operation of shared instrumentation.

www.ccmr.cornell.edu/industry

About Cornell Department of Materials Sciences and Engineering

The Department of Materials Science and Engineering (MSE) at Cornell University is one of the premier MSE programs internationally. This position was earned through its leadership in innovative interdisciplinary research and its dedication to providing an exceptional education at all levels. The master of Engineering program (MEng) provides a deepening understanding of the field and prepares students for professional careers in engineering or other problem-solving positions, or for further graduate study.

<http://www.mse.cornell.edu/>

About Empire State Development's Division of Science, Technology and Innovation

Empire State Development's Division of Science, Technology and Innovation (NYSTAR) supports collaborative industry/academic partnerships to foster integrated approaches for developing and commercializing innovative technologies. NYSTAR serves as a resource for small and startup technology companies. For more information, please visit

www.esd.ny.gov/nystar/.

About Capsulated Systems

Capsulated Systems (CSI), Ithaca NY, is a worldwide leader in the research, development, and manufacturing of Polymeric Microencapsulation systems. The company specializes in microencapsulating both inorganic and organic materials often using wall materials patented by CSI.

<https://www.csicaps.com/index.htm>

About Light Green Machines,

Light Green Machines, Ithaca NY, is a startup that focuses on efficient transportation solutions, with initial goals of commercialization of lightweight, composite chassis hybrid and electric small bus applications.

<https://www.linkedin.com/in/steven-fleishman-90aa587b/>

About Universal Instruments

Universal Instruments, Conklin NY, is a global leader in the design and manufacture of advanced automation and assembly equipment solutions for the electronics manufacturing industry.

<http://www.uic.com/>

About Vergason Technology, Inc.

Vergason technology (VTI), Van Etten NY, is a leader in physical vapor deposition (PVD) coating services and systems. It provides PVD vacuum metallizing services for a variety of industries, including automotive, LED lighting, appliance manufacturing, and packaging.

<https://vergason.com/>

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