



For Immediate Release:

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**The Cornell Center for Materials Research's Invest and Invest-NY Programs Matched Companies with Cornell Experts for Help in Developing Innovative Technologies.**

**Ithaca, NY** - The Cornell Center for Materials Research (CCMR) Industrial Partnerships Program helps startups solve technical challenges and develop and improve their products, with the ultimate goals of revenue growth and job creation.

**Invest-NY** provides New York State (NYS) businesses with a fast and flexible way to benefit from the help of Cornell materials science experts to solve pressing technical issues related to materials, optimize technologies and prototypes, and access innovative solutions. Invest-NY projects receive 25 percent (up to \$12,500) in matching funds for project costs that include faculty and research staff, facilities, services, supplies and materials. The program is supported by Empire State Development's Division of Science, Technology and Innovation (NYSTAR).

Five NYS companies have been awarded funding:

- Calmetrics (Holbrook) is developing X-ray Fluorescence (XRF) reference standards for materials screening and verification compliance with the Restriction of Hazardous Substances (RoHS) directive in collaboration with Prof. Emmanuel Giannelis, Materials Science and Engineering.
- EndoGlow (Rochester) is working with Dr. Genggeng Qi, Prof. Emmanuel Giannelis' lab, Materials Science and Engineering. The team's goal is to optimize a scalable manufacturing process for medical devices.
- Heat Inverse (Ithaca) is working with Prof. Francesco Monticone, Electrical and Computer Engineering, on the characterization of proprietary polymer films for passive cooling applications.
- Vartest (New York City) and Prof. Steve Marschner, Computer Science, are developing methods to analyze wool and cashmere fibers. This project's matching funds are provided by the Industrial and Technology Assistance Corporation, ITAC, NYC, through a collaboration with CCMR as part of New York City's Futureworks NYC initiative.
- Xallent (Ithaca) is collaborating with Prof. Amit Lal, Electrical and Computer Engineering, on the development of a next generation diagnostic tool to test and characterize semiconductor devices and thin film materials during manufacturing.

**Invest** enables global companies to train Cornell students to utilize innovative technologies. Invest projects receive 10 percent (not to exceed \$7,500) in matching funds from the CCMR.

Three companies have been awarded CCMR matching funds:

- Mr. Hirofumi Yamanaka, Senior Research Chemist, Toray Industries (Japan), is a Visiting Fellow in Prof. Juan Hinestroza's lab, Fiber Science and Apparel Design, developing new technologies to functionalize fibers.
- Metglas (Conway, South Carolina) renewed its project with Prof. Paul Steen, Chemical and Biomolecular Engineering, aimed at developing the next generation of amorphous and nanocrystalline metallic foils. The company has created a fellowship honoring Dr. Ryusuke

Hasegawa, Metglas' Vice President of Research and Development, an expert on amorphous magnetic materials, for his years of service. Every year, Metglas selects a Hasegawa fellow: a Cornell graduate student to be trained in this new technology.

- JMC Corporation (Korea) is conducting with Prof. Yong Joo, Chemical and Biomolecular Engineering, research on the development of energy storage materials based on graphene oxide and reduced graphene oxide that they plan to commercialize.

### **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. Three other functions complete the CCMR's research mission: educational outreach; industrial outreach and knowledge transfer; and the operation of shared instrumentation in support of materials research both on and off campus. [www.ccmr.cornell.edu/industry](http://www.ccmr.cornell.edu/industry)

### **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/](http://www.esd.ny.gov/nystar/).

### **About Calmetrics**

Calmetrics specializes in the development and production of certified thin film thickness and composition reference standards used to calibrate X-ray Fluorescence instruments.

[www.calmetricsinc.com](http://www.calmetricsinc.com)

### **About EndoGlow**

EndoGlow develops medical devices with fluorescence allowing visualization of pathology below the surface and reducing patient risk during surgery.

<https://www.endoglow.com/>

### **About Heat Inverse**

Heat Inverse is developing a cooling technology that helps manufacturers increase efficiency simply and inexpensively, using its thin-film materials that get cold with no energy input and no waste heat generated.

<https://www.heatinverse.com/>

### **About Vartest**

Vartest Laboratories is a testing laboratory in New York City that employs a range of advanced technologies to help companies innovate. It offers a broad range of quality assurance and research programs for the physical, chemical, biological, photometric, and microscopical testing and evaluation of fibers, yarns, fabrics, apparel, textiles, home furnishings, safety and protective products, commodities, finishes, pharmaceutical standards, cosmetics, aerospace, medical, and other related products.

<https://vartest.com/>

### **About Xallent**

Xallent develops proprietary nanoscale measurement hardware and software tools for imaging, testing, and analyzing semiconductors and thin film materials.

**Step into a world of leading experts and state of the art equipment.**

**Solve real-world challenges using a science-based, uniquely collaborative approach.**



<https://xallent.com/>

**About Toray Industries, Inc.**

Toray Industries, Inc. is a multinational corporation headquartered in Japan that specializes in industrial products centered on technologies in organic synthetic chemistry, polymer chemistry, and biochemistry. Its founding business areas were fibers and textiles, as well as plastics and chemicals.

<https://www.toray.com>

**About Metglas**

Metglas® Inc., located in Conway, SC, is a world leading producer of amorphous metal ribbons. These Amorphous Metals have a unique non-crystalline structure and possess excellent physical and magnetic properties that combine strength and hardness with flexibility and toughness. Metglas products can help companies around the globe reduce their operating costs, strengthen energy conservation efforts and increase application efficiency.

<https://metglas.com/>

**About JMC Corporation**

JMC Corporation, Korea, is the world leader in fine chemical manufacturing, supplying the world's highest quality saccharin and providing sulfa antibiotic intermediates and electronic material intermediates.

<http://www.jmcfinechem.com/jmcfinechem/english1-1.php>

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