



For Immediate Release:

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CCMR's Invest and Invest-NY Programs Matched Seven Companies with Cornell Experts for Help in Developing Innovative Technologies

Ithaca, NY - The Cornell Center for Materials Research (CCMR) Industrial Partnerships Program facilitates industry access to CCMR's world-class capabilities, helping them solve technical challenges and develop and improve their products, with the ultimate goals of revenue growth and job creation.

The Invest Program is supported by Cornell University and enables global companies to train Cornell students on innovative technologies. The Invest-NY program is supported by Empire State Development's Division of Science, Technology and Innovation (NYSTAR), and provides New York State businesses with a fast and flexible way to benefit from the help of Cornell materials science experts to solve pressing technical issues, optimize technologies and prototypes, and access innovative solutions.

Seven companies were awarded funding in 2020:

- Xallent LLC (Ithaca, NY) collaborated with Professor Amit Lal, Electrical and Computer Engineering, on the development of a next generation diagnostic tool to more rapidly and economically test and characterize semiconductor devices and thin film materials during manufacturing. This tool is built on Xallent's innovative nanoscale imaging and probing technology. The ability to rapidly probe and measure electrical components at the nanoscale for diagnostics and failure analysis non-destructively is expected to tap a broad range of industry applications
- Toray Industries (Japan) worked with Hirofumi Yamanaka, a senior research chemist and Visiting Fellow in Prof. Juan Hinestroza's Fiber Science and Apparel Design lab, on developing new technologies to functionalize fibers.
- Metglas (Conway, South Carolina) worked with Prof. Paul Steen, Chemical and Biomolecular Engineering, and Prof. Shef Baker, Materials Sciences and Engineering, on 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, for his years of service, and selects a Cornell graduate student to be trained in this new technology as a Hasegawa fellow every year.
- Dongjin Semichem (Korea) has been conducting research with Prof. Yong Joo, Chemical and Biomolecular Engineering, on the development of energy storage materials.
- ENF (Korea) has been working with Prof. Yong Joo, Chemical and Biomolecular Engineering, on advanced carbon materials.

- Artsana Group – Chicco (Italy) is working with Prof. Juan Hinestroza, Fiber Science and Apparel Design, on exploring the chemical composition of fibrous materials.
- JMC Corp. (Korea) is working with Prof. Yong Joo, Chemical and Biomolecular Engineering, on applications of graphene oxides.

Invest projects receive 10% (up to \$12,500) in matching funds from the CCMR. Invest-NY projects receive 25% (up to \$12,500) in matching funds for project costs that include faculty and research staff, facilities, services, supplies and materials.

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: industrial outreach and knowledge transfer; educational outreach to teachers and students; and the operation of shared instrumentation in support of materials research both on and off campus.
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/.

About Xallent

Xallent develops proprietary nanoscale measurement hardware and software tools for imaging, testing, and analyzing semiconductors and thin film materials. Xallent nanoprobe test cards offer reduced capital investments, shorter setup and testing cycle times, and lower support costs than existing solutions. Xallent plans to leverage its proprietary nanomachine technology for inline on-wafer process control monitoring and failure analysis.
<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/>

**Step into a world of leading experts and state of the art equipment.
 Solve real-world challenges using a science-based, uniquely collaborative approach.**



About Dongjin Semichem

Dongjin Semichem is paving the way towards the future with innovations the world needs today. With the goal of transforming human lives with technology, Dongjin Semichem has been a pioneer of the Korean fine chemical industry and now proudly holds a place among global corporations as a leader in electronic materials and foaming agents. Dongjin Semichem manufactures and sells materials for display and semiconductors, alternative energy (solar cell, fuel cell), and foaming agents.

<https://www.dongjin.com/en/company/overview.php>

About ENF

Founded as an electronic materials manufacturer and fine chemical corporation in 2000, ENF Technology Co., Ltd. has been pioneering in the field of semiconductor and display industry with matured technology for process chemical, pigment dispersion and synthetic materials.

<https://www.enftech.com/en/about-enf/about-us/>

About Artsana, USA – Chicco, USA

Chicco is a division of the global corporation Artsana, S.p.A. Under the umbrella of the Artsana Group, Chicco offers innovative, quality baby care products from car seats, strollers, playards, to nursing gear and toys. Chicco was founded in 1958 by an inventor and developer of pharmaceutical devices named Pietro Catelli. After the birth of his son, Mr. Catelli expanded his work into the world of baby products and dedicated himself to creating better solutions for parents and babies. Since then, Chicco has grown into a global brand with a presence in 120 countries.

About JMC Corp.

JMC Corporation, Korea, 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. JMC Corp. recently developed graphene oxide to secure mass production technology; it is currently in pilot production.

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

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