

Cornell University Cornell Center for Materials Research John Sinnott Industrial Partnerships Manager Cornell University 624 Clark Hall Ithaca, NY 14853-2501 607.255.7070 jps39@cornell.edu www.ccmr.cornell.edu/industry

# The Cornell Center for Materials Research Announces the Spring 2014 JumpStart Funded Companies

**Ithaca, NY -** The Cornell Center for Materials Research JumpStart program, funded by Empire State Development's Division of Science, Technology and Innovation (NYSTAR), is designed to assist New York State small businesses develop and improve their products through university collaborations; the ultimate goal is revenue growth and job creation. JumpStart projects receive up to \$5,000 in matching funds for project costs that include faculty and research staff, facilities, services, supplies, and materials. Since its inception, 55 companies have benefited from this program. During the upcoming semester, five companies have been awarded funding and will participate in the following collaborations:

Lionano, Inc., Ithaca, NY, will collaborate with Professor Héctor Abruña, Chemistry and Chemical Biology, to study the efficiency and reliability of an advanced drop-in replacement anode material for lithium-ion batteries used in electric vehicles.

Omniafiltra LLC, Beaver Falls, NY, will collaborate with Professor Alan Taylor, Seed Science and Technology, Department of Horticulture, to test recycled fiber and seed combinations to determine the optimal nutrients, seed concentrations, paper densities, etc. that will produce a seed containing paper with excellent biodegradability and seed germination.

Oratel Diagnostics LLC., Hammondsport, NY, will collaborate with Professor Uli Wiesner, Materials Science and Engineering, to develop a process for embedding plant pigments used in their diagnostic tools in porous nano-silica particles. Ideally, the embedding will extend shelf life, allow for a time release, and be transparent for easy color identification.

RocCera LLC, Rochester, NY, will collaborate with Michael Haselkorn, Ph.D., Golisano Institute for Sustainability, Rochester Institute of Technology, to develop a laboratory wear test to compare the wear resistance of <u>Road Rocs Ceramic Snow Plow Shoes</u> to the wear resistance of standard steel snow plow shoes.

Wool&Prince LLC, New York, NY, will collaborate with Professor Margaret Frey, Fiber Science and Apparel Design, to characterize the antibacterial performance of the wool fabrics used in making their superfine wool shirts.

# About NYSTAR

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 start-up technology companies.

# 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. This objective is pursued through

fundamental experimental and theoretical studies. Three other complementary functions complete the CCMR's mission: educational outreach to teachers and students; industrial outreach and knowledge transfer; and the operation of shared instrumentation in support of materials research both on and off campus.

For additional details about this and other exciting programs, including how to apply for fall 2014 projects, please visit <u>ccmr.cornell.edu/industry</u>

### About Lionano

Lionano Inc. is a Cornell spin-off company commercializing an advanced drop-in replacement anode material for lithium-ion batteries, aiming to increase the capacity (3X), extend battery lifetime (4X) and reduce charging time (1/3), with significantly enhanced safety and an 80% cost reduction when compared to current anode materials. <u>http://lionanobattery.com</u>

### About Omniafiltra

Omniafiltra Group is an established multinational industrial paper manufacturer that focuses on technologically advanced industrial paper production. Dedicated to flexibility and customer service, Omniafiltra meets the challenges of the global paper industry with a pioneering spirit that extends the frontiers of industrial paper technology. <u>http://www.omniafiltra.com/</u>

### **About Oratel Diagnostics**

Founded in 2006 by Dorothee Goldman, Oratel Diagnostics uses a plant pigment chemistry to produce a color response when exposed to specific mammalian proteins. The company's first product is a fertility diagnostic tool to detect ovulation in dairy cattle. Research has shown that this test can help farmers improve conception rates in their herds by up to 30%.

### About RocCera

RocCera, LLC is a manufacturer and fabricator of advanced technical ceramic, polyurethane and steel components. The company is based in The Rochester Technology Park, Rochester, NY. RocCera's advanced ceramic technology was originally developed in Kodak under the leadership of Dr. Sam Ghosh, who founded RocCera in 2006. <u>http://www.roccera.com</u>

### About the Golisano Institute for Sustainability

Golisano Institute for Sustainability is a multidisciplinary academic unit at RIT whose mission is to undertake world-class education and research programs in sustainability with major foci on sustainable production, sustainable energy, sustainable mobility, and ecologically friendly information technology systems. These programs are led by a multidisciplinary team of faculty and researchers who collaborate with organizations locally, nationally, and internationally to create implementable solutions to complex sustainability problems. <u>http://www.rit.edu/gis/</u>

### About Wool&Prince

Wool&Prince began in early 2013 through an obsession to make better, longer-lasting apparel for guys. Made from 100% Australian superfine wool, these durable, wrinkle- and odor-resistant garments are light, breathable, and most important—soft. <u>http://woolandprince.com/</u>