



ADVANCING BATTERY TECHNOLOGY

Herty helping Dreamweaver International bring breakthrough battery separator to market

Georgia Southern University's Herty Advanced Materials Development Center provides another look at the role this academic institution plays in boosting economic development locally, nationally and globally. The top-notch applied research facility is where clients from around the world sign on to develop new

technologies and validate processes and product concepts.

Clients like Dreamweaver International. Headquartered in Greenville, South Carolina, Dreamweaver is an advanced technology company focused on selling low-cost high-performance battery separators to battery manufacturers.

A separator is the thin barrier placed between the anode (positive) and the cathode (negative) electrodes in a battery to prevent it from short-circuiting.

Dreamweaver's battery separators for lithium ion batteries and supercapacitors are made from a combination of nanofibers and microfibers. The



PARTNER FOR POWER

When they needed a partner to create and test prototypes of their lithium ion batteries and supercapacitors, they turned to Herty.

company's unique nanofiber technology dramatically improves the durability and high-power performance of rechargeable batteries for use in a range of applications including electric/hybrid vehicles, cordless power tools, computers and mobile devices.

For development of its products, Dreamweaver partnered with Herty where more than 1,000 prototypes have been made and tested. "Herty had everything we needed. They had the knowledge, equipment, lab for testing and support staff that could help bring our product to market," said Dreamweaver International co-founder Brian Morin. "They were always willing to help solve problems and think outside the box to come to a solution that fits what we are looking for."

In explaining how the Center has helped Dreamweaver, Morin said, "When we started the company, I knew nothing about paper, and had only one contact in the industry, who I called and who suggested Herty. I went to visit almost immediately and was so impressed with their capability and business-like approach to help our only-days-old startup, that we actually signed the contract that we use today within two weeks of founding the company. Every idea we have had has been first tested with help from Herty."

Morin, who is also the company's president and chief operating officer, praised the efforts of Danny Bragg, Herty's assistant program director who spent many hours helping the company develop its products. "Danny made changes to the machines and tried multiple ways to make our material," he said.

Dreamweaver's president said his company's partnership with Herty has been an invaluable experience. "Everyone at Herty has been wonderful to work with. They go out of their way to make you feel welcome," he said. "They helped Dreamweaver launch three product lines and in four years. They have been supportive and encouraging since the first day."



TWO FACULTY HONORED FOR EXCELLENCE

Derek Larson, MFA, is a multimedia artist working in animation, video, sound and sculptor. He is the MFA graduate program director and associate professor in the Betty Foy Sanders Department of Art. His creativity comes from a number of sources - art history, philosophy and popular culture.

Gulzar H. Shah, Ph.D., is the associate dean for research in the Jiann-Ping Hsu College of Public Health. He is a prolific public health researcher and teaches courses in health policy and management. His research centers on local health departments, local



received this award, especially among so many successful and talented colleagues across our campus," said Larson. "This support from the University has provided a great sense of appreciation and motivation in my practice. I'm proud of our accomplished research community and very excited to see what the future holds for Georgia Southern academics."

Over the course of his career of two decades, Dr. Shah has worked in both academia and public health practice agencies. "I am honored to be recognized for excellence in research - something I do purely out of my passion," he said.

"It is humbling in that so many of my colleagues are excellent researchers, and anyone could have been the winner. I am fortunate to have worked with such high quality students and faculty researchers, making me a highly collaborative researcher. Research creativity and its ability to promote health outcomes are among the ultimate sources of job satisfaction for me and enable me to promote my college's mission."

Shah's research has been published in dozens of peer reviewed journals.



public health, interdisciplinary STEM and rural education.

Both faculty members are also winners of the 2016-17 Award for Excellence in Research/Creative Scholarly Activity. The Georgia Southern award is given to faculty who excel in their research efforts while fulfilling their regular full-time teaching responsibilities. Larson earned his Master of Fine Arts in sculpture from Yale University and exhibits nationally and internationally. He teaches new media and design.

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