NU battery team wins $20,000, will compete in Nov. for $250,000 at national cleantech competition

EVANSTON, Ill. (November 1, 2012) -- SiNode, LLC, a cleantech student startup out of Northwestern University, was one of 3 regional Midwest finalists selected October 19th in Minneapolis, MN by The Cleantech Open to compete in its Global Forum next month in San Jose, CA. The Cleantech Open is a national accelerator program that focuses on fostering entrepreneurs addressing urgent energy, sustainability and environmental problems. Its annual Global Forum showcase is billed as the ‘Academy Awards’ of Cleantech, at which approximately 25 teams will compete for $250,000 in investments and in-kind services.

SiNode is commercializing novel energy storage solutions by developing patented silicon-based composite anodes, technology developed by Northwestern University research chemist Professor Harold Kung. SiNode’s anodes can hold a charge up to 10 times greater than current batteries widely available in the market, and charge 10 times more quickly. Potential applications for the technology range in scale from smart phones up to electric vehicles (a more detailed description of the technology is available here).

Technological advancements promising orders of magnitude improvements in key cleantech segments like battery research rightfully capture significant attention. Since publishing initial findings a year ago in the journal Advanced Energy Materials, Kung and his technology have been profiled widely, ranging in source from Engadget to the BBC.

Kung and the SiNode team have hooked up thanks in large part to an energy entrepreneurship course offered by the Farley Center for Entrepreneurship and Innovation and the Initiative for Sustainability and Energy at Northwestern (ISEN). In ISEN 430 NUvention: Energy, interdisciplinary teams of student from a broad cross-range of Northwestern undergraduate and graduate programs work on commercialization plans for early-stage energy products, technologies, or services. Kung’s battery technology has been assigned to a project team in ISEN 430 NUvention: Energy for the past three years.

This year, graduate students Joshua Lau and Thomas Yu (MS Materials Science & Engineering), and Guy Peterson, Samir Mayekar and Nishit Mehta (Kellogg School of Management) – team SiNode – have successfully taken this promising technology from the bench to the pitch circuit. Among their many accolades, SiNode has been a finalist of the Midwest Clean Energy Challenge, the First Look West (FLOW) Clean Energy Challenge, and winner of a $20,000 National Collegiate Inventors and Innovators (NCIAA) award, among other awards. The team was also selected in October for a prestigious SBIR
Phase I grant of $150,000 from the Department of Energy, pending DOE Fiscal Year 2013 funding availability, of which they will be notified in December.

SiNode is in great company, as one of a number of cleantech entrepreneurship stories coming out of Northwestern recently. NuMat Technologies recently won the first-ever U.S. Department of Energy National Clean Energy Business Plan Competition in June. NuMat, which designs high-performance materials to separate and store gases for cleantech applications, has won in excess of $1 million in cash and in-kind services from business plan competitions this year, and is currently part of a $1.5 million Department of Energy grant to develop new adsorbents for low-pressure natural gas vehicles.

Meanwhile, SiNode is currently testing their technology in a variety of full cell configurations. With their recent SBIR award from the Department of Energy, they plan to significantly expand their research initiatives and continue working with strategic partners in the coming year.