$1.8M funding for research into new battery technology

RELEASED ON 14/05/13 (DD/MM/YY)

A nanotechnology research project to explore new battery chemistries that could lead to high-density energy storage has been awarded funding from Natural Resources Canada's ecoENERGY Innovation Initiative.

Led by Professor Linda Nazar of the Faculty of Science and the Waterloo Institute for Nanotechnology at the University of Waterloo, the study will examine completely new approaches to materials and chemical components of batteries that could result in more powerful, and longer-lasting batteries for hybrid electric or electric cars.

“The funding from Natural Resources Canada allows us to expand our electrochemical energy storage laboratory here at Waterloo to explore beyond lithium-ion batteries using nanotechnology and completely different approaches to battery chemistry,” said Professor Nazar, a Canada Research Chair in Solid State Energy Materials. “This research is high-risk, but it has the potential to create batteries with much greater storage capacity and at lower costs.”

Natural Resources Canada (NRCan) is providing $1.8 million over four years to Professor Nazar for her work titled High Energy Density Storage for Automotive Applications. Partnerships on the project include Hydro-Quebec, the Korea Institute of Energy Technology Evaluation and Planning, and BASF (SE).

“One of the greatest challenges to the sustainable energy field is adequate electrochemical energy storage. Although there are improvements that can be made using existing battery chemistry to make an electric car last longer before needing a recharge, we expect that improvements to the amount of storage in current rechargeable batteries will reach their limit within the next five years,” said Professor Nazar. “This research could have a significant effect on the long-term future of electric cars.”

SOURCE Canada Business News Network