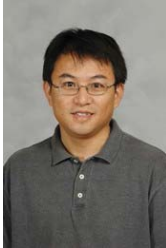




6. *Rapid Screening Micro Fuel Cells for Portable Electronics*

Principle Investigator: Li Tan, Engineering Mechanics



<http://www.unl.edu/emhome/faculty/tan.html>

The goal of this project is to design and develop a platform for rapid screening fuel cells suitable for portable electronics. The project will deliver a systematic survey on micro fuel cell structure – material – performance relationship; and a batch fabricated multi-element fuel cell array and corresponding operation and data collection system.

The objective is to demonstrate the following: (1) An infrastructure built upon MEMS (Micro-Electro-Mechanical System) technology; and (2) a simple and reliable system bridging the gap between fundamental fuel cell research and applications. Current micro fuel cell research is hampered by insufficient data on their structure and properties and by lack of high-throughput optimization methodologies. The approach is targeted to fill those gaps.