



**ADVANCED ENERGY™**  
Research and Technology Center  
AT STONY BROOK UNIVERSITY

## **AEC COMMUNITY LUNCH & LEARN SEMINARS**

**Date: November 4, 2015**

**Time: 11:30am**

**Location: Advanced Energy Center, Rm 104**

***“Review of the Application of Energy Harvesting”***

**By**

**Dr. Ya Wang**

**Assistant professor**

**Department of Mechanical Engineering**

This talk introduces the basics of energy harvesting using piezoelectric materials. These principles are illustrated through several applications that benefit from using harvested energy: small UAV gust alleviation, multifunctional hypersonic spacecraft, etc. Special attention is given to scientific issues not well studied and addressed in the literature, in terms of electromechanical modeling, signal processing, and optimal control algorithms. The engineering challenges towards synergistic energy harvesting and electronic damping are also highlighted and potential research applications are discussed.

***“Brief lunch will be provided during the talk”***

**MORE ARE COMING SOON!!**

Upcoming lecture: *“Materials Advances in Battery Design”*

By

Prof. Ovadia Lev, Casali Institute, Hebrew University



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