

ISU
DEPARTMENT OF ELECTRICAL ENGINEERING
and COMPUTER SCIENCE

S e m i n a r

Mr. Steven Novack

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**“The Nanoantenna Prospect for Harvesting
Energy”**

Friday October 2, 2009, Room 7 LIBRARY

ISU Pocatello Campus

1:00 – 1:50 p.m.

Abstract:

Renewable energy sources are an important contributor to future US and world energy policies and will be part of a successful diverse energy portfolio. This presentation introduces research into an alternative to the traditional Photovoltaic (PV) approach, using recent advances in nano-technology, and provides a pathway for energy collectors that combine broadband energy collection with high efficiency and low cost. This presentation will focus on the development of large scale nanoantenna resonance structures to be used as a collector and disseminator of electrical energy. The nanoantenna approach is a transformational technology and promises to become a better and much more efficient energy source concept. Advantages and disadvantages of collecting energy via nanoantennas, the utilitarian aspects of this technology, and the current technical challenges in large-scale production and roll-to-roll manufacturing will be discussed.