

# NANOSCIENCE COLLOQUIUM

Thursday January 17th 2013 at 10:15, K-space, Fysicum

## Nanomaterials Design for Energy Conversion and Storage

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*Abstract:* The development of nanotechnology in the past two decades has generated great capability of controlling materials at the nanometer scale and has enabled exciting opportunities to design materials with desirable photonic, electronic, ionic and mechanical properties, which are important for advanced energy conversion and storage. In this talk, I will show how we design rationally nanostructured materials for energy applications. Examples include: 1) nanostructured Si anodes 2) nanostructured S cathodes 3) nanocones and domes for advanced photon management.

*This is one in a series of Nanoscience Colloquia, aimed at researchers and students with an interest in nanoscience. They will cover different areas of nanoscience, and are given a couple of times per semester. The series is arranged by the Strategic Research Environment "The Nanometer Structure Consortium at Lund University", "nmC@LU", and part of the Linnaeus grant "Nanoscience and Quantum Engineering", funded by the Swedish Research Council (VR).*



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