



**SAN FRANCISCO BAY AREA
NANOTECHNOLOGY COUNCIL**

March 2009 Seminar

Subject:

Novel Nanomaterial Enabled Devices for Sustainable Energy Harvesting and Utilization

Speaker:

**Dr. Bin Chen, Material Scientist
UC Santa Cruz / NASA Ames Research Center**

Date: Tuesday, March 17, 2009

Time: Registration & light lunch 11:30am. Presentation & Q/A 12:00 to 1pm

Location: National Semiconductor Bldg E-1 CMA Room. 2900 Semiconductor Drive, Santa Clara, CA
<http://www.google.com/search?hl=en&q=2900+Semiconductor+Drive.+santa+clara+%2C+ca&btnG=Google+Search>

Cost: IEEE Members and Students \$5. Non-Members \$10

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Talk Abstract:

Dr. Chen will discuss experimental approaches to synthesize hybrid nanocomposite materials. These multifunctional nanomaterials are targeted for low cost and high efficiency power output for solar (and wind) energy harvesting as well as CO₂ reduction and conversion.

Speaker Biography:

Dr. Bin Chen is a material scientist working at UC Santa Cruz / NASA Ames Research Center. She has special interests in experimental research and development of nanoscale materials. She has been working on electronic and optical properties of nanostructural materials including carbon nanotube, carbon nanotube-polymer composite, and metal oxide nanowires. She focuses on the novel properties of these nanoscale materials for critical applications in energy utilization and conversion in fuel cell and solar cell applications, toxic gas decontamination, lightweight structure component and sensing devices under extreme environment for space and planetary exploration.

Dr. Chen has been contributing to NASA astrobiology missions such as the MARTE science mission and involved in High Lake expedition sample analysis. She also plays important roles in nanotechnology education and outreach programs, and serves as a co-advisor in doctoral programs at UCLA, Stanford and Penn State University. Dr. Chen grew up in China and received her PhD at Penn State University.