

# SINAM NANO SEMINAR

Center for Scalable and Integrated Nano  
Manufacturing (SINAM) presents



## Recent Activities in Soft X-Rays Microscopy and EUV Lithography

Prof. David Attwood

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Center for X-Ray Optics, Lawrence Berkeley National Laboratory

Monday, January 28, 2008

11:00 - 12:00 PM

3110 Etcheverry Hall

### Abstract

Research on short wavelength electromagnetics offers new opportunities for high resolution imaging with elemental sensitivity. Topics receiving much current attention include soft x-ray microscopy of biological, environmental and nanomagnetic samples, as well as the printing of nanoelectronic patterns by extreme ultraviolet (EUV) lithography, a current fron runner for the high volume manufacture of computer xchips with 15 nm gate widths. Challenges include the development of suitable optics, bright but compact sources of radiation, and a requisite infrastructure for resists, defect free masks and a wide variety of componentry we take for granted in the visible region of the spectrum.

Prof. David Attwood received his PhD in Applied Physics from New York University in 1972. He has been a Professor in Residence at UC Berkeley since 1989. He was co-founder of the Applied Science and Technology Ph.D. program and serves on its Executive Committee. At the contiguous Lawrence Berkeley National Laboratory, he is the founding Director of the Center for X-Ray Optics (CXRO), and was first (1985-1988) Scientific Director of the Advanced Light Source (ALS). He has published 5 books and has co-authored over 130 other publications.

*\*Refreshments Provided\**

Hosted By: Professor Xiang Zhang, 3112 Etcheverry Hall  
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