

SINAM NANO SEMINAR

Center for Scalable and Integrated
Nano Manufacturing (SINAM)

presents



Photonic Crystals and Quantum Dots - Towards Integrated Optics for Advanced Ultra-Fast All-Optical Signal Processing

Dr. Yoshimasa Sugimoto, AIST and University of Tsukuba, Japan

Monday, November 6, 2006

1:00 - 2:00 pm

3110 Etcheverry Hall

(Cookies and refreshments provided at 12:45 PM)

Abstract

New design and fabrication technologies of antiproton including GaAs-based two-dimensional photonic crystal slab waveguides and InAs-based quantum dots will be addressed for a symmetric Mach-Zehnder type, ultra-small and ultra-fast all-optical switch (PC-SMZ) and a new logic device.

About Dr. Sugimoto

Yoshimasa Sugimoto received his B.E., M.E., and Ph. D degree in electronic engineering from Shizuoka University in 1978, 1980 and 1996, respectively. From 2000 to 2004, he joined the Femtosecond Technology Research Association (FESTA), where he developed nanoprocessing technologies of photonic crystals for ultra-fast photonic devices. From 2005, he is engaged in the National Institute of Advanced Science and Technology (AIST), where he is currently developing photonic crystals based nano-photonic devices. From 2004, he is also a Visiting Professor in the Center of Tsukuba Advanced Research Alliance (TARA), University of Tsukuba.

*****View the full abstract and bio for this seminar at <http://www.sinam.org>*****

Hosted By: Professor Xiang Zhang, 3112 Etcheverry Hall
For Information contact Christian Spencer, 642-0390