

# CENTER FOR NANOHYBRID FUNCTIONAL MATERIALS

**FRIDAY  
JANUARY 20, 2012  
2:00 – 3:00 PM  
237 SEC**



## **Dr. Xudong (Sherman) Fan**

Associate Professor, Department of Biomedical Engineering,  
University of Michigan

## **Optofluidic Lasers: Principles and Applications**

Various optofluidic lasers will be reviewed and their performances will be compared. Direct and indirect excitation schemes will be discussed, followed by possible biosensing applications and future research directions.

*Dr. Fan obtained B.S. and M.S. from Peking University in 1991 and 1994, respectively, and Ph.D. in physics and optics from Oregon Center for Optics at the University of Oregon in 2000. Between 2000 and 2004, he was a project leader at 3M Company on fiber optics and photonic sensing devices for biomedical applications. In August of 2004, he joined the Department of Biological Engineering at the University of Missouri as an assistant professor. In January of 2010, he joined the Biomedical Engineering Department at the University of Michigan as an associate professor.*

*Dr. Fan's research includes photonic bio/chemical sensors, micro/nano-fluidics, and nano-photonics for disease diagnostics and bio/chemical molecule analysis. He has nearly 70 peer-reviewed publications and over 12 issued/pending patents. Presently, Dr. Fan serves as Associate Editor for Optics Express, responsible for optical biological and chemical sensors and optofluidics, and as a chair and organizer of numerous conferences for OSA, SPIE, and MRS. He is a recipient of 3M Non-Tenured Faculty Award (2004, 2005, and 2006), American Chemical Society Young Faculty Award, the Wallace H. Coulter Early Career Award (Phase I and Phase II), and the National Science Foundation CAREER Award. His research is supported by the National Science Foundation, National Institute of Health, private foundations, and industrial companies.*

**Seminar hosted by Dr. Ming Han, Department of Electrical Engineering**



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