

# Physics Colloquium

## Michigan Technological University

Thursday, September 23, 2010

4:00 pm

Room 139 Fisher Hall

### Opportunities and Challenges in MEMS: Physicist's View



**Suresh Sampath**

### Innovative Micro Technology

**Abstracts:** I will talk about “Opportunities and challenges in MEMS” with emphasis on how Physicists and other scientists can potentially benefit from it. The first part of the talk will start with a short introduction to MEMS and will describe how the MEMS devices are fabricated. It will be followed by a description of some of the interesting applications of such devices. The talk will also highlight some of the challenges that the MEMS industry faces and how it can be an opportunity for others to get involved. The last part of the talk will point out some of the challenges that Physicists face in industry and what are some of the necessary skill set that we need to have in order to be successful in industry.

**Bio:** Dr. Sampath is presently a program manager at Innovative Micro Technology (IMT), a leading MEMS (Micro Electro Mechanical Systems) foundry located at Santa Barbara, CA. He received his M.Sc degree in Physics from University of Hyderabad, India in 1992 and then received Ph.D in Physics from Michigan Technological University in 1998. He has been working for over 11 years in MEMS and his present responsibilities include managing multiple MEMS projects as well as managing vacuum engineering department that includes thin film depositions, dry etching and wafer bonding.