Nanotechnology Conference
Eagle Crest Conference Center, Ypsilanti
Wednesday, Nov. 18, 2009 11am – 8pm
IEEE Southeastern Michigan Section

Nanotechnology, Nanorobots, Nanoindustry, Nanoeducation

Nanotechnology in Medicine and Biology

Prof. James R. Baker
Keynote Speaker

Prof. James R. Baker, Director, Biologic Nanotechnology Institute , University of Michigan
Biography: James R. Baker, Jr., M.D. completed his undergraduate education at Williams College in Williamstown, Massachusetts. After an internship and internal medicine residency at the Walter Reed Army Medical Center in Washington, D.C., he completed an Allergy and Clinical Immunology Fellowship, also at Walter Reed and at NIAID. He joined the faculty of the University of Michigan, in 1989 as an Associate Professor, Department of Internal Medicine, Division of Allergy. In May, 2001, Dr. Baker was named the Co-Director of the Center for Biomedical Engineering in the School of Engineering. Dr. Baker has over 25 years experience in basic biologic research, concentrating in immunology and host defense. Dr. Baker's work with synthetic lipid and polymeric nanostructures has resulted in the development of a new class of antimicrobial agents with activity against bacteria, spores, fungi viruses.

Nanotechnology Jobs in Michigan

Rick Snyder
Keynote Speaker

Rick Snyder, Chair of the Board, CEO and a Co-Founder of Ardesta, LLC
Biography: Since 1991, his primary business activities have focused on the technology industry and the development of emerging and high growth companies. In 1997, Rick founded and led Avalon Investments, Inc., a venture capital company targeted at investments in technology-oriented ventures. Avalon was established as a $100 million fund targeting early stage technology investments. Rick studied at the University of Michigan, where he earned a Bachelor of General Studies degree with high distinction in 1977, a Masters of Business Administration with distinction in 1979, and a Juris Doctor in 1982.

Wireless Integrated Micro-Systems: Wearable and Implantable Devices for Improved Health Care

Prof. Kensall D. Wise
Keynote Speaker

Prof. Kensall D. Wise, Director, NSF Engineering Research Center For Wireless Integrated Microsystems (WIMS), University of Michigan, IEEE Life Fellow
Biography: Kensall D. Wise received the B.S.E.E. degree from Purdue University , West Lafayette, IN, in 1963, and the M.S. and Ph.D. degrees in Electrical Engineering from Stanford University, in 1964 and 1969, respectively. From 1963 to 1965 and from 1972 to 1974, he was a Member of Technical Staff at Bell Telephone Laboratories. In 1974, he joined the University of Michigan, where he is now the William Gould Dow Distinguished University Professor of Electrical Engineering and Computer Science, the J. Reid and Polly Anderson Professor of Manufacturing Technology, Professor of Atmospheric, Oceanic, and Space Sciences, and Professor of Biomedical Engineering. He holds the 2007 Henry Russel Lectureship, at the University of Michigan, is a Life Fellow of the IEEE, a Fellow of the AIMBE, and a member of the .United States National Academy of Engineering.

Poster Session: Authors are invited to submit a poster title and abstract (less than 150 words) to: lora.schulwitz@gd-ais.com no later than 10/18/09. Poster session topics include: Nanofabrication, Nano System Integration, MEMS and Robots, Nano Learning Modules, and other relevant Nanotechnology topics. A Best Poster Award will be given to the top presented poster, as judged by the review committee. The award will be based on originality, content, and poster quality.

Conference Sponsors: A.J. Boggs, Ann Arbor and Nanobrick, Okemos

Organized by the Southeastern Michigan Chapter of the IEEE Nanotechnology Council (NTC).

Organizing Committee
General Chair: Prof. Dean Aslam, Michigan State University
Technical Chair: Prof. Jay Guo, University of Michigan
Section Chair: David Laurent
Section Vice Chair: Dr. Randy Stevenson
Program Chairs: Doug Czinder, Trinity Health
Prof. Wen Li, Michigan State University
Poster Session Chairs: Dr. Lora Schulwitz
Prof. Lixin Dong, Michigan State University
Publicity Chairs: Dr. Randy Stevenson
Bob Neff, Kimball Williams, C.N.E.
Mark Ciechanowski, P.E.

IEEE Southeastern Michigan Section (www.ieee-sem.org). Conference: http://ewh.ieee.org/r4/se_michigan/nano/index.htm

Advanced Conference Program				
10:30am - 11:00am	Registration			
11:00am - 12:00pm	Keynote Address - Auditorium **Nanotechnology in Medicine and Biology** *Prof. James R. Baker* Director, Biologic Nanotechnology Institute, University of Michigan			
12:00pm - 1:00pm	Lunch (box lunch provided)		Poster Viewing	Sponsor Tables
1:00pm - 2:00pm	Keynote 2 - Auditorium **Nanojobs in Michigan** *Rick Snyder* Ardesta			
2:00pm - 2:30pm	Break including light snacks		Poster Viewing	Sponsor Tables
	Technical Track A: Nanotechnology, Robotics, and Sensors Chair: Doug Czinder	Technical Track B: Nano Industry and Education Chair: Wen Li	Poster Session Chairs: Lora Shulwitz, Lixin Dong	
2:30pm - 3:00pm	**Applying Small Area Networking to Nano Communications** *Bruce Emaus* President, Vector-Cantech	**Nano Education** *Prof. Bob Chang* , Director, National Center for Teaching of Nanoscale Science and Engineering Education Northwestern University	Poster Session Presentations	
3:00pm - 3:30pm	**NanoRobotic Systems and Nanomanufacturing** *Prof. Lixin Dong*, Electrical & Computer Engineering Michigan State University	**RFID and Nano Technologies** *Prof. Robb Clarke,* School of Packaging, Michigan State University		
3:30pm - 4:00pm	**High Speed Fabrication of Nanostructures by Roll-to-Roll Processes** *Prof. Jay Guo* Electrical Engineering & Computer Science, University of Michigan	**Nano Education For The 21st Century** *Robert Giasolli,* Vice President of the Americas, Micro and Nanotechnology Commercialization Education Foundation		
4:00pm - 4:30pm	**Integrating Nanotechnology Into Sensors, Lab-on-chip Systems and Other Electronic Devices** *Prof. Cindy Harnett,* Electrical and Computer Engineering Department, University of Louisville, Chair Nanotechnology Committee, IEEE Instrumentation and Measurement Society	**Panel discussion: Nanojobs and Workforce Training** *Panel Chairs:* *Prof. Colletta Moser,* Michigan State University *Bob Neff*		
4:30pm - 5:00pm	**Developing nano-scale structures for EMC/EMI** *Dr. Ji Chen,*IEEE EMC Society Distinguished Lecturer Department of Electrical & Computer Engineering, University of Houston			
5:00pm - 5:30pm	**Resonant Nano- and Mirco-Electromechanical Devices** *Prof. Mina Rais-Zadeh,* Solid State Electronics Laboratory, University of Michigan			
5:30pm - 6:00pm	ESD Affiliate Council Committee Meeting	Break	Poster Viewing	
6:00pm - 7:00pm	Dinner, Awards Ceremony, Speaker Recognition, Sponsor Recognition - Ballroom (Business attire recommended)			
7:00pm - 8:30pm	Keynote Address - Ballroom **Wireless Integrated Micro-Systems: Wearable and Implantable Devices for Improved Health Care** *Prof. Kensall D. Wise* Director, NSF Engineering Research Center For Wireless Integrated Microsystems (WIMS), University of Michigan			

Early full registration by 10/18 $55 members, $65 non-members, $30 students / retired / unemployed members.