

2009-2010 Graduate Seminar Series

The Department of Mechanical Engineering – Engineering Mechanics

Proudly Presents

Professor Reza Shahbazian-Yassar Michigan Technological University

Dr. Reza Shahbazian-Yassar received his PhD from Washington State University in 2005. He is currently an assistant professor and adjunct assistant professor at the departments of Mechanical Engineering-Engineering Mechanics and Materials Science and Engineering at Michigan Tech. He joined Michigan Tech in fall 2007. Prior to his position at Tech, he was a post-doctorate research associate at the Mutliscale Modeling group of Prof. Mark Horstemeyer at Mississippi State University. Dr. Yassar's research is being supported through NSF, DOE, Michigan Space Grant Consortium, Michigan Tech Research Excellence Fund, and MuSTI.



Thursday, Nov. 19, 2009 3:00 – 4:00 p.m. Room 112, ME-EM Bldg.

Real-Time Electro-Mechanical Coupling in One-Dimensional Materials

Nanomaterials including nanotubes and nanowires are the smallest building blocks for future small-scale electronics, and energy conversion technologies. Therefore it is very important to understand the intrinsic physical and mechanical properties of these low-dimensional nanostructures. At Michigan Tech, through a recent NSF-MRI grant we have gained access to an advanced characterization technique that enables simultaneous electrical, mechanical, and structural monitoring of nano-scale materials. This talk gives an overview on some of the current research of the PI on organic and inorganic nanowires and nanotubes used for solar cells, nanogenerators, nanoelectronics, and high-strength biocomposites.