

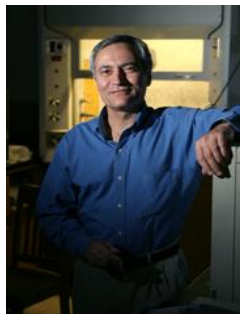
CNAS Public Lecture Series – Fall 2012

Temple Hall 002

September 18, 2012 7:30 PM – 8:30 PM

Synthesis, Characterization and Applications of Poly(ethylene glycol) Modified Dendrimers.

Speaker: Dr. Reza S. Herati, Professor, Department of Chemistry



Dendrimers (polymers) have attracted much interest because of their unique structures and properties. Their size, structure, and surface properties are highly controllable. In addition, their interior has been shown to be capable of encapsulating various molecules. Therefore, dendrimers are highly attractive in drug delivery applications. To use dendrimers as drug delivery, it is important that the polymers are water soluble, nontoxic, and biocompatible. It has been shown that modification of polymers with poly(ethylene glycol) (PEG) improves such properties as water solubility, nonimmunogenicity, and toxicity. In this presentation, our recent work on synthesis, characterization and applications of PEGylated dendrimers will be presented and discussed.

October 16, 2012 7:30 PM – 8:30 PM

Meeting our Future Energy Needs: Materials under Extreme Environments

Speaker: Dr. Robert Mayanovic, Professor, Department of Physics, Astronomy & Materials Science

Discovery of novel materials for a more efficient means of energy conversion and storage poses a significant challenge in the twenty-first century. Our project is part of a major nation-wide initiative to generate the scientific breakthroughs needed to establish more efficient and cleaner energy applications. The Department of Energy has established 46 new Energy Frontier Research Centers (EFRCs) in this initiative, one of which is the center that we partner in, the Energy Frontier Research in Extreme Environments (EFree). Nanoparticles, glassy materials, highly porous materials and metal oxides are just some of the materials projected to play a significant role in energy applications under extreme conditions. Research in this area conducted by our group and by some of our partners in EFree will be discussed



November 13, 2012 7:30 PM – 8:30 PM

Turtles in Decline

Speaker: Dr. Day Ligon, Assistant Professor, Department of Biology



Turtles made their appearance on Earth during the Triassic roughly 230 million years ago. These distinctive animals exhibit some familiar (and some not-so-familiar) traits that make them uniquely adapted to survive changing environments. Despite this, many species are now experiencing unprecedented rates of decline, and several species have recently become extinct. This presentation will discuss some of the factors that are driving these widespread declines, highlight some of the most critically endangered species around the globe, and explore some of the actions that conservation biologists are taking locally and internationally to stabilize and restore turtle populations. Conservation work conducted on behalf of alligator snapping turtles in the Mississippi River drainage will serve as a case study.

PARKING WILL BE AVAILABLE IN LOT 4, SOUTH OF TEMPLE HALL