

Biomedical Engineering Wallace H. Coulter Foundation Seminar Series

FLORIDA INTERNATIONAL UNIVERSITY

Nanomedicine and Nanotoxicology: engineered nanomaterials for cancer and toxicological studies

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Monday, March 19th, 2012 LECTURE: 9:30 AM - 10:30 AM; ROOM EC 2300 Engineering Center, Florida International University 10555 WEST FLAGLER STREET MIAMI, FL 33174



<u>Abstract:</u> The interactions of nanoscale materials with life processes mainly resulted in two sciences, one is Nanomedicine, the other is Nanotoxicology, although their common bases are biological effects of nanoscale matters in vitro or in vivo. It is considered that the life process consists of a series of chemical, physical, biological processes at a nanoscale. Thus, to explore the interactions of nanoscale materials with life processes will have many challenges, a simple reason is that they are complexity sciences. In the lecture, I will focus on the nanotoxicology analyses of engineered nanomaterials and their applications for biomedical research especially cancer.

Biography: Dr. Zhao's degrees are in Chemistry (1985, Sichuan Univ.), and Chemistry / Physics (M.D.1996 & Ph.D. 1999, Tokyo, Japan). He moved to Chinese Academy of Sciences from RIKEN (Japan) as a Hundred Elite Professor in 2001. He is a founder of CAS Nanosafety Lab, and also one of the earliest scientists who proposed and studied the nanotoxicology. Prof. Zhao has published about 200 journal articles and 2 books on "Nanotoxicology" published. He has been invited and given more than 110 Invited Lectures at international/domestic conferences, universities and institutes. He was invited and serves as the Associate Editor for Biomedical Microdevices (USA), Particle & Fiber Toxicology (UK), and Journal of Nanosciences and Nanotechnology (USA), and the editorial board member for 8 other journals.