
Nanoscience and Nanotechnology – The Science & Engineering in the 21st Century

Speaker: Prof Liu Jingyue
Centre fo Nanoscience, University of Missouri-St. Louis, Missouri, USA

Venue: Blk S8, Level 3, Room 14, Executive Classroom,
Department of Chemistry, Faculty of Science, NUS

Date: 29th June 2007 (Friday)

Time: 11.00am – 12.00pm

Abstract:

Nanotechnology is the key enabling technology in the 21st century-helping existing industry to become more efficient and competitive, advancing new knowledge and emerging technologies, and developing unprecedented products and unmet medical procedures that cannot be realized with conventional sciences and technologies. Nanoscience is providing a critical bridge between the physical sciences and engineering, on the one hand, and modern molecular biology and biotechnology on the other. At the nanometer scale, all natural sciences converge and intellectual fusion becomes norm. Multidisciplinary and interdisciplinary fields are becoming the dominant research frontier, especially in the age of nanobiotechnology. Nanotechnology has the potential to help us understand and manipulate biological systems, to develop new energy resources, to provide new diagnostic tools and medical procedures, and, to a certain degree, to modify societal relations. In this presentation, I will discuss some basic concepts, recent progresses and the exciting future of nanotechnology and nanobiotechnology with specific examples.

Profile:

Prof Liu obtained his BSc degree from the Beijing University of Science & Technology in 1982 where he majored in Materials Physics. After obtaining his BSc degree, he went on to major in Condensed Matter Physics at Arizona State Univeristy where he obtained his PhD degree in 1990 under the tutelage of Regent Professor John M. Cowley.

He is currently a Professor of Physics and Chemistry and the Director for the Center for Nanscience at the Unviersity of Missouri-St. Louis. His research interests range from clusters, nanoparticles and nanostructured catalysts, surface structure, surface chemical reactions to heterogeneous catalysis and metal oxide nanostructure. He has published over 170 publications in refereed journals, books and proceedings.

For details, please contact:

Mr Leong Wai Kit, NUSNNI, Blk S13, #02-12A, 2 Science Drive 3, Singapore 117542

Tel: 6516-3980, Fax: 6779-0350, Email: nnilwk@nus.edu.sg