

**Shun Hing Distinguished Lecture Series 2007****Novel One Dimensional Nanostructures**

by

Dr. M. Meyyappan**Chief Scientist for Exploration Technology****Center for Nanotechnology****NASA Ames Research Center, CA****Date: 15 January 2007, Monday****Time: 2:00 p.m. – 3:30 p.m.****Venue: Lecture Theater, 9/F, William M.W. Mong Engg. Bld., CUHK****(light refreshment will be served after lecture on 9/F)***Abstracts**

The combination of remarkable mechanical properties and unique electronic properties of carbon nanotubes(CNTs) offers significant potential for revolutionary applications in electronics devices, computing and data storage technology, sensors, composites, storage of lithium for battery development, nanoelectromechanical systems(NEMS),and as tip in scanning probe microscopy(SPM) for imaging and nanolithography. Thus the CNT synthesis, characterization and applications touch upon all disciplines of science and engineering. This talk will provide an overview of CNT growth, and application development in many of the above areas. The ability to grow inorganic nanowires with controlled properties and vertical orientation provides another competitive avenue for some of the needs mentioned above. Our work in this direction will also be described.

Biography of Speaker

Meyya Meyyappan is Chief Scientist for Exploration at the Center for Nanotechnology, NASA Ames Research Center in Moffett Field, CA. Until June 2006, he served as the Director of the Center for Nanotechnology as well as Senior Scientist. He holds an Adjunct Professor position at the Arizona State University. He is a founding member of the Interagency Working Group on Nanotechnology(IWGN) established by the Office of Science and Technology Policy(OSTP). The IWGN is responsible for putting together the National Nanotechnology Initiative.

Dr. Meyyappan is a Fellow of the Institute of Electrical and Electronics Engineers(IEEE), the Electrochemical Society(ECS)and the California Council of Science and Technology. In addition, he is a member of the American Society of Mechanical Engineers(ASME), Materials Research Society, American Vacuum Society and American Institute of Chemical Engineers. He is the IEEE Distinguished Lecturer on Nanotechnology and ASME's Distinguished Lecturer on Nanotechnology. He is currently the President of the IEEE's Nanotechnology Council(2006-2007).

For his work and leadership in nanotechnology, he was awarded NASA's Outstanding Leadership Medal and Arthur Flemming Award by the Arthur Flemming Foundation and George Washington University. For his contributions to nanotechnology education and training, he received the 2003-2004 Engineer of the Year award by the San Francisco section of the AIAA(American Institute of Aeronautics and Astronautics). In 2004, he was honored with the President's Meritorious Award for his contributions to nanotechnology. Dr. Meyyappan has authored or co-authored over 150 articles in peer reviewed publications and made over 200 Invited/Keynote/Plenary Talks in nanotechnology subjects across the world.

******* ALL ARE WELCOME *********ENQUIRIES: SHIAE, CUHK, Tel: 3163 4351**