SEMINAR SERIES

International Institute for Carbon-Neutral Energy Research
Kyushu University

Title **Graphene vs Carbon Nanotube in Electronics**

Speaker Dr. Young Hee Lee

Professor, Department of Physics, Department of Energy Science
Center for Nanotubes and Nanostructured Composites
Sungkyunkwan University(KOREA)

Date & Time Friday, July 1, 2011 4:00p.m.

Place INAMORI Hall, Ito campus, Kyushu University

Abstract

Nanocarbons such as fullerenes, carbon nanotubes, carbon nanofibers, graphite oxides, and graphenes have been the key materials in 21th century and have led nanoscience and nanotechnology. In particular, carbon nanotubes and graphene have been intensively investigated for electronic applications. Both materials have strong potentials for transparent conducting electrodes and transistors. While their electronic properties are similar to each other, their applications are still limited by the available technologies in many cases. I will describe the progresses of carbon nanotubes and graphenes in electronics and furthermore advantages and drawbacks of both materials in electronics applications.

About the Speaker

Prof. Young Hee Lee was born in 1955 in Korea and received a bachelor's degree from Chonbuk National University (1982) and a Ph. D. from Kent State University in Ohio (1986), all in physics. His work has focused on understanding the fundamental properties of nanocarbons such as carbon nanotubes, graphenes, and graphene oxides, and their applications to various devices. His applications to devices cover field emission displays with CNTs, CNT-FET/graphene transistors, flexible transparent conducting films, supercapacitors, secondary battery, gas sensors, hydrogen storage, third generation solar cell (polymer, CNT, CNT/QD, CNT/Si nanowire/QD), and metal/CNT and LC/CNT composites.

Host: Professor Naotoshi NAKASHIMA

For registration, please visit our website:http://i2cner.kyushu-u.ac.jp/

CONTACT：Research Support and International Affairs division
International Institute for Carbon-Neutral Energy Research
TEL:092-802-6934