
The 113th iCeMS SEMINAR

Tue 31 July 2012
11:00-12:00

**Chemistry on Carbon Nanotubes for Materials
Science and Biomedical Applications**

Lecturer: Prof. Alberto Bianco

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Venue: 2nd floor Seminar Room (#A207)
iCeMS Main Building (#71), Kyoto University

The combination of the mechanical, thermal, chemical and electronic properties makes carbon nanotubes unique materials in nanoscience and nanotechnology. In addition, they are emerging as a new material for wide range of applications in the biomedical domain and in nanomedicine. One major concern related to the extreme difficulty to manipulate this material due to the insolubility in all types of solvents, particularly in aqueous solutions, has been solved. In this presentation we will describe the functionalization and biomedical applications of carbon nanotubes loaded with different therapeutic agents. We will also address the critical issue of their potential toxic effects and their biodegradability. Finally, we will discuss our recent development of nucleobase-modified carbon nanotubes for heterogeneous catalysis.

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Hosted by: iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University
Co-hosted by: Center for Frontier Medicine, Global COE Program, Kyoto University

