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RESEARCH CONFERENCES

ESF Conference

Nanocarbons 2011

Carbon Nanotubes and Related Materials: From Physico-Chemical Properties to Biological and Environmental Effects

Hotel Villa del Mare, Acquafredda di Maratea • Italy

6-11 September 2011

Nanomaterials have specific properties mainly governed by quantum physics or surface effects, and significantly different from those of macroscopic objects. Emblematic nanomaterials are carbon nanotubes, which have generated a worldwide, and highly competitive, scientific research activity. The general aim of this conference is, thanks to its pluridisciplinary approach, to give the different actors of carbon nanotubes (CNT) research (physicists, chemists, biologists) the proper level of knowledge required to discuss with the other participants and understand each other correctly. The conference will therefore propose courses accessible to scientists of different fields, as well as more specialized courses in each domain of interest, including the most recent advances on the subject. The program will focus on four general topics: synthesis/characterization of CNT, CNT chemistry, health effects of CNT, and environmental effects of CNT. This conference should allow scientists from the different fields to acquire, increase and share their specific knowledge, and to make their own research understandable to scientists from other disciplines.

Support grants will be available for students, postdocs and early stage researchers to cover the conference fee and possibly part of the travel costs.

Chair:
Sophie Lanone, INSERM University Paris 12, FR

Co-Chairs:
Dr. Pascale Launois, CNRS-University Paris 11, FR
Professor Philippe Lambin, University of Namur, BE
Professor Stephen Klaine, Clemson University, US

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Invited Speakers and Lecture Topics Will Include

General introduction on nanocarbons (nanotubes and graphene) **Chris Ewels** - Institut des Matériaux Jean Rouxel, FR • ***Physico-chemical characterization of CNT*** **Mathieu Kociak** - Univ. Paris Sud, FR • ***Optical microscopy/biology*** **Laurent Cognet** - Université Bordeaux 1, CNRS, FR • ***Chemistry of CNT*** **Davide Bonifazi** - FUNDP, BE • ***Chemistry of catalyst nanoparticles*** **Mélanie Auffan** - CEREGE Europole Méditerranéen de l'Arbois, FR • ***Sorting CNT/surface chemistry*** **Michael Strano** - MIT, US • ***Surface modification, characterization (from the physico-chemical point of view)*** **Dirk Guldi** - Friedrich-Alexander-Universität Erlangen-Nürnberg, DE • ***Imogolite nanotubes (synthesis and properties)*** **Antoine Thill** - CEA Saclay, FR • ***Synthesis and cutting graphene nanoribbons: toward physical applications*** **Laszlo P. Biro** - Research Institute for Technical Physics & Materials Science, HU • ***General lecture on mammals toxicity*** **Craig Poland** - Institute of Occupational Medicine, UK • ***Health effects of CNT (mesothelioma), determinants - what we know, what we don't know*** **Alison Elder** - University of Rochester, US • ***Uptake of carbon materials by inhalation or guts - devenir (food chain transfer)*** **Alison Elder** - University of Rochester, US • ***Occupational exposure*** **Vince Castranova** - NIOSH, US • ***General lecture on environmental toxicity*** **Aaron Roberts** - University of North Texas, US • ***Exposure in terrestrial and aquatic biota*** **Teresa Fernandes** - Edinburgh Napier University, US • ***Characterization of CNT in environmental media, stability*** **Emmanuel Flahaut** - Université Paul Sabatier, FR • ***Life cycle assessment*** **Roland Hischier** - EMPA, CH • ***Round Table: CNT/Asbestos connexion*** **Alison Elder** - University of Rochester, US, **Craig Poland** - Institute of Occupational Medicine, UK, **Vince Castranova** - NIOSH, US, **Agnes Kane** - Brown University, US, **Dominique Lison** - TOXI, BE

Application Form & Programme available from
www.esf.org/conferences/11363

Closing Date for Application 29 May 2011

European Science Foundation I Research Conferences Unit
149 avenue Louise I Box 14 I Brussels I Belgium
Tel: + 32 (0)2 533 2020 I Fax: +32 (0)2 538 8486
Email: conferences@esf.org I www.esf.org/conferences