FEATURED NANOICT SESSION CELEBRATED AT THE TRENDS IN NANOTECHNOLOGY CONFERENCE, TNT2008

The Ninth edition of the Trends in Nanotechnology Conference (September 01-05, 2008) held in Oviedo, Spain, presented a broad range of current research in Nanoscience and Nanotechnology as well as related policies (European Commission, etc.) or other kind of initiatives (iNANO, CIC nanoGUNE, GDR-E, etc.). TNT events have demonstrated to be particularly effective in transmitting information and establishing contacts among workers in this field.

The Phantoms Foundation (Spain), main organizer of the TNT Conference, coordinates the "Nanoscale ICT Devices and Systems Coordination Action" funded under the Seventh EU Framework Programme, project which aims to reinforce and support the whole European Research Community in "ICT nanoscale devices". Within this objective, TNT2008 held, among others, a NanoICT session.

David Guedj (EU/ICT-FET-nanoICT, Belgium), Chairman of the session, introduced the EU nanoscale devices and system proactive initiative as well as a general scientific overview of the recently funded nanoICT projects and the state of the art present/future in this field. Results of EU funded projects within this initiative, such as NODE, Pico-Inside, SINGLE, or CHIMONO, were also presented.

The session focused on unconventional solutions to increase computing performance, functionality or communication speed, or to reduce cost, size and power consumption of ICT components beyond the expected limits of CMOS technology such as:

- Manipulation of single molecules with STM
- Current-driven domain wall dynamics in magnetic multilayer nanostripes
- Modeling of electronic and transport properties of semiconductor nanowires
- Single molecule electron transfer in solid state devices
- Molecular cooling and control with the innovative technological developments brought forward by "AtomChips" as well as nano-optics (Nano optics for molecules on Chips)

In addition, international research such as the Australian advances on engineered materials for atomic-scale architectures for computation, were presented during this session.

More info:

http://www.tntconf.org/2008/index.php?conf=08 http://www.nanoict.org

Questions regarding the nanoICT project or the TNT Conference, please contact:

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About Phantoms Foundation: This Non-Profit organisation was established on November 26, 2002 (Madrid, Spain) in order to provide high level Management profile to scientific projects. This association plays an important role in the 6th and 7th Framework Programmes as a platform for European funded projects (NAPA, Pico-Inside, nanoICT) to spread excellence amongst a wider audience, and to help in forming new networks.

This Association is now a key actor in structuring and fostering European Excellence in "Nanoscience and Nanotechnology", having a world leading position in organising conferences, training and dissemination activities in this field.

Dr. Werner Steinhoegl (Project officer): Werner.Steinhoegl(at)ec.europa.eu ICT Future and Emerging Technologies (FET) – NanoICT Proactive Initiative European Commission

DG Information Society and Media, Office BU-25 5/38, B-1049 Brussels WEB site: http://cordis.europa.eu/fp7/ict/fet-proactive/nanoict_en.html