Workshop on

'Nanotechnology for electronic and photonic applications'

Date of the Workshop: September 18, 2009, Athens - during ESSDERC-ESSCIRC'2009

<u>Organized by</u>: Dimitris Tsoukalas (NTUA) and Panos Dimitrakis (NCSR Demokritos) and supported by EU Marie-Curie project NANOSOURCE.

Abstract:

The workshop will focus on the latest experimental results regarding the applications 0-D and 1-D material structures like nanoparticles and nanotubes in the field of electronics and photonics. New techniques for the fabrication of innovative (opto-) electronic devices based on the above nanostructured materials will be presented, also.

Program:

9.00 - 9.10 Introduction

9.10 – 9.45 "Si nanostructures for solar and photonic applications", Fabrice Gourbilleau, UMR-CNRS, France

9.45 – 10.20 "Silicon nanophotonics: Present status and some perspectives", Leonid Khriachtchev, University of Helsinki, Finland

10.20 -10.50 Coffee

10.50 – 11.25 "Hybrid optoelectronics for light harvesting and light emitting applications", Pavlos Lagoudakis, University of Southampton, UK

11.25 – 12.00 "TEM-based quantitative analysis of nanoparticles for application in microelectronics", Sylvie Schamm, CEMES-CNRS, France

12.00- 13.30 Lunch

13.30 – 14.05 "Deposition Fabrication of nanoparticles in vacuum", Alistair Kean, Mantis, UK

14.05 – 14.40 "Soluble Functionalized Carbon Nanohorns in Donor-Acceptor Nanoensembles", Nikos Tagmatarchis, NHRF, Greece

14.40 – 15.15 "Electrically Charging Nano-particles and Small Molelcules", Shashi Paul, de Monfort University, UK

15.15 – 15.50 "Silicon nanowire non-volatile memory cells: Progress and prospects", Dimitris Ioannou, George Mason University, USA