



Workshop 1:
Identification of the Main Requirements for Future ICT Devices
20-21 January 2011, Parque de las Ciencias, Granada, Spain

Thursday 20 January 2011

12.00-13.30: Registration

13.30-14.15 Welcome Cocktail and Introduction

Francisco Gamiz, Universidad de Granada, and *Clivia M Sotomayor Torres*, Catalan Institute of Nanotechnology, Barcelona, and coordinator of NANO-TEC

14.15-16.05 Sessions 1 and 2. Chairperson Roger de Keersmaecker, Illinois Manufacturing Extension Center, Leuven.

14.15-15.10 Session 1 – Nanoelectronics Trends for the Next Decade

Jeffrey Welser, International Business Machines, and Semiconductor Research Corporation, San José.

Discussant: Clivia M Sotomayor Torres, ICN, Barcelona. Rapporteur: Mart Graef, Delft University of Technology.

Group Discussion.

15.10-16.05 Session 2 – Carbon-based Electronics: Graphene

Jeong-Sun Moon, HRL Laboratories LLC, Malibu.

Discussant: Jouni Ahopelto, VTT Technical Research Centre of Finland, Espoo.

Rapporteur: Adrian Ionescu, Ecole Polytechnique Federale de Lausanne.

Group Discussion.

16.05-16.30 Coffee Break

16.30-16.40 Information on ENI2, a research infrastructure for Nanoelectronics,

Livio Baldi, Numonyx-Micron Technology Inc., Milano.

16.40-18.30 Sessions 3 and 4. Chairperson Livio Baldi, Numonyx-Micron Technology Inc., Milano

16.40-17.35 Session 3 – Analog/Mixed-Signal (AMS) Design

Helmut Graeb, München University of Technology.

Discussant: Michel Brillouët, Atomic Energy Commission, Electronics and Information Technology Laboratory, Grenoble.

Rapporteur: Anne Marie Gue, LAAS-Centre National de la Recherche Scientifique, Paris.

Group Discussion.

17.35-18.30 Session 4 - Silicon-Based Electronics

Michel Brillouët, CEA-LETI, Grenoble.

Discussant: Wiesław Kuźmicz, Warsaw University of Technology. Rapporteur: Androula Nassiopoulou, National Centre for Scientific Research Demokritos, Athens.

Group Discussion.



- 18.30-18.50** Wrap up of session 1 to 4 (Rapporteurs: 5 minutes per session)
- 18.50-19.20** Discussion on methodology for Workshops Nr 2 and 3 (Jouni Ahopelto, VTT and Mart Graef, TU Delft).
- 21.00** Workshop Dinner:
Hotel M.A. Nazaries, Calle Maestro Montero 12, Granada.

Friday 21 January 2011

- 09.00-09.10** European Commission Perspective on Nanoelectronics,
Dirk Beernaert, European Commission
- 09.10-11.00** Sessions 5 and 6. Chairperson: Michel Brillouet, CEA-LETI, Grenoble.
- 09.10-10.05** Session 5 – Compound Semiconductor Based Micro (Nano) - Electronics
William Stanchina, University of Pittsburg.
Discussant: Thomas Swahn, Chalmers University of Technology, Gothenburg.
Rapporteur: Alain Cappy, LAAS-CNRS, Paris.
Group discussion.
- 10.05-11.00** Session 6 – Spintronics and Magneto Electronics, an Overview
Sergio Valenzuela, Catalan Institute for Nanotechnology, Barcelona.
Discussant: Paolo Lugli, Technische Universität München. Rapporteur: Christian Pithan, Forschungszentrum Juelich GmbH.
Group discussion.
- 11.00-11.30** Coffee break
- 11.30-13.20** Sessions 7 and 8. Chairperson: Piotr Grabiec, Institute of Electron Technology, Warsaw.
- 11.30-12.25** Session 7 – The Bridge to Design
Paolo Lugli, Technische Universität München.
Discussant: Danilo Demarchi, Politechnic University of Turin. Rapporteur: Volker Schoeber, Edacentrum GmbH, Hannover.
Group discussion.
- 12.25-13.20** Session 8 – Molecular Electronics/Quantum Computers Computing towards 2020
Göran Wendin, Chalmers University of Technology, Gothenburg.
Discussant: Douglas Paul, University of Glasgow. Rapporteur: Dag Winkler, Chalmers University of Technology, Gothenburg.
Group discussion.
- 13.20-13.40** Wrap up (of session 5 to 8 (Rapporteurs: 5 minutes per session)
- 13.40-14.00** Conclusions of Workshop 1 and Next Steps. Closing remarks and announcement of Workshop 2
- 14.00** Lunch and departure