



# HIGH LEVEL CONFERENCE ON NANOTECHNOLOGIES

20-21 NOVEMBER 2007

Braga, Portugal

## Draft Agenda

<b>19<sup>th</sup> November 2007</b>		
<u>Parallel Sessions</u>		
National ICT Directors Forum	Microfluidics Workshop - Nexus	Meeting ETP NanoMedicine
ICT Committee Meeting	Convergence of Nano-Bio systems- HEALTHY AIMS open workshop	ARTEMIS Presidium Meeting
7th Meeting of Program Committee for Theme 4 "NMP" of FP7	HIPEAC – NoE. Computing Systems Workshop	Meeting of EPoSS Steering Group

## **20<sup>th</sup> November 2007**

### Morning: Plenary: Opening Speeches

Chair: **João Sentieiro**, President of the Portuguese Science and Technology Foundation FCT

#### **9:00 Special Address from the EC:**

- **José Manuel Silva Rodriguez**, Director-General Research, European Commission
- **Peter Zangl**, Deputy Director-General Information Society and Media, European Commission

**9:25 Keynote speech: Paul Seidler**, Manager of Science and Technology, IBM Zurich Research Laboratory

"Nanotechnology: An IT Industry Perspective"

**9:50 Keynote speech: J.K. Heinrich Hörber**, HH Wills Physics Laboratory, Bristol University

"Scanning Probe Techniques: keys to the nano-world"

**10:15 Infrastructure activities in FP7, Hervé Péro**, Head of Unit Research Infrastructure, DG RTD

**10:30 The lead market initiative, Pierre Vigier**, Deputy Head of Unit Innovation Policy, DG Enterprise

**10:45 – 11:15 Coffee Break**

<u>Parallel Session 1</u> <b>Nanoelectronics</b>		<u>Parallel Session 2</u> <b>Computing in the Nano-era</b>		<u>Parallel Session 3</u> <b>Nanomedicine</b>	
<b>Chair: Norbert Lehner</b> , Infineon Technologies AG. Chairman of the Support Group of ENIAC. <b>Co-chair: Dirk Beernaert</b> , EC Head of Unit "Nanoelectronics"		<b>Chair: Yrjo Neuvo</b> , President of ARTEMISIA <b>Co-chair: Konstantinos Glinos</b> , EC Head of Unit "Embedded Systems"		<b>Chair: Paul Smit</b> , Senior Vice President Philips Med <b>Co-Chair: Uta Faure</b> , EC "Nano and Converging Sciences and Technologies"	
<b>11:15</b>	"The impact of nanoelectronics and the role of the European Technology Platform". <b>Norbert Lehner</b> , Infineon Technologies AG, Germany	"The Challenges for Computing in the Nano-Era: The HIPEAC Roadmap". <b>Koen De Bosschere</b> , Ghent University, Belgium	"Surface-supported cell programming - a new dimension to develop nanomedicine and cell therapy". <b>Günter Fuhr</b> , Fraunhofer-Institut für Biomedizinische Technik (IBMT), St. Ingbert, Germany		
<b>11:30</b>	"The evolving market & business challenges for nanoelectronics: opportunities / threats for Europe"(To be defined)	"European Industry Perspective". <b>Marco Cornero</b> , STMicroelectronics, France	"Targeted nanomedicines: from bench to bedside". <b>Gert Storm</b> , Utrecht Institute for Pharmaceutical Sciences, Department of Pharmaceutics, Utrecht University, The Netherlands		
<b>11:45</b>	"The Scientific and research Challenge". <b>Mihail Adrian Ionescu</b> , École Polytechnique Fédérale de Lausanne (EPFL), Switzerland.	"MPSOC challenges" <b>Tiberiu Seceleanu</b> , ABB Corporate Research, Sweden	"Nanomedicine: The strength of the very small", <b>Mário Barbosa</b> , Institute for Biomedical Engineering (INEB), University of Porto, Portugal		
<b>12:00</b>	"Spintronics: from memory and data storage to new biomedical applications". <b>Paulo Freitas</b> , INESC-MN and Institute of Nanotecnologies\ (IN), Portugal	"Reconfigurable Computing: Challenges" <b>João Cardoso/ Pedro Diniz</b> , INESC-ID, Portugal	" Photonics for cell manipulation" <b>Karin Schütze</b> , Chief Innovation Officer, P.A.L.M Microlaser Technologies GmbH, Germany		
<b>12:15</b>	"Implementing the Framework Program and the ENIAC SRA: Results of call 1 and future directions". <b>Dirk Beernaert &amp; Wolfgang Boch</b> , European Commission.	"Molecular modelling at the interface with the new technologies". <b>Maria João Ramos</b> , REQUIMTE and Chemistry Department Faculdade de Ciências da Universidade do Porto, Portugal	"Nanomedicine and cardiovascular implant technology applications". <b>Renzo Dal Molin</b> , ELA Medical S.A.S, France		
<b>12:30</b>	Discussion	"Computing Systems in FP7: Call 1 results and future prospects". <b>Panagiotis Tsarchopoulos</b> , Embedded Systems Unit. European Commission	Discussion		
		<b>12:45</b> Discussion			

**13:00 - 14:30 Exhibitions & Poster Sessions**

**13:30 - 14:30 Lunch**

**Afternoon Plenary: The implementation of the policies - Success cases of  
Research Institutes in Europe**

**Chair: Herbert von Bose, EC DG RTD, Director "Industrial Technologies"**

- 14:30 Keynote speech on the INL – International Iberian Nanotechnology Laboratory,**  
**José Rivas, Director of the INL.**
- 15:00 *Strategies for Innovation,***  
**Herc Neves, IMEC, Interuniversitair Micro Elektronica Centrum vzw, Belgium.**
- 15:15 *Adaptation to new Technologies,***  
**Emilio Lora-Tamayo, CNM, Centre Nacional de Microelectronica, Spain.**
- 15:30 *International Alliances,***  
**Rolf Aschenbrenner, IZM Fraunhofer – Gesellschaft, Research Institute on Microelectronics,**  
**Germany.**
- 15:45 *Cooperation with Industry,***  
**Jean-Charles Guibert. MINATEC, Centre for Innovation In Micro & Nanotechnologies,**  
**France.**
- 16:00 *Nanobioanalytics: from Research to Application,***  
**Harald Fuchs, WestfälischeWilhelms-Universität Münster & Center for Nanotechnology**  
**(CeNTech), Germany.**
- 16:15 *High-Performance and Embedded Computing in Europe,***  
**Mateo Valero Barcelona Super Computing Center, Spain.**
- 16:30 *Research transfer to create business start-ups,***  
**Georges Kotrotsios, CSEM, Centre Suisse d'Electronique et Microtechnique, Switzerland.**
- 16:45 – 17:00 Coffee Break**

## Evening Plenary: European Technology Platforms

**Chair: Rosalie Zobel, EC DG INFSO, Director "Components and Systems"**

- 17:00 ETP Nanomedicine,**  
**Paul Smit,** Senior Vice President Philips Med, chairman ETP Nanomedicine
- 17:15 ETP EPoSS,**  
**Klaus Schymanietz,** EPoSS Chairman, Chief Technical Officer of Defence & Security, EADS Deutschland GmbH
- 17:30 ETP Photonics21,**  
**Gerd Litfin,** Chairman of the Board, LINOS GROUP
- 17:45 ETP Textile,**  
**Lutz Walter,** R&D Manager of Euratex; Textile ETP Governing Council Secretary.  
"Role of nanotechnology in the new generation of smart and functional textile materials"
- 18:00 ETP Manufuture/MINAM,**  
**Paolo Matteazzi,** President MBN Nanomaterialia SpA (Italy); MINAM Industrial Management Board Chairperson.
- 18:15 ETP EuMaT,**  
**Giancarlo Grasso,** Senior Adviser of Finmeccanica SpA
- 18:30 – 18:50: Round Table Discussion with ETP's**  
(With the participation of Norbert Lehner, Infineon Technologies AG. Chairman of the Support Group of ENIAC and ARTEMIS)

## Dinner offered by the Portuguese Presidency

**20:30, In the Colunata of Bom Jesus Hotels**

21<sup>st</sup> November 2007

Morning Plenary: The political initiative

8h45- 10h00

**Viviane Reding**, Commissioner of Information Society and Media

**Janez Potočnik** Commissioner of Science and Research

**Mercedes Cabrera Calvo-Sotelo**, Minister of Education and Science of Spain

**José Mariano Gago**, Minister of Science, Technology and Higher Education of Portugal

**Joint Technology Initiative on Nanoelectronics, ENIAC.**

**Wolfgang Ziebart**, CEO Infineon Technologies AG.

**Joint Technology Initiative on Embedded Systems, ARTEMIS.**

**Yrjo Neuvo**, President of ARTEMISIA, Vice-Chairman, Board of Directors of Vaisala Group,  
Board of Directors, METSO Co.

10:00 – 10:30 Coffee Break

*(10:00 – 11:00 Media event with Ministers, Commissioners and ETP VIPs)*

<u>Parallel Session 4</u>		<u>Parallel Session 5</u>	<u>Parallel Session 6</u>
<b>Food, Environment and Energy</b>		<b>Organic Electronics and Micro Nano Systems</b>	<b>Nano manufacturing (including Textiles)</b>
<b>Chair: Carles Cané</b> , Centre Nacional de Microelectronica (CNM), Barcelona		<b>Chair: Marc Boukerche</b> , EC "Microsystems"	<b>Chair: Renzo Tomellini</b> , EC Head of Unit "Nano- and Converging Sciences and Technologies"
<b>Co-Chair: Antonio di Giulio</b> , EC Head of Unit "Biotechnologies, Agriculture, Food"			<b>Co-chair: Hans Pedersen</b> , EC "New Generation Products"
<b>10:30</b>	GoodFood: "Integration of Ultra Low Power Sensors in RFID Systems: A Flexible Tag Microlab for Logistics Applications". <b>Thomas Becker</b> , EADS Innovation Works, Germany	"Si-based DNA nanosensing". <b>Elvira Fortunato</b> , CENIMAT, Universidade Nova de Lisboa, and Institute of Nanostructures, Nanomodelling and Nanofabrication (I3N), Portugal	"Smart Fabric-Interactive Textile: from research to business opportunities". <b>Camino Giovanni</b> , Proplast, Italy

<b>10:50</b>	"Potential applications of nanotechnology in bioprocessing and food processing & packaging". <b>Maria Smolander</b> , VTT Technical Research Center, Finland	"Advanced implant technologies and systems". <b>Diana Hodgins</b> , European Technology for Business Ltd., United Kingdom	"Micro-nano system for automatic handling of nano-objects". <b>Albert Sill</b> , OFFIS – Institute for Information Technology, Germany
<b>11:10</b>	"Nanotechnologies for food production: small technologies, big implications". <b>Remko M. Boom</b> , Wageningen University, The Netherlands	"Flexible displays for novel applications", <b>Eliav Haskal</b> , Philips Research, The Netherlands	Leading R&D towards the e-textile vision: converging smart materials, biochemistry and data processing towards personal wearable solutions, <b>Danilo De Rossi</b> , Pisa University, Italy
<b>11:30</b>	"Consumer safety and regulatory issues in relation to the use of nanotechnologies in the food sector". <b>Qasim Chaudhry</b> , Central Science Laboratory, UK	"Organic Electronics, Europe Leads the Way". <b>Ricardo Garcia</b> NAIMO Project. Instituto de Microelectrónica de Madrid – Centro Nacional de Microelectronica, Spain	"Micro- and nanotechnologies applications for automotive". <b>Vito Lambertini</b> , CRF – Centro Ricerche FIAT, Italy
<b>11:50</b>	"Electrocatalysts and the multidisciplinary approach combining theoretical design combinatorial methods and development of MEAs". <b>Ib Chorkendorff</b> Director of CINF. Danish National Research Foundation's. Technical University of Denmark	"From Micro/Nano Systems Technologies to Smart Systems Integration". <b>Reinhard Neul</b> , Robert Bosch GmbH, Germany	"Biomimetic Approaches and Nano-tools in the Context of Tissue Engineering and Regenerative Medicine". <b>Rui Reis</b> 3Bs Group and Institute for Biotechnology and Bioengineering, Portugal
<b>12:10</b>	"Nanomaterials for Energy Systems & Optoelectronics" <b>João Rocha</b> , CICECO- Centre for Research in Ceramics and Composite Materials, Aveiro, Portugal	"Nanotechnologies enabling the printing of electronics and e-paper display application". <b>Henning Sirringhaus</b> . University of Cambridge, United Kingdom	
<b>12:30</b>	Discussion	Discussion	Discussion

## Final Plenary and Adjourn

**Chair: Luis Magalhães**, President of Knowledge Society Agency (UMIC), Portugal

**12:45 -13:30** Reports on the Parallel Sessions.

Final messages from

- Organizers
- Herbert von Bose, Director "Industrial Technologies" (EC DG RTD)
- Dirk Beernaert, EC Head of Unit "Nanoelectronics"