











Rome, March 31 - April 3, 2009

Conference Program

Registration desk opening: 08.30 in the morning (every day)

March 31st, Morning

Conference Opening (09.15-11.15)

Chairman: Giancarlo Righini, Institute of Applied Physics - National Research Council

Luciano Maiani.

National Research Council President

Renato Ugo,

AIRI/Nanotec IT President

Luigi Rossi Luciani,

Veneto Nanotech President

Luigi Mastrobuono,

Head of "Dipartimento per l'Impresa e l'Internazionalizzazione", Ministry for the Economic Development

Giuseppe Ruocco

General Director "D.G. Farmaci e Dispositivi medici, Ministero del lavoro, della Salute e delle Politiche Sociali"

Umberto Croppi,

Assessore Comune di Roma - Cultural Policies Department

Opening lecture

Roberto Cingolani,

Scientific Director, Italian Institute of Technology (IIT) Nanotechnology in Human Systems and Humanoids

Coffee break

Nanotechnology governance (11.45 – 13.00)

Chairman: Elvio Mantovani, AIRI/Nanotec IT

Philippe Galiay,

Unit L3, Governance and Ethics, European Commission

A Code of conduct for the responsible development of nanosciences and nanotechnologies in Europe

Rob Aitken,

Director, Institute of Occupational M edicine, UK Potential risks of nanotechnology and their management

LUNCH and Poster session - March 31st (13.00-14.00)

www.nanotec2009.it



17.20

Discussion and final remarks







March 31st, Afternoon (14.00 - 18.30)

SUSTAINABLE DEVELOPMENT

Nanotechnology to develop safer and frendlier energy and transport systems and environmental protection

Chairman: Ugo Romano, ENI S.p.A.			
14.00	Jorgos Achtsivassilis	Lux Research	Nanotechnology: profitable innovation in energy and environmental resource management
14.30	Enrico Drioli	Institute on Membrane Technology (ITM-CNR)	Nanostructured membranes for water recovery and desalination
14.50	Roberto Fusco	ENI S.pA - Istituto ENI Donegani	Nanostructured materials for solar energy capture and storage
15.10	Michele Manca	National Nanotechnology Labs of CNR-INFM	Novel nano-materials for dye sensitized solar cells
15.30- 16.00	Coffee break		
16.00	Mauro Brignone	Centro Ricerche FIAT	Nanostructured thermoelectric materials for automotive application
16.20	Gabriele Centi	INSTM-Messina and CASPE (INSTM Laboratory of Catalysis for Sustainable Production and Energy)	Nanotech catalytic materials to address energy and climate change challenges
16.40	Giovanni Principi	Dep. of Mechanical Engineering and CNISM, University of Padova	Recent achievements on nanomaterials for solid state hydrogen storage
17.00	Maria Letizia. Terranova	MINASlab - University of Roma "Tor Vergata"	Carbon-based nanocomposites as innovative systems for hydrogen storage under standard conditions

POSTER SESSION (17.30-18.30)

Governance and Sustainable development



12.30

Discussion and final remarks







April 1st, Morning (9.00 - 13.00)

HEALTH & MEDICAL DEVICES

Nanomedicine for Regenerative Medicine, Diagnostic and Drug Delivery

<u>Chairman</u> : Roberto Gradnik, Assobiotec President- National Association for Biotechnology Development - Senior Executive Vice President Europe Merck Serono International			
9.10	C. James Kirkpatrick	RepairLab, Institute of Pathology, Johannes Gutenberg University	Nanotechnologies for tissue engineering and regenerative medicine
9.40	Elisa Figallo	Fidia Advanced Biopolymers	Hyaluronan based biomaterials in regenerative medicine
10.00	Alessandro Maiocchi	Bracco Imaging spa	In vivo Magnetic Resonance molecular imaging applications with metal containing nanosized systems
10.20	Giuseppe Miserocchi	Dep. of Experimental Medicine, University of Milano - Bicocca	Recent advances In Nanomedicine
10.40- 11.10	Coffee break		
11.10	Barbara Troian	BioNanoLab, A.P.E. Research	Scanning Probe Microscopy in Nanomedicine
11.30	Agnese Molinari	Dep.of Technology and Health, Istituto Superiore di Sanità	Assessment of a New Transfection Strategy Using Cationic Liposomes for Photodynamic Therapy of Malignant Gliomas
11.50	Elena Ghedini	Dep. of Chemistry, University of Venice, INSTM Consortium	Nanoporous carriers for the controlled release of metoprolol
12.10	Daniele Pressato	Finceramica	Tridimensional nanostructured scaffolds for treatment of musculoskeletal system pathologies

LUNCH and Poster session (12.40-14.00)









April 1st, Afternoon (14.00 - 18.30)

nanotechnologies in Terahertz

for security applications

Metal oxide nanowires gas sensors

applications

ICT – ELECTRONICS - SECURITY

Nanotechnology for electronic components and systems

Photonics and Nanotechnology (CNR-IFN)			
14.00	Renato Bozio	University of Padova, INSTM Consortium	Photonics and plasmonic for nanotechnology and convergent technologies
14.20	Fabio Antonio Bovino	Elsag Datamat	Optical logic functions with nonlinear gallium nitride nanoslab
14.40	Faustino Martelli	TASC National Laboratory of CNR-INFM	Semiconductor nanowires for next- generation electronic and optoelectronic devices
15.00	Marco Ferrera	STMicroelectronics	Technological development of MEMS/NEMS and the role of STMicroelectronics
15.20- 15.50	Coffee break		
15.50	Arnaldo D'Amico	University of Roma "Tor Vergata"	Nanosensors and security
40.40	0		A multiscale approach for

Chairman: Florestano Evangelisti, University of Roma 3 and Director of CNR-Institute of

16.50 Discussion and final remarks

Andrea Ponzoni

Carlo Falessi

16.10

16.30

POSTER SESSION (17.00-18.30)

Selex Sistemi Integrati

SENSOR Lab of CNR-

INFM and University of

Brescia

Health and Medical Devices - ICT, Electronics and Security









April 2st, Morning (9.30 - 12.30)

MADE IN ITALY

Nanotechnology to support National leading hedge sectors and reshape traditional productions

Chairm	<u>Chairman</u> : Nicola Trevisan, Veneto Nanotech		
9.30	Amedeo Visconti	Ferrari SpA	Nanotechnology in Ferrari: applications in F1 and perspectives for GT cars
9.50	Giovanni Baldi	CERICOL - Centro Ricerche Colorobbia	Development of nanostructured surfaces for the construction sector: assessment of pollution decrease by means of a gas photoreactor
10.10	Arianna Lo Presti	Mapei SpA. R & D Central Laboratory	Cement - based materials: the control of the nanostructure
10.30	Tiziano Manfredini	University of Modena and Reggio Emilia and INSTM Consortium	Nanotechnologies for traditional ceramics of the 3rd millenium
10.50	Andrea Pucci	Dep.of Chemistry and Industrial Chemistry, University of Pisa	Smart polymer nanomaterials for food packaging traceability
11.10- 11.40	Coffee break		
11.40	Michele Modesti	Dep. of Chemical Process Engineering, University of Padova	Improving shelf life of PET nanocomposite bottles for food packaging: from lab trials to industrial production
12.00	Alessandro Patelli	CIVEN	Embedding nanostructures: improved mechanical/functional properties of PECVD coatings
12.20	Discussion and fina	l remarks	

LUNCH and Poster session (12.30-13.40)









April 2st, Afternoon (13.40 - 18.30)

MADE IN ITALY - CULTURAL HERITAGE

Nanotechnology and innovative technologies to preserve and protect the cultural heritage

<u>Chairm</u>	<u>Chairman:</u> Luigi Dei, University of Florence, Dep. Of Chemistry		
13.40	Piero Baglioni	Dept. of Chemistry, University of Florence and CSGI Consortium	Nanoscience for cultural heritage conservation
14.00	Antonio Sgamellotti	Dep. of Chemistry, University of Perugia	Nanotechnology in cultural heritage: from renaissance ceramics to advanced diagnostics
14.20	Gabriel Maria Ingo	Institute of Molecular Science and Technologies (ISMN-CNR)	Aternative materials for protecting Cu- and Ag-based archaeological artefacts
14.40	Enrico Ciliberto	Dep. of Chemical Sciences, University of Catania	Nanoparticles of Sr(OH)2 in Consolidation of Natural and Artificial Stones
15.00	Gian Luca Guerrini	Italcementi	Photocatalytic cement-based materials for the "green construction"

Coffee break (15.30-16.00)

16.00 - ROUND TABLE

<u>Chairman:</u> Mauro Matteini, CNR ICVBC (Institute for the Conservation and Promotion of Cultural Heritage)		
Maria Mautone	Dep. of Cultural Heritage - National Reearch Council (CNR)	
Pietro Alessandro Vigato	Institute of Inorganic Chemistry and Surfaces (ICIS/CNR)	
Caterina Bon Valsassina	Istituto Superiore per la Conservazione ed il Restauro	
Leonardo Borgioli	CTS s.r.l.	
Lorenzo Appolonia	Soprintendenza di Aosta	
Andrea Granelli	Kanso Rome	
Bruno Brunetti	Dep. of Chemistry, University of Perugia	

POSTER SESSION APRIL 2nd (17.15-18.30)

Made in Italy, Cultural Heritage

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April 3rd, Morning (8.45 - 13.00)

Networking Day

Presentations on nanotechnology activities from representatives of the USA, China, Japan and Italy delegations

Introduction and opening remarks	AIRI/Nanotec IT, Italian Institute for Foreign Trade (ICE)
Alexei Andreev	Harris & Harris Group Inc, USA
Greg Book	Nanotechnology Research Center (NRC) at Georgia Tech University, USA
W. Richard Chung	San Josè State University
John Fortner	Rice University –Center for Biological and Environmental Nanotechnology, USA
G.P. Li	University of California, Irvine
Mr. Charlie Chow	Nano-Group Holdings Ltd., China
Mr. Shen Jun	Centre of Nano-Science & Technology, Tongji University, China
Kimi Koyanagi	Nagano Techno Foundation, Japan
Dr. Hiroshi Yanazawa	MEMS-Core, Japan
Giuseppina Padeletti	National Research Council Department of Molecular Design Italy
Antonella Tajani	National Research Council Department of Materials & Devices, Italy
Diego Basset	Nanofab, Italy

LUNCH (13.00-14.00)

April 3rd, Afternoon (14.00 - 17.00)

Networking Day: one to one meeting with the delegates

More information: http://www.nanotec2009.it/lta/Networking-day/Networking-day-2.html

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