



# 10<sup>th</sup> International Conference on Nanosciences & Nanotechnologies – NN13

Porto Palace Conference Centre & Hotel, 9 - 12 July 2013  
Thessaloniki, Greece

## PROGRAM

Tuesday 9 July		Porto Palace Conference Centre & Hotel	
08:00 – All Day	<b>Registration to NN13</b>		
	<b>Keynote Session I (All Workshops of NN13)</b>		
09:00– 09:15	<b>'WELCOME &amp; OPENING REMARKS'</b> <b><u>Stergios Logothetidis</u></b> <b>NN13 Chairman</b> <i>Room:</i>		
09:15 – 09:45 Keynote Talk	<b>TBA</b> S. Ravi P. Silva <i>Nano-Electronics Centre, Advanced Technology Institute, Uni of Surrey, UK</i>		
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 1 - Wafer based PV cells</b> <i>Chair: Bertrand Fillon</i> <i>Room:</i>		<b>Parallel Session</b> <b>W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: NanoFabrication I</b> <i>Chair:</i> <i>Room:</i>
09:45-10:00	<i>Opening</i>	10:00-10:20 Invited Oral	<b>TIACN/VCN Nanoscale Multilayer PVD Coatings Deposited by the Combined High Power Impulse Magnetron Sputtering / Unbalanced Magnetron Sputtering, (HIPIMS/UBM) Technology Dedicated to Machining of Al and Ti Alloys</b> P.Eh. Hovsepian <sup>1</sup> ; A.P. Ehasarian <sup>1</sup> ; I. Petrov <sup>2</sup> <sup>1</sup> Sheffield Hallam University, United Kingdom
10:00-10:15	<b>20 percent efficiency on less than 100 µm thick industrially feasible c-Si solar cells (20plus)</b> Coord:UNIVERSITAT KONSTANZ, Germany Barbara Terheiden		
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 2-Thin film PV cells</b> <i>Chair: Bertrand Fillon</i>	10:20-10:35	<b>Simultaneous Multilayer Coating of Nanomaterials</b> M. Graf zu Eulenburg, CEO / Rudi Schmidt, Senior Product Developer <i>InovisCoat GmbH, Rheinparkallee 3, D-40789 Monheim</i>
10:15-10:30	<b>Thin Si film based hybrid solar cells on low- cost Si substrate (THIN-Si)</b> Coord: SINTEF, Norway Alexander Ulyashin	10:35-10:50	<b>Towards New Multifunctional Coatings for Photovoltaics</b> M. Benkovičová, A. Vojtko, P. Šiffalovč, V. Nádaždy, J. Ivančo, M. Jergel, E. Majková <i>Institute of Physics, Slovak Academy of Sciences Dúbravská cesta 9, 845 11 Bratislava, Slovakia</i>
10:30-10:45	<b>Roll to Module processed Crystalline Silicon Thin - Films for higher than 20% efficient modules (R2M-Si)</b> Coord:FRAUNHOFER - ISE, Germany		

	Philipp Rosenits		
10:45-11:00	<b>Non-vacuum processes for deposition of Cl(G)S active layer in PV cells [NOVA-Cl(G)S]</b> Coord: UMICORE NV, Belgium Fabrice Stassin	10:50-11:05	<b>Hard and superhard multicomponent nanocomposite coatings with enhanced thermal stability and oxidation resistance</b> Ph. V. Kiryukhantsev-Korneev, K.A. Kuptsov, E.A. Levashov, D.V. Shtansky <i>National University of Science and Technology "MISIS" Leninsky pr., 4, Moscow 119049, Russia</i>
11:00-11:10	<i>Questions and discussion</i>		
11:00–11:30	<b>Coffee Break-Exhibition-Networking</b> <b>POSTER SESSION I: All participants of Workshop 1 and Workshop 2 (Specific Numbers will be announced soon) should put their Posters to the NN13 Poster Area.</b>		
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 3-Third generation PV cells</b> <b>Subcluster 3.1: Nanodots or nanowires-based PV</b> <i>Chair: Bertrand Fillon</i> <i>Room:</i>		<b>Parallel Session</b> <b>W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: NanoFabrication II</b> <i>Chair:</i> <i>Room:</i>
11:30 – 11.45	<b>Silicon nanodots for solar cell tandem (NASCEnT)</b> Coord: FRAUNHOFER - ISE, Germany Stefan Janz	11:30 – 11.50 EU Project -	<b>LASER manipulation of PLASMONic nanostructures (LASER-PLASMON)</b> Nikolaos Kalfagiannis <i>Nottingham Trent University, UK</i>
11:45 – 12.00	<b>Semiconductor Nanomaterial for Advanced Photovoltaic Solar cells Using New concept of nanocrystal and conductive host (SNAPSUN)</b> Coord: CEA-LITEN, France Simon Perraud	11:50 – 12.05	<b>Metal Oxide Nanoparticle Engineering for Printed Electrochemical Applications</b> P.J. Wojcik, L. Santos, L. Pereira, R. Martins, E. Fortunato <i>CENIMAT/13N, Departamento de Ciência de Materiais, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa and CEMOP/UNINOVA, Campus da Caparica, 2829-516 Caparica, Portugal</i>
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 3-Third generation PV cells</b> <b>Subcluster 3.2: Organic PV cells or DSC</b> <i>Chair: Bertrand Fillon</i>	12:05 – 12:20	<b>Formation of Au nano-particle networks with CuPcSu ligands-Electronic transport in mesoscopic scale</b> A. Balliou <sup>1</sup> , S. Kazim <sup>2</sup> , D.Velessiotis <sup>1</sup> , N.Glezos <sup>1</sup> , J. Rakusan <sup>3</sup> , J.Pfleger <sup>2</sup> <i>1Institute of Microelectronics, NCSR Demokritos, Agia Paraskevi Attikis, 153 10 Athens, Greece</i> <i>2 Institute of Macromolecular Chemistry, AS CR, Heyrovsky Square 2, 162 06 Prague 6, Czech Republic</i> <i>3COC Ltd., 533 54 Rybitví, Czech Republic</i>
12:30 – 12:45	<b>Smart light collecting system for the efficiency enhancement of solar cells (EPHOCELL)</b> Coord : Leitat Technological Center, Spain Laurent Aubouy	12:20 – 12:35	<b>Electronic Properties of Hybrid Cu<sub>2</sub>S/Ru Semiconductor/Metallic-Cage Nanoparticles</b> O. Millo <sup>1</sup> , Y. Bekenstein <sup>1,2</sup> , K. Vinokurov <sup>2</sup> , U. Banin <sup>2</sup> <i>1Racah Institute of Physics and the Center for Nanoscience and Nanotechnology, The Hebrew University of Jerusalem, Jerusalem 91904, Israel</i> <i>2Institute of Chemistry and the Center for Nanoscience and Nanotechnology, The Hebrew University of Jerusalem, Jerusalem 91904, Israel</i>
12:45 – 13:00	<b>Sensitizer Activated Nanostructured Solar Cells (SANS)</b> Coord: UNIVERSITY OF OXFORD, Clarendon Laboratory, UK Henry Snaith	12:35 – 12:50	<b>Ion-beam shaping of embedded metallic nanoparticles</b> G. Rizza <sup>1</sup> , P.-E. Coulon <sup>1</sup> , S. Perruchas <sup>2</sup> , T. Gacoin <sup>2</sup> , D. Maillly <sup>3</sup> , I. Monnet <sup>4</sup> , C. Dufour <sup>4</sup> , V. Khomenkov <sup>4</sup> <i>1LSI, Ecole Polytechnique, 91128 Palaiseau, France</i>
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 3-Third generation PV cells</b> <b>Subcluster 3.3: Innovative nanostructures</b> <i>Chair: Bertrand Fillon</i>	12:50 – 13:05	<b>Nanoparticle Formation by Spark Discharge in Ar: Analysis of the Involved Mechanisms</b> A. Voloshko and T.E. Itina Hubert Curien Lab. (CNRS/Lyon University), 18 rue du Prof. Benoit Lauras, 42000 Saint-Etienne, France

13:00 – 13:15	<b>Nanomaterials for harvesting sub -band-gap photons via Upconversion to increase solar cell efficiencies (NanoSpec)</b> Coord:FRAUNHOFER – ISE, Germany Jan Christoph Goldschmidt	13:05 – 13:20	<b>Antireflection coatings with embedded silver nanoparticles for silicon solar cells</b> G. Paternoster, A. Paris, A. Vaccari, A. Cala' Lesina, F. Mattedi, and L. Calliari <i>Centro Materiali e Microsistemi - Fondazione Bruno Kessler Via Sommarive,18 - 38123 Povo (Trento) - Italy</i>
13:15-13:30	Questions & Discussion	13:20-13:35	<b>Synthesis of zinc stannate nanoparticles: hydrothermal vs microwave</b> Alicja Kownacka, Daniela Nunes, Rodrigo Martins, Pedro Barquinha, Elvira Fortunato <i>CENIMAT/I3N, Departamento de Ciência de Materiais, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa and CEMOP/UNINOVA, Portugal</i>
		13:35-13:50	<b>New ways in organic catalysis - Tagging to magnetic nanoparticles</b> A. Nan <sup>1</sup> , Z. Yacob <sup>1</sup> , R. Turcu <sup>1</sup> , J. Liebscher <sup>1</sup> <i>1 National Institute of Research and Development for Isotopic and Molecular Technologies, 65-103 Donath, Cluj-Napoca, Cluj, RO-400293, Romania</i>
<b>13:30 – 15:00 Lunch Buffet Break</b>			
<b>Poster Session I (DAY 1) - Exhibition – Networking</b> <b>Posters of Workshop 1 and Workshop 2(specific numbers will be announced soon) at 14:00 – 15:00</b> <i>Chair:</i>			
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 4 - Concentrator PV cells</b> <i>Chair: Stergios Logothetidis</i>		<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy &amp; W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: NanoFabrication III</b> <i>Chair:</i> <b>Room:</b>
15:00 – 15:15	<b>Multi-APPrOach for high efficiency integrated and intelligent cONcentrating PV modules (systems) (APOLLON)</b> Coord:AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE (ENEA),Italy Gianluca Timo	15:00 – 15:20 Invited	<b>From synthesis to integration of Ge NCs into an optoelectronic device</b> <u>E. Quesnel</u> <sup>1</sup> , S. Parola <sup>1</sup> , V. Muffato <sup>1</sup> , L. Xie <sup>2</sup> and K. Leifer <sup>2</sup> <i>1CEA-Liten, 17 rue des Martyrs, Grenoble, France.</i>
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 5 - Production equipment and processes</b> <i>Chair: Stergios Logothetidis</i>	15:20 –15:35	<b>Nano-X-ray absorption spectroscopy in single nanowires</b> G. Martinez-Criado <sup>1</sup> , J. Segura-Ruiz <sup>2</sup> , M.-H. Chu <sup>3</sup> , <i>Experiments Division, European Synchrotron Radiation Facility 6 Rue Jules Horowitz, 38043-Grenoble, France</i>
15:15 - 15:30	<b>Manufacturing technologies and equipments to produce low-cost PV bituminous-modified roofing membrane with full integration of high efficiency flexible thin-film silicon PV modules (PV-GUM)</b> Coord:DERBIGUM, Belgium Eric Bertrand	15:35 –15:50	<b>Plasmonic properties of metallic nanoantennas obtained by the ion-shaping technique</b> P.-E. Coulon <sup>1</sup> , A. Slablab, S. Perruchas <sup>2</sup> , T. Gacoin <sup>2</sup> , D. Maily <sup>3</sup> , X. Lafosse <sup>3</sup> , C. Ulysse <sup>3</sup> , I. Monnet <sup>4</sup> , J. Cardin <sup>4</sup> , A. Fafin <sup>4</sup> , C. Dufour <sup>4</sup> , M. Kociak <sup>5</sup> , A. Losquin <sup>5</sup> and G. Rizza <sup>1</sup> <i>1LSI, Ecole Polytechnique, 91128 Palaiseau, France</i>
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Cluster 6-Industry support</b> <i>Chair: Stergios Logothetidis</i>	15:50 - 16:05	<b>Synthesis of Ultra-Thin Membranes of Anodized Aluminium Oxide to Create Arrays of Metal Nanoparticles</b> R. Poplausks, U. Malinovskis, G. Bergs, J. Prikulis, D. Erts <i>Institute of Chemical Physics, University of Latvia, Riga, Latvia</i>

15:30- 15:45	<b>Training of Photovoltaic Installers in Europe (PVTRIN)</b> Coord :TECHNICAL UNIVERSITY OF CRETE, Greece Theocharis Tsoutsos	16:05-16:20	<b>Nucleation Rate Surfaces for Nanosize Particles Generation</b> M. P. Anisimov, V. A. Pinaev <i>Technological Design Institute of Scientific Instrument Engineering SB RAS (Russia, Novosibirsk, 41 Russkaya Street, 630058)</i>
15:45 - 16:00	<b>Definition of competitiveness for photovoltaics and development of measures to accompany PV to grid parity and beyond (PV PARITY)</b> Coord:WIRTSCHAFT & INFRASTRUKTUR GMBH & CO PLANUNGS KG (WIP), Germany Ingrid Weiss	16:20 - 16:35	<b>Directed Self-Assembly of Block Copolymers by in situ solvent vapors assisted Nanoimprint Lithography</b> C. Simão <sup>1</sup> , N. Kehagias <sup>1</sup> , A. Franconce <sup>1</sup> , M. Salaün <sup>2</sup> , M. Zelsmann <sup>2</sup> , M. A. Morris <sup>3,4</sup> , C. M. Sotomayor Torres <sup>1</sup> <i>1 Catalan Institute of Nanotechnology, Campus de la UAB, Barcelona 08193, Spain;</i>
		16:35 – 16:50	<b>Effects of precursor parameters on the properties of AZO nano films synthesized by sol-gel method</b> U. O. Akkaya Arier a, Bengu Ozugur Uysal b <i>a Department of Physics, Mimar Sinan Fine Arts University, Bomonti, Sisli, Istanbul 34347, Turkey</i>
16:00 – 16:15	<b>Support of the activities of all stakeholders from the PV sector to collaborate together to achieve the 2020 target (PV TP SEC)</b> Coord :EUROPEAN PHOTOVOLTAIC INDUSTRYASSOCIATION (EPIA), Belgium Kinga Timaru-Kast	16:50 – 17:05	<b>Manipulating Nanostructures by High Power Impulse Magnetron Sputtering</b> A.P. Ehasarian, P.Eh. Hovsepien <i>HIPIMS Technology Centre, Materials and Engineering Research Institute, Sheffield Hallam University, Howard St., Sheffield, S1 1WB, United Kingdom</i>
16:15 - 16:30 Round Table	<b>Questions and discussion Identifying challenges and common exploitation, key recommendations on future research needs, research bottlenecks</b>	17:05-17:20	<b>Advanced photonic structures via193 nm excimer laser microfabrication</b> M.Vasileiadis <sup>1,2</sup> , L. Athanasekos <sup>1,2</sup> , D. Alexandropoulos <sup>1</sup> , V. Karoutsos <sup>1</sup> , I. Koutselas <sup>1</sup> , S. Pispas <sup>2</sup> , and N. A. Vainos <sup>1,2</sup> <i>1 Department of Materials Science, University of Patras, Patras 26504, Greece 2 National Hellenic Research Foundation-NHRF, Theoretical and Physical Chemistry Institute TPCI, Photonics Media Lab, 48 Vas. Constantinou Ave., Athens 11635, Greece</i>
	<b>Parallel Session W1 – Plasmonics, Nanoelectronics &amp; Clean Energy Session: Plasmonics &amp; Photovoltaics I</b> <i>Chair:</i> <i>Room:</i>	17:20-17:35	<b>Formation of Light-emitting Si Nanocrystals by Irradiation of the Si/SiO<sub>2</sub> Nanolayers with Swift Heavy Ions</b> G.A. Kachurin <sup>1</sup> , S.G. Cherkova <sup>1,2</sup> , V.A. Volodin <sup>1,2</sup> , A.H. Antonenko <sup>1,2</sup> , G.N. Kamaev <sup>1,2</sup> , V.A. Skuratov <sup>3</sup> , and A.G. Cherkov <sup>1,2</sup> <i>1A.V. Rzhhanov Institute of Semiconductor Physics SB RAS, 630090 Novosibirsk, Russia</i>
16:30 - 16:50 Invited Oral	<b>MAGNETIC MOMENT AND PLASMA FREQUENCY OF SINGLE METAL NANOPARTICLE DETERMINED FROM FARADAY AND COTTON-MOUTON EFFECT IN FERROFLUIDS</b> Jacek Szczytko <sup>1*</sup> , Agnieszka Starobrat <sup>1</sup> , Natasa Vaupotic <sup>2,3</sup> , Mikhail Osipov <sup>4</sup> , Karolina Madrak <sup>5</sup> , Ewa Górecka <sup>5</sup> <i>1 Institute of Experimental Physics, Faculty of Physics, University of Warsaw, Hoza 69, 00-681 Warsaw, Poland</i>		
16:50-17:10	<b>Exploring the shape effects of Ag plasmonic nanoparticles on a substrate, relevant to enhanced spectroscopy applications</b> D.V.Bellas <sup>1</sup> , A.Siozios <sup>1</sup> , N.T.Panagiotopoulos <sup>2</sup> , P.Patsalas <sup>1,3</sup> , E.Lidorikis <sup>1</sup> <i>1 Department of Materials Science and Engineering, University of Ioannina, GR-45110 Ioannina, Greece</i>		
17:10-17:25	<b>Electronic Properties of Hybrid Cu<sub>2</sub>S/Ru Semiconductor/Metallic-Cage Nanoparticles</b> O. Millo <sup>1</sup> , Y. Bekenstein <sup>1,2</sup> , K. Vinokurov <sup>2</sup> , U. Banin <sup>2</sup>		

	<p><i>1Racah Institute of Physics and the Center for Nanoscience and Nanotechnology, The Hebrew University of Jerusalem, Jerusalem 91904, Israel</i></p>	
17:25-17:40	<p><b>Tunable plasmonic dichroism of self-aligned metallic nanoparticles on nanopatterned dielectric surfaces</b>  <u>S. Cameli</u>, D. Babonneau, E. Vandenhecke, S. Rousselet, F. Pailloux  <i>Institut Pprime (Dpt Physique et Mécanique des Matériaux, CNRS-University of Poitiers)</i>  <i>SP2MI, Bvd M. et P. Curie, BP 30179, 86962 Futuroscope Chasseneuil Cedex, France</i></p>	
17:30–18:30	<b>Coffee Break-Exhibition-Networking</b>	
<b>Plenary Session (ISFOE13 Symposium and NN13 Conference)</b>		
<i>Chair:</i>		
<i>Room:</i>		
	<i>Introduction by Prof. Stergios Logothetidis, NN13 &amp; ISFOE13 Chairman</i>	
18:30 – 19:10 Plenary Talk	TBA ANDREA C. FERRARI Dept. of Engineering, University of Cambridge, UK	
19:10 – 19:50 Plenary Talk	TBA BUDDY RATNER UWEB, USA	
19:50 – 20:30 Plenary Talk	TBA GEORGE HADZIOANNOU LCPO, CNRS, France	
<b>END OF FIRST DAY</b>		
<b>21:00</b>	<b>DRINKS &amp; OFFICIAL DINNER (ISFOE13 &amp; NN13)</b>	

**Wednesday 10 July****Porto Palace Conference Centre & Hotel**

08:00 – All Day	<b>Registration to NN13</b>	
	<b>Parallel Session</b> <b>Joined Session of ISFOE13 and W1 – Plasmonics, Nanoelectronics &amp; Clean Energy and W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: Graphene I</b> <i>Chair:</i> <i>Room:</i>	<b>Parallel Session</b> <b>W3 – Nanomedicine</b> <b>Session: Nanoparticles in Nanomedicine I</b>  <i>Chair: Krol S.</i> <i>Room:</i>
09:00-09:30 Invited	TBA A. Ferrari <i>Dept. of Engineering, University of Cambridge, UK</i>	09:00 – 09:30 Invited <b>Guiding the way: Proteins and the blood brain barrier</b> Silke Krol <i>Fondazione IRCCS, Italy</i>
09:30 – 09:50 Invited	TBA Jürgen P. Rabe <i>Humboldt-Universität zu Berlin, Germany</i>	09:30 – 09:45 <b>Synthesis and Characterization of Fe – Pt Based Multishell Magnetic Nanoparticles</b> O. Pana <sup>1</sup> , C. Leostean <sup>1</sup> , M. L. Soran <sup>1</sup> , <u>M. Stefan</u> <sup>1</sup> , S. Macavei <sup>1</sup> , S. Gutoiu <sup>1</sup> , O. Chauvet <sup>2</sup> <i><sup>1</sup>National Institute for R &amp; D of Isotopic and Molecular Technology, 65 – 103 Donath Str., 400295, Cluj-Napoca, Romania; e-mail: ovidiu.pana@itim-cj.ro</i>
09:50-10:10 Invited	TBA Amaia Zurutuza <i>Graphenea, Spain</i>	09:45 – 10:00 <b>In-vitro application of ferrite nanoparticles as novel magnetic hyperthermia agents</b> Makridis <sup>1</sup> , K. Topouridou <sup>2</sup> , M. Tziomaki <sup>1</sup> , K. Simeonidis <sup>1</sup> , M.P. Yavropoulou <sup>2</sup> , M. Angelakeris <sup>1</sup> , J.G. Yovos <sup>2</sup> and O. Kalogirou <sup>1</sup> <i><sup>1</sup>Department of Physics, Aristotle University, 54124 Thessaloniki, Greece</i> <i><sup>2</sup>Division of Molecular Endocrinology, AHEPA University Hospital, AUTH, Thessaloniki, Greece.</i>
10:10-10:30	<b>Non-invasive conductance mapping of large-area graphene - A new light on defects</b> Peter Bøggild <i>Department of Micro- and Nanotechnology, Technical University of Denmark, Denmark</i>	10:00 – 10:15 <b>Preparation of Poly(MA-alt-olefin-C6,8,12,18)/Silica Nanohybrids via In-Situ Generated Nanoparticles</b> Deniz D. Bozdoğan <sup>1</sup> , Günay Kibarer <sup>1</sup> , Zakir M.O. Rzayev <sup>2</sup> <i><sup>1</sup>Department of Chemistry, Division of Physical Chemistry, Faculty of Science, Hacettepe University, Beytepe,06800 Ankara, Turkey</i>
10:30-10:45	<b>Solution processable transparent conducting tracks by the de-functionalisation of amine functionalised carbon nanotubes</b> J.W. Dear, C Poll, K.T. Lai, M. Shkunov <i>Advanced Technology Institute, Department of Electronic Engineering, University of Surrey, Guildford, Surrey, GU2 7XH, UK</i>	10:15 – 10:30 <b>Reactivity, Solubility, Colloidal Stability: How can we predict these important properties for nanoparticles?</b> H. Hofman, J. Lemaitre, M.Beuzelin-Ollivier <i>Powder Technology Laboratory, Institute of Materials, Ecole Polytechnique Fédérale de Lausanne, Station 12, CH-1015 Lausanne, Switzerland</i>
10:45-11:00	<b>A Molecular Dynamics Study of Polymer/Graphene Nanocomposites</b> Anastassia N. Rissanou <sup>1,2</sup> , Vagelis Harmandaris <sup>1,2</sup> <i><sup>1</sup>Department of Applied Mathematics, University of Crete, Heraklion, Crete, Greece.</i> <i><sup>2</sup>Institute of Applied and Computational Mathematics (IACM), FORTH, Heraklion, Crete, Greece.</i>	10:30 – 10:45 <b>'Slippery' Nanoparticles for the Mucosal Delivery of Biomolecules</b> T. Karamanidou <sup>1</sup> , V. Bourganis <sup>1</sup> , K. Karidi <sup>2</sup> , O. Kammona <sup>2</sup> , C. Kiparissides <i><sup>1</sup>Department of Chemical Engineering, Aristotle University of Thessaloniki, Greece</i> <i><sup>2</sup>Chemical Process &amp; Energy Resources Institute, Centre for Research and Technology Hellas, Greece</i>
11:00 – 11:30	<b>Coffee Break-Exhibition-Networking</b>	

	<b>Parallel Session</b> <b>Joined Session of ISFOE13 and W1 – Plasmonics, Nanoelectronics &amp; Clean Energy and W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: Graphene II</b> Chair: Room:		<b>Parallel Session</b> <b>W3 – Nanomedicine</b> <b>Session: Nanoparticles in Nanomedicine II</b> Chair: Room:	
11:30 – 11:50 Invited	TBA K. Teo AIXTRON Ltd., UK	11 :30-11 :45	<b>Biocidal properties of nanocomposites based on polypropylene and metal-containing nanoparticles</b> M.I. Biryukova <sup>1</sup> , G.Yu. Yurkov <sup>2</sup> , A.I. Ogarkov <sup>3</sup> Baikov Institute of Metallurgy and Materials Science of the Russian Academy of Sciences, Moscow, Russia	
11:50 - 12:10 Invited	TBA Tim Booth Department of Micro- and Nanotechnology, Technical University of Denmark, Denmark	11 :45-12 :00	<b>Polysaccharide nanoparticles as efficient carriers for proteins</b> V.I. Kulikouskaya, V.E. Agabekov Institute of Chemistry of New Materials, National Academy of Sciences of Belarus	
12:10 – 12:30 Invited	<b>Raman studies of graphene at high pressure</b> I. Arvanitidis Dept. of Physics, Aristotle University of Thessaloniki, Greece	12:00 – 12 :20 Invited Oral	<b>Site specific immobilization of protein ligands on colloidal nanoparticles for selective targeting of cancer cells</b> Miriam Colombo Department of Biotechnology and Bioscience, University of Milano-Bicocca, Piazza della Scienza, Milano, Italy	
12:30 – 12:50 Invited	TBA K. Porfyrakis University of Oxford, UK	12:20 – 13:30 Round Table	<b>NANOPARTICLES FROM DESIGN &amp; DEVELOPMENT TOWARDS CLINICAL APPLICATIONS</b>	
12:50 – 13:10	<b>To be announced soon</b> D. Christofilos Dept. of Mathematical, Physical, and Computational Sciences, Faculty of Engineering, Aristotle University of Thessaloniki, Greece			
13:10 – 13:30 Invited	<b>Deformations of Carbon Nanotubes</b> M. Damnjanović, S. Dmitrović, B. Nikolić, I. Milošević NanoLab, Faculty of Physics, University of Belgrade, Belgrade, Serbia			
<b>13:30 – 14:45</b>	<b>Lunch Buffet Break</b> <b>Poster Session I (DAY 2)- Exhibition – Networking</b> <b>Posters of Workshop 1 and Workshop 2(Specific Numbers will be announced soon) at 14:00 – 15:00</b> Chair:			
	<b>Parallel Session</b> <b>Joined Session of ISFOE13 and W1 – Plasmonics, Nanoelectronics &amp; Clean Energy and W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: Graphene II</b> Chair: Room:		<b>Parallel Session</b> <b>W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: NanoConstruction I</b> Chair: Maria Stefanidou, Jiri Rathousky Room:	<b>Parallel Session</b> <b>W3 – Nanomedicine</b> <b>Session: EC funded Nanomedicine Projects</b> Chair: Room:

15:00 – 15:30 Invited	<b>Beyond Graphene : Nanoribbons and conjugated polymers</b> <u>C. Ewels</u> <sup>1</sup> , Ph. Wagner <sup>1</sup> , J. J. Adjizian <sup>1</sup> , B. Humbert <sup>1</sup> <i>Institute of Materials, CNRS, University of Nantes, Nantes, France</i>	14:45 – 15:05 Invited	<b>Nanomechanical Analysis of Structural Materials</b> Jiri Němeček <i>Czech Technical University in Prague, Faculty of Civil Engineering, Thakurova 7, Prague 6, 166 29, Czech Republic</i>	15:30 –15:45 Invited	<b>Superparamagnetic Nanoparticles for Molecular Imaging of Rheumatoid Arthritis, EU Project NanoDiaRA</b> Margarethe Hofmann-Antenbrin <i>Mat Search Consulting Hofmann (NanoDiaRA Project), Switzerland</i>
15:30 –15:45	<b>Characterization of Layer-on-Layer Graphite/Graphene Sheets by Raman Spectroscopy at 976 nm Excitation Wavelength</b> <u>A. Mailian</u> <sup>1</sup> , M. Mailian <sup>2</sup> , G. Shmavonyan <sup>3</sup> <i>Institute for Informatics; 1 P. Sevak str., 0014, Yerevan, Armenia 2 LTX-Credence Armenia</i>	15:05 – 15:25 Invited Oral	<b>The potential of tailor-made nanoparticles to “heal” corrosion damage in reinforced concrete</b> D.A. Koleva <sup>1</sup> and K. van Breugel <sup>1</sup> <i>1Delft University of Technology, Faculty of Civil Engineering and Geosciences, Department Materials and Environment, Stevinweg 1, 2628 CN Delft, The Netherlands</i>	15:45 –16:00 Invited	<b>NANODRUG: A new approach to Nanomaterials for Drug Delivery to the skin</b> Marina Resmini <i>Queen Mary University of London, School of Biological and Chemical Sciences, UK</i>
15:45 –16:00	<b>High Lubricating Properties of New Re Doped Fullerene-Like MoS<sub>2</sub> Nanoparticles</b> <u>L. Rapoport</u> <sup>1</sup> , R. Tenne <sup>2</sup> <i>1Holon Institute of Technology, Holon, Israel 2, Weizmann Institute of Science, Rehovot, Israel</i>				
16:00– 16:15	<b>Enlightening on the Effect of Titanium and Tantalum Nitride Buffer Phase Transition on the Carbon Nanotube Growth by chemical vapor deposition</b> <u>B. Bouchet-Fabre</u> <sup>1</sup> , M. Pinault <sup>1</sup> , M. Mayne-L’Hermite <sup>1</sup> , C. Reynaud <sup>1</sup> , T. Minéa <sup>2</sup> , M. C. Hugon <sup>2</sup> , M. Morales <sup>2</sup> , L. Zagonel <sup>3</sup> , F. Alvarez <sup>3</sup> <i>1 Lab. Francis Perrin, CEA-CNRS, CEA-Saclay, 91191 Gif sur Yvette Cedex, France</i>	15:25- 15:40	<b>A Model for the Micromechanical Structure and Strength of Cementitious Materials Reinforced W/Nanomaterials</b> <u>Nikolaos Archontas</u> <sup>1</sup> , V. Balopoulos <sup>2</sup> and S. J. Pantazopoulos <sup>3</sup> <i>1Department of Civil Engineering University of Cyprus, Nicosia 1678, Cyprus e-mail: narcho@ee.duth.gr</i>	16:00– 16:15 Invited	<b>New 'Intelligent' Block-Copolymer Micelles for Enhanced Drug Delivery in Human Skin (NANOGENE)</b> Diana Velluto <i>School of Biological and Chemical Sciences, Queen Mary University of London, UK</i>
16:15– 16:30	<b>Silicon-Coated Carbon Nanofiber Mat for Anode of Lithium Ion Battery</b> <u>Fei Yao</u> <sup>1,2</sup> , Bing Li <sup>1</sup> , Kangpyo So <sup>1</sup> , Jian Chang <sup>1</sup> , Vu Quoc An <sup>1</sup> , Didier Pribat <sup>1</sup> , Costel Sorin Cojocaru <sup>2</sup> , Hongyan Yue <sup>1</sup> , Sishen Xie <sup>1</sup> and Young Hee Lee <sup>1,*</sup> <i>1Institute of Basic Science, Center for Integrated Nanostructure Physics, Department of Energy Science, BK21 Physics Division, Sungkyunkwan University, Suwon 440-746, Republic of Korea 2 LPICM CNRS, École polytechnique, Palaiseau 91120, France</i>	15:40– 16:00 Invited	<b>Nano-modified renders and coatings for increasing concrete</b> Georgiou Andriana <sup>1</sup> , Xenia Vassiliou <sup>1</sup> , Maria Stefanidou <sup>1</sup> <i>Laboratory of Building Materials, civil Engineering Department AUTH</i>	16:15– 16:30 Invited	<b>Disc-shaped Point-of-Care platform for infectious disease diagnosis (DiscoGnosis)</b> Konstantinos Mitsakakis <i>Lab for MEMS Applications, Univ of Freiburg, Germany</i>
16:30-16:45	<b>Effect of Post-Treatment Conditions on the Carbide and/or Nitride Phase Formation of Nano Carbon Black Reinforced Hard Chromium Coatings</b> Orkut Sancakoglu <sup>1,2</sup> , Erdal Celik <sup>1,3</sup> , and Tefik Aksoy <sup>1,3</sup> <i>1)Dokuz Eylul University, Engineering Faculty, Metallurgy and Materials Engineering Department, Tinaztepe Campus, 35160, Buca-Izmir, Turkey. 2)Dokuz Eylul University, The Graduate School of Natural and Applied Sciences,</i>	16:00– 16:20 Invited Oral	<b>The use of nano-additives in composite construction materials</b> <u>M. Theodoridou</u> <sup>1</sup> , E. Charalambous <sup>1</sup> , I. Ioannou <sup>1</sup> , P. Maravelaki <sup>2</sup> <i>1Department of Civil and Environmental Engineering, University of Cyprus, Cyprus</i>	16:30– 16:45 Invited	<b>Novel Nanoparticles for Neural Stem Cell Drug Delivery</b> <u>S.A. Papadimitriou</u> <sup>1</sup> , D. Ceric <sup>2</sup> , R. O’Reilly <sup>3</sup> , S. Marino <sup>2</sup> , M. Resmini <sup>1</sup> <i>1School of Biological and Chemical Science, Queen Mary University of London, UK</i>



	Tinaztepe Campus, 35160, Buca-Izmir, Turkey.				
	16:20–16:35	<b>Multifunctional Surfaces for Ceramic Tile</b> F. Bondioli Department of Engineering “Enzo Ferrari”, University of Modena and Reggio Emilia Via Vignolese 905, 41125 Modena, Italy	16:45– 17:00 Invited	<b>Safety by designing surface-modified nanomaterials (Sanowork)</b> Anna Luisa Costa <i>Institute of Science and Technology for Ceramics, Italy</i>	
	16:35–16:50	<b>Self-cleaning glass prepared from a commercial TiO<sub>2</sub> nano-dispersion and its photocatalytic performance under common anthropogenic and atmospheric factors</b> E. I. Cedillo-González <sup>1</sup> , R. Riccò <sup>2</sup> , M. Montorsi <sup>3</sup> , M. Montorsi <sup>1</sup> , P. Falcaro <sup>2</sup> , C. Siligardi <sup>1</sup> <sup>1</sup> Dipartimento di Ingegneria “Enzo Ferrari”, Università degli Studi di Modena e Reggio Emilia, Italy			
	16:50 – 17:05	<b>TiO<sub>2</sub>-SiO<sub>2</sub> nanocomposite photocatalysts for self-cleaning application on porous building materials</b> L. Pinho, M. J. Mosquera <i>TEP 243 Nanomaterials Group, Physical-Chemistry Department, University of Cádiz, Puerto Real (Cádiz), Spain</i>			
	17:05 - 17:20	<b>Application of doped Tin Oxide coatings on glass for thermal insulation and energy savings in buildings</b> I. Fasaki <sup>1</sup> , I. Arabatzis <sup>1</sup> , V. Theoharakis <sup>1</sup> , G. Mousdis <sup>2</sup> <sup>1</sup> . NanoPhos SA, R&D Department, PO Box 519, <i>Technological and Science Park of Lavrio, Greece</i>			
	17:20 - 17:35	<b>Water-based Photocatalytic Acrylic Paint For Exterior and Interior Use</b> K. Kalafata, D. Skordas, I. Arabatzis <i>NanoPhos SA, Technological &amp; Science Park of Lavrio, Lavrio 19500, Greece</i>			
17:30 – 17:50	<b>Coffee Break-Exhibition-Networking</b>				
	<b>Parallel Session W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: NanoConstruction II</b> Chair: Ioanna Papayianni, Jiri Němeček <b>Room:</b>		<b>Parallel Session W3 – Nanomedicine</b> <b>Special Session II: NANOMEDICINE NETWORKING &amp; COMMERCIALIZATION co-organized with the European Technology Platform on Nanomedicine- ETPN</b> Chairs: Andreas Falk, Olivier Fontaine		
17:50-18:10 Invited	<b>Nanotechnologies for consolidation and protection of building materials</b> Jiri Rathousky				

	<i>Center for Innovations in the Field of Nanomaterials and Nanotechnologies, J. Heyrovsky Institute of Physical Chemistry, Czech Republic</i>		
18:10 – 18:30 Invited Oral	<b>Design, non-destructive testing, in meters to nano meters scale, and signal processing techniques applied to cultural heritage documentation and industrial applications</b> G. Karagiannis <i>Scientific and Technical Head (Diagnostic Centre, "ORMYLIA" Foundation) Ormylia Chalkidiki, Greece</i>		
18:30 – 18:45	<b>Nano-materials for the conservation of the cultural heritage - concepts, results and lessons learned in the last years</b> G. Ziegenbalg <sup>1</sup> , E. Piaszczynski <sup>2</sup> , M. Musiela <sup>3</sup> <i>1IBZ-Salzchemie GmbH &amp; Co.KG, GP "Schwarze Kiefern", Halsbrücke, Germany</i>	18:00–18:15	<b>Overview of nanomedicine activities in Romania</b> Claudia Roman <i>National Institute for R&amp;D in Microtechnologies IMT, Romania</i>
18:45-19:05 Invited Oral	<b>Novel hybrid nanocomposites for building materials' strengthening and protection</b> Pagona-Noni Maravelaki, C. Kapridaki, A. Verganelaki <i>Department of Sciences, Technical University of Crete, Greece</i>	18:15-18:30	<b>NanoMed 2020: Enabling the nanomedicine era under Horizon 2020</b> Olivier Fontaine <i>ETPN Platform, VDI-VDE/IT, Cranfield University, Germany</i>
19:05-19:20	<b>Particle modified silicon-based consolidants for stone consolidation: Application and evaluation in porous stones</b> E. Ksinopoulou <sup>1</sup> , A. Bakolas <sup>1</sup> , A. Moropoulou <sup>1</sup> <i>1Department of Materials Science and Engineering, School of Chemical Engineering, National Technical University of Athens, Iroon Polytechniou 9, Zografou 15780 Athens, Greece</i>	18:30-18:45	<b>NanoNET Network</b> Varvara Karagkiozaki <i>Nanotechnology LTFN Lab, AUTH, Greece</i>
19:20 – 19:35	<b>Evaluation of consolidation treatments of archaeological clay with nano-lime</b> N.A. Stefanis <sup>1</sup> , P. Theoulakis <sup>1</sup> <i>1Technological Educational Institute of Athens, Department of Conservation of Antiquities and Works of Art, Ag.Spiridonos st., 12210, Athens, Greece</i>	18:45-19:00	<b>Cooperation enables sustainable commercialization of nanotechnology achievements</b> Andreas Falk <i>BioNanoNet ForschungsGmbH, Austria</i>
		19:00-19:15	<b>TBA</b> Archontoula Papanagiotou <i>Patent Office, Athens</i>
		19:15-19:30	<b>Europe speaks with two voices, CoE and EU: Can we harmonize European NanoLaw?</b> Ilise Feitshans <i>Institute for Health at Work , Uni of Lausanne, Switzerland</i>
			<b>DISCUSSION</b>
<b>END OF SECOND DAY</b>			
<b>20:00</b>	<b>BEACH PARTY (ISFOE13 &amp; NN13)</b>		

<b>Thursday 11 July</b>		<b>Porto Palace Conference Centre &amp; Hotel</b>	
08:00 – All Day	<b>Registration to NN13</b>		
	<b>Keynote Session II (All Workshops of NN13)</b> <i>Room:</i>		
09:00 – 09:30 Keynote Talk	<b>Theoretical and experimental studies of electronic properties of Nanostructured graphene and related layered materials</b> <u>E. Kaxiras</u> , W. L. Wang, E. G. Santos, B. Malone <i>Department of Physics &amp; School of Engineering and Applied Sciences, Harvard University, USA</i>		
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy &amp; W2- Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: Theoretical Approaches &amp; Modelling I</b> <i>Chair:</i> <i>Room:</i>		<b>Parallel Session</b> <b>Joined Session of ISFOE13 and W3 – Nanomedicine &amp; W4 - Bioelectronics of NN13</b> <b>Session: Bioelectronics I</b> <i>Chair:</i> <i>Room:</i>
09:30-10:00 Invited	<b>Magnetic properties of C13 sigle wall carbon nanotubes</b> Milan Damnjanovic NanoLab, Faculty of Physics, University of Belgrade	09:30-10:00 Invited	<b>Control and Monitoring of Mammalian Cells with Organic Electronics</b> R. Owens <i>EMSE, France</i>
10:00 – 10:20 Invited Oral	<b>TBA</b> Eleftherios. Lidorikis Department of Materials Science and Engineering, University of Ioannina, Greece	10:00 – 10:15	<b>New approaches to sensing biomolecules using OFETs</b> K. Manoli <sup>1</sup> , M. Magliulo <sup>1</sup> , G. Palazzo, L. Torsi Department of Chemistry, University of Bari A. Moro Via Orabona 4, Bari, 70126, Italy
10:20-10:35	<b>Energy and Kinematic Analysis of Molecular Gears Mechanism</b> T. Anastasiou <sup>1</sup> , P. Nikolakopoulos <i>Machine Design Laboratory, Department of Mechanical and Aeronautics Engineering, University of Patras, Greece</i>	10:15-10:30	<b>Pulsed electromagnetic waves may propagate within the membrane/sheath of axons</b> J. W. Xue, <u>S. Y. Xu</u> <i>Department of Electronics, Peking University, Beijing, China</i>
10:35-10:50	<b>On the Possibility of the Existence of a Quasi Two-Dimensional Nanostructures of Large Polarons in the Dielectric Layers. Quantum Oscillations of Polarons in Magnetic and Electric Fields and Bipolaron Formation</b> V. Mukhomorov <i>Agrophysical Institute, Sankt-Petersburg, Russia</i>	10:30-10:45	<b>Rapid optical biosensing of bacteria and cells using porous silicon based, photonic phase gratings</b> Y. Mirsky <sup>1</sup> , A. Nahor <sup>1</sup> , E. Edrei <sup>1</sup> , N. Massad-Ivanir <sup>2</sup> , L. M. Bonanno <sup>2</sup> , E. Segal <sup>2</sup> and <u>A. Sa'ar</u> <sup>1</sup> <i>1 Racah Institute of Physics and the Harvey M. Kruger Family Center for Nanoscience and Nanotechnology, the Hebrew University of Jerusalem, Israel</i> <i>2 Dept. of Biotechnology and Food Engineering, the Russel Berrie Nanotechnology Institute, Technion – Israel Institute of Technology, Israel</i>
10:50-11:10 Invited Oral	<b>TBA</b> Hariton Polatoglou <i>Dept of Physics, AUTH, Thessaloniki, Greece</i>	10:45-11:00	<b>Mo6 cluster complexes for oxygen sensing in aqueous media</b> <u>K. Kirakci</u> <sup>1</sup> , K. Lang <sup>1</sup> <i>1Institute of Inorganic Chemistry of the AS CR, v.v.i, Husinec-Řež 1001, 250 68 Řež, Czech Republic</i>
11:00 – 11:30	<b>Coffee Break-Exhibition-Networking</b> <b>POSTER SESSION: All participants of Poster Session I should remove their Posters from the NN13 Poster Area. All participants of Workshop 3, Workshop 4 and Workshop 2 (Specific Numbers will be announced soon) should place their posters up to the NN13 Poster Area (Poster Session II).</b>		

	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy &amp; W2- Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: Theoretical Approaches &amp; Modelling II</b> <i>Chair:</i> <i>Room:</i>		<b>Parallel Session</b> <b>Joined Session of ISFOE13 and W3 – Nanomedicine &amp; W4 - Bioelectronics of NN13</b> <b>Session: Bioelectronics II</b> <i>Chair:</i> <i>Room:</i>
11:30 – 11.50 Invited	<b>TBA</b> Christian Matyssek <i>Institut fuer Physik, Humboldt-Universitaet zu Berlin, Germany</i>	11:30 – 12.00 Invited	<b>In vivo recordings of brain activity using organic transistors</b> Dion Khodagholy <sup>1</sup> , Thomas Doublet <sup>1,2,3,4</sup> , Moshe Gurfinkel <sup>1</sup> , Pierre Leleux <sup>1,2,3,4</sup> , Pascale Quilichini <sup>2,3</sup> , Antoine Ghestem <sup>2,3</sup> , Esma Ismailova <sup>1</sup> , Thierry Herve <sup>4</sup> , Sébastien Sanaur <sup>1</sup> , George G. Malliaras <sup>1</sup> & <u>Christophe Bernard</u> <sup>2,3</sup> <sup>2</sup> Aix Marseille Université, INS, France. <sup>3</sup> InsermMarseille, France.
11:50 – 12.10 Invited	<b>TBA</b> Nick Kioussis <i>Dept. of Physics &amp; Astronomy, California State University, USA</i>	12:00-12:15	<b>TBA</b> E. Georgaraki <i>Dept. of Physics, AUTH, Thessaloniki, Greece</i>
12:10 – 12:25	<b>Ab initio calculations of the Interaction SiH4 with Boron Nitride Nanotube (BNNT)</b> <u>S. Ustundag</u> <sup>1</sup> , S.Berber <sup>1</sup> <i>Physics Department, Gebze Institute of Technology, Gebze/Kocaeli/Turkey</i>	12:15-12:30	<b>Biocompatible biosensor for tear glucose monitoring with Soft-MEMS techniques</b> M.K. Chu, K. Mizuno, K. Miyajima, T. Arakawa, K. Mitsubayashi <i>Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University 2-3-10 Kanda-Surugadai, Chiyoda-ku, Tokyo 101-0062, Japan</i>
12:25-12:45 Invited Oral	<b>Pattern transfer: Modeling reveals the key role of resist roughness</b> <u>V. Constantoudis</u> , G. Kokkoris, E. Gogolides <i>Department of Microelectronics, N.C.S.R. Demokritos Aghia Paraskevi, 15310 Greece</i>	12:30-12:45	<b>Utilisation of SU-8 Polymer for Micro-Nano-Biosensor Applications</b> <u>S.D. Psoma</u> <sup>1</sup> , P.D. van der Wal <sup>2</sup> , N.F. de Rooij <sup>2</sup> <sup>1</sup> Department of Engineering of Informatics and Telecommunications, University of Western Macedonia, Kozani, Greece
12:45-13:00	<b>Mathematical model for Chitosan nanoparticles absorption kinetics in whey</b> <u>M.Motameni</u> <sup>1</sup> , M. mardmomen <sup>2</sup> , M.Sharifzadeh Baei <sup>3</sup> <sup>1</sup> Department of mathematics, Qaemshahr branch , Islamic Azad University, Qaemshahr, Iran	12:45-13:05 Invited Oral	<b>Polymer technologies &amp; electrophysiological data acquisition</b> Thierry Herve <i>Microvitae Company</i>
13:00-13:20 Invited Oral	<b>TBA</b> Maria Kafesaki <i>Dept. Materials Science &amp; Technology, University of Crete, Greece</i>	13:05-13:20	<b>Fabrication of flexible zinc oxide nanowire sensors using roll-to-roll printing</b> C.M.Fung <sup>1</sup> , J.S.Lloyd <sup>1</sup> , K.S.Teng <sup>1</sup> , Davide Deganello <sup>2</sup> <sup>1</sup> Multidisciplinary Nanotechnology Centre, College of Engineering, Swansea University, SA28PP, UK
13:20 – 13:35	<b>VIBRATIONAL PROPERTIES OF Si-Ge/Si ISLANDS ((113) and (111) facets)</b> Hassan KASSEM Lebanese University ,Faculty of Engineering Al Hadat Lebanon	13:20 – 13:50 Round Table	<b>BIOELECTRONICS TARGET CLINICAL PRACTICE', co-organized by Rolemak Project FP7-REGPOT-2011-1</b> G.Malliaras, R.Owens, V.Karagkiozaki, C.Bernard, G.Scarpa
<b>13:50 – 15:00</b>	<b>Lunch Buffet Break</b> <b>Poster Session II (DAY 1)- Exhibition – Networking</b> <b>Posters of Workshop 2 (the specific numbers will be announced soon), Workshop 3 and Workshop 4 at 14:00 – 15:00</b> <i>Chair:</i>		
	<b>Keynote Session III (All Workshops of NN13)</b>		

Room:					
15:00 – 15:30 Keynote Talk	<b>TBA</b> Ioannis Missirlis <i>Lab of Biomechanics &amp; Biomedical Engineering, Uni of Patras, Greece</i>				
	<b>Parallel Session</b> <b>W1 – Plasmonics, Nanoelectronics &amp; Clean Energy</b> <b>Session: Plasmonics &amp; Photovoltaics II</b> Chair: Room:		<b>Parallel Session</b> <b>W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: Nanomaterials</b> Chair: Room:	<b>Parallel Session</b> <b>Joined Session of ISFOE13 and W3 – Nanomedicine &amp; W4 - Bioelectronics of NN13</b> <b>Session: Bioelectronics III</b> Chair: Room:	
15:30 – 15:50 Invited Oral	<b>Porous Si platform for the on-chip integration of RF passive devices</b> Androula G. Nassiopoulou <i>NCSR Demokritos/IMEL, Terma Patriarchou Grigoriou, Aghia Paraskevi, 153 10 Athens – Greece</i> <i>A.Nassiopoulou@imel.demokritos.gr</i>	15:30 – 15:50 Invited Oral	<b>Electronic properties and piezoresistive effect of helically coiled carbon nanotubes</b> S. Dimitrović1, Z. P. Popović1, M. Damjanović1 and I. Milošević <i>NanoLab, Faculty of Physics, University of Belgrade, Studentski trg 12, Belgrade, Serbia"</i>	15:30 – 15:50 Invited Oral	<b>Natural and nature-inspired Hydrogen-bonded Semiconductors: A Change of Paradigm for Organic Electronics</b> Mihai Irimia-Vladu <i>Joanneum Research Forschungsgesellschaft mbH, Weiz, Austria</i>
15:50 – 16:05	<b>Nanosecond and Picosecond Laser Annealing of a-Si Thin Films for Solar Cell Applications (Simulation – Annealing – Characterization)</b> Y. Theodorakos1, I. Kalpyris1, K. Kotsovos2, C. Sarigiannidis2, V. Vamvakas2, D. Tsoukalas1, Y.S. Raptis1, I. Zergioti1 <i>1 Physics Department, National Technical University of Athens, Heroon Polytechniou 9, 15780 Zographou, Athens, Greece</i> <i>2 Heliosphera SA, Industrial Area of Tripolis, 8th Building Block, 5th Road, GR-221 00 Tripolis, Greece</i>	15:50 – 16:05	<b>Nanosheets of layered hydroxides as building blocks for thin films</b> J. Demel, J. Hynek, B. Schneiderová, K. Lang <i>Institute of Inorganic Chemistry, Academy of Sciences of the Czech Republic, v.v.i. Husinec-Řež 1001, 250 68, Řež, Czech Republic</i>	15:50 – 16:10 Invited Oral	<b>Spray-deposited CNT-based sensing devices</b> G. Scarpa <i>Technische Universität München, Germany</i>
		16:05 - 16:20	<b>Electrochemical Nanowires Devices for Energy Storage</b> Liqiang Mai, Xiaocong Tian, Qiulong Wei, Xu Xu, Chaojiang Niu, Qinyou An <i>State Key Laboratory of Advanced Technology for Materials Synthesis and Processing, WUT-Harvard Joint Nano Key Laboratory, Wuhan University of Technology, China</i>	16:10-16:25	<b>Solid-State Electrochemiluminescence Detection of L-proline Based Ru-AuNPs Signal Amplification Labels</b> Shenguang Ge, Mei Yan, Jinghua Yu <i>Key Laboratory of Chemical Sensing &amp; Analysis in Universities of Shandong (University of Jinan), School of Chemistry and Chemical Engineering, University of Jinan, P.R. China</i>
16:05 - 16:20	<b>Ge-rich SiGe Multilayer Heterostructures for Thermoelectric Applications</b> S. Cecchi1, D. Chrastina1, J. Frigerio1, G. Isella1, T. Eitzelstorfer2, J. Stangl2, E. Müller3, A. Samarelli4, L. Ferre Llin4, Y. Zhang, J. Weaver, P. Dobson, and D. J. Paul4 <i>1L-NESS Politecnico di Milano, Polo Territoriale di Como, via Anzani 42, 22100 Como, Italy</i>	16:20 - 16:35	<b>Flexible Nanogenerator Based on ZnO Nanoflakes With Ultra-high Output Voltage</b> Dae Joon Kang1, and H V Ngoc2 <i>BK 21 Physics Research Division, Department of Energy Science, Institute of Basic Sciences, SKKU Advanced Institute of Nanotechnology, Sungkyunkwan University, Republic of Korea</i>	16:25 – 16:40	<b>Integrating diamondoids with DNA for biosensing applications</b> Ganesh Sivaraman and Maria Fyta <i>Institute for Computational Physics, University of Stuttgart Allmandring 3, 70569, Stuttgart, Germany</i>
16:20 - 16:35	<b>Performance improvement of pattern nanostructured amorphous Si solar cells</b> Ching-Ting Lee1, Chiung-Yang Chuang1, Chun-Yen Tseng1, and Hsin-Ying Lee2 <i>1Institute of Microelectronics, Department of Electrical</i>	16:35 - 16:50	<b>Nucleation and growth of Ge nanoislands on patterned Si substrates prepared by ion-irradiation</b> Zh. Smagina, A. Dvurechenskii, A. Nenashev, P. Novikov, S. Rudin. N. Stepina		<b>Parallel Session</b> <b>W3 – Nanomedicine Session: Regenerative &amp; Nanomedical Strategies</b> Chair:

	Engineering, Energy Technology and Strategy Center, National Cheng Kung University, Tainan, Taiwan, ROC 2Department of Photonics, National Cheng Kung University, Tainan, Taiwan, ROC		Institute of Semiconductor Physics SB RAS 13, Novosibirsk, 630090, Russia		Room:
16:35-16:50	<b>Transport and photoelectric effects in structures with Ge and SiGe nanoclusters grown on oxidized Si (001)</b> S.V. Kondratenko <sup>1</sup> , Ye.Ye. Melnichuk, V.S. Lysenko <sup>2</sup> , Y.V. Gomeniuk <sup>2</sup> , Y.N. Kozyrev <sup>3</sup> <i>1National Taras Shevchenko University; 2Lashkaryov Institute of Semiconductor Physics, NAS of Ukraine; 3 Chuiko Institute of Surface Chemistry, Kyiv, Ukraine</i>	16:50 – 17:05	<b>Synthesis and electronic properties of nanostructured MexZn1-xS photocatalysts</b> E. Balantseva, A. M. Ferrari, P. Davit, S. Coluccia and G. Berlier <i>University of Turin Department of Chemistry and NIS Centre of Excellence, Turin, Italy</i>	16:40-17:10 Invited	<b>Control of human cancer cells behaviour using 2D/3D biocompatible surfaces</b> Masaru Tanaka <i>Graduate School of Science and Engineering, Yamagata University, Japan</i>
16:50-17:05	<b>Electrolytes based on Tetraglyme solvent led to record long term thermal stability of DSCs.</b> A.G. Kontos <sup>1</sup> , T. Stergiopoulos <sup>1</sup> , V. Likodimos <sup>1</sup> , D. Milliken <sup>2</sup> , H. Desilvesto <sup>2</sup> , G. Tulloch <sup>2</sup> , P. Falaras <sup>1</sup> <i>1Department of Physical Chemistry, Institute for Advanced Materials, Physicochemical Processes, Nanotechnology &amp; Microsystems, NSRF "Demokritos" Aghia Paraskevi Attikis, 15310, Athens, Greece 2Greatcell Solar S.A., c/o BDO S.A., Biopôle, 1066 Epalinges, Switzerland.</i>	17:05 - 17:20	<b>Absorption and Scattering Properties of Gold Nanoshells Studied by Photoacoustic and Surface Enhanced Raman Spectroscopy</b> V. Weber <sup>1</sup> , R. Bozio <sup>1</sup> , A. Feis <sup>2</sup> , C. Gellini <sup>2</sup> , D. Pedron <sup>1</sup> , P.R. Salvi <sup>2</sup> , R. Signorini <sup>1</sup> <i>1Department of Chemical Science, University of Padova, Via Marzolo 1 35131, Padova (Italy) 2Chemistry Department "Ugo Schiff", University of Firenze, Via della Lastruccia 3, 50019 Sesto Fiorentino, Firenze (Italy)</i>	17:10-17:40 Round Table	<b>Nanomedicine in Neurodegenerative Diseases &amp; Brain Cancer</b> Chair:
17:05-17:20	<b>Tunable all-polymer 1-D Photonic Crystal arrays</b> D. Chavelas <sup>1,2</sup> , M.-I. Georgaki <sup>2</sup> , P. Oikonomou <sup>2</sup> , A. Botsialas <sup>2,3</sup> , P. Argitis <sup>2</sup> , M. Chatzichristidi <sup>2,4</sup> , K. Beltsios <sup>1</sup> , E. Lidorikis <sup>1</sup> , D. Goustouridis <sup>5</sup> , I. Raptis <sup>2</sup> <i>1 Dept. of Materials Science, University of Ioannina, Ioannina, Greece 2 Dept. Microelectronics, IAMPPNM, NCSR 'Demokritos', 15343, Athens, Greece 3 ThetaMetrisis S.A. Polydefkous 14, 12243, Athens, Greece 4 Chemistry Dept, University of Athens, Athens, Greece 5 Dept. Electronics, TEI of Peiraeus, Egaleo, Greece</i>	17:20 - 17:35	<b>Artificial superconductor-ferromagnet cryogenic devices based on Ni80Fe20-Nb-Ni80Fe20 and Co-Nb-Co trilayers: exploration of their transport properties</b> D. Stamopoulos, E. Aristomenopoulou <i>Institute of Advanced Materials, Physicochemical Processes, Nanotechnology and Microsystems, National Centre for Scientific Research 'Demokritos', Greece</i>		
17:20 – 17:40 EU Project	<b>SolarDesign Vision: On-the-fly alterable thin-film solar modules for design driven applications</b> N. Adamovic <sup>1</sup> , A. Zimmermann <sup>2</sup> , N. Severino <sup>1</sup> , W. Brenner <sup>1</sup> <i>1 TU Vienna, Institute of Sensor and Actuator Systems, Floragasse 7, A-1040 Vienna, Austria 2 Sunplugged GmbH, Wildermieming, Austria</i>				
17:30 –18:00	<b>Coffee Break-Exhibition-Networking</b>				
	<b>Parallel Session W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: Polymer Nanotechnologies</b> Chair:			<b>Parallel Session W3 – Nanomedicine</b> <b>Session: Nanodiagnostics &amp; Drug Delivery</b> Chair: Room:	

	<b>Room:</b>		
18:00 - 18:20 Invited	TBA Spyros Anastasiadis <i>Dept of Chemistry, University of Crete, Greece</i>	18:00 - 18:15	<b>Enhancement of Surface Plasmon Resonance imaging signal for biomedical applications</b> Marinella G. Sandros <sup>1</sup> , Stephen A. Vance <sup>1</sup> , Maryam Tabrizian <sup>2</sup> , Lidjia Malic <sup>2</sup> , Chiraz Frydman <sup>3</sup> <i>3 HORIBA Scientific, Palaiseau, France</i>
18:30 – 18:45	<b>Electrically conductive fibers based on polymer nanocomposites - material, processing and properties</b> W. Steinmann <sup>1</sup> , G. Seide <sup>1</sup> , T. Gries <sup>1</sup> <i>1Institut für Textiltechnik (ITA), RWTH Aachen University Otto-Blumenthal-Straße 1, 52074 Aachen, Germany</i>	18:15 – 18:30	<b>Protein immobilization and model immunoassay on silicon surfaces modified with organo-silanes</b> K. Awsiu <sup>1</sup> , A. Budkowski <sup>1</sup> , P. Petrou <sup>2</sup> , A. Psarouli <sup>2</sup> , A. Bernasik <sup>3</sup> , M.M. Marzec <sup>3</sup> , S. Kakabakos <sup>2</sup> , J. Rysz <sup>1</sup> <i>1Inst. of Physics, Jagiellonian University, Kraków, Poland</i>
18:45 – 19:00	<b>Polyethylene/ chitosan-Na+-MMT nanocomposites</b> R.N. Darie <sup>1</sup> , A. Sdrobis <sup>1</sup> , G. Pricope <sup>2</sup> , A. Baklavariadis <sup>3,4</sup> , C. Panayiotou <sup>3,4</sup> , I. Zuburtikudis <sup>3,*</sup> , L. Fras <sup>5</sup> , D. Pamfil <sup>1</sup> , C. Vasile <sup>1</sup> <i>1Romanian Academy, "P.Poni" Institute of Macromolecular Chemistry, 41A Grigore Ghica Voda Alley, 700487, Iasi, Romania</i>	18:30 – 18:45	<b>Controlled microfluidic switching in arbitrary time-sequences with low drag</b> C.S.Niman <sup>1</sup> , J.P.Beech <sup>1</sup> , J.O.Tegenfeldt <sup>1</sup> , P.M.G.Curmi <sup>2,3</sup> , D.N.Woolfson <sup>4,5</sup> , N.R.Forde <sup>6</sup> , H.Linke <sup>1</sup> <i>1 Nanometer Structure Consortium (nmC@LU) and Div. of Solid State Physics, Lund University, Sweden</i>
19:00-19.15	<b>Polyvinylalcohol/Chitosan/Montmorillonite Nanocomposites</b> E.Părpărită <sup>1</sup> , C.N. Cheaburu-Yilmaz <sup>1</sup> , C. Vasile <sup>1</sup> <i>Physical Chemistry of Polymers, Romanian Academy, "P. Poni" Institute of Macromolecular Chemistry, 41A Grigore Ghica Voda Alley, 700487 Iasi, Romania</i>	18:45-19:00	<b>Enhanced luminescence and imaging of desoxyribonucleic acid infiltrated into silica photonic crystal</b> G. Dovbeshko <sup>1</sup> , O. Fesenko <sup>1</sup> , V. Boiko <sup>1</sup> , L. Dolgov <sup>2</sup> , V. Kiisk <sup>2</sup> , I. Sildos <sup>2</sup> , V. Gorelik <sup>3</sup> <i>1Department of Physics of Biological Systems, Institute of Physics, NAS of the Ukraine 2Institute of Physics, University of Tartu, Estonia, 3P.N. Lebedev Physical Institute of the Russian Academy of Sciences, Russia</i>
19:15-19.30	<b>Conductive polymer brushes for directional charge transport at nanoscale</b> Michał Szuwarzyński, Justyna Kowal, and Szczepan Zapotoczny <i>Faculty of Chemistry, Jagiellonian University Ingardena 3, 30-060 Krakow, Poland</i>	19:00-19:15	<b>Radiolabeling and in vivo evaluation of cubosomes and hexosomes for lymphatic targeting</b> C. Nilsson <sup>1</sup> , B. Barrios-Lopez <sup>2</sup> , A. Kallinen <sup>3</sup> , P. Laurinmäki <sup>4</sup> , S. Butcher <sup>4</sup> , M. Raki <sup>2</sup> , J. Weisell <sup>5</sup> , K. Bergström <sup>2</sup> , S. Weng Larsen <sup>1</sup> , J. Østergaard <sup>1</sup> , C. Larsen <sup>1</sup> , A. Urti <sup>2</sup> , A. Airaksinen <sup>3</sup> and A. Yaghmur <sup>1</sup> <i>1Department of Pharmacy, Faculty of Health and Medical Sciences, University of Copenhagen, Universitetsparken 2, DK-2100 Copenhagen, Denmark, 2Centre for Drug Research, Faculty of Pharmacy, University of Helsinki, Helsinki, Finland, 3Laboratory of Radiochemistry, Department of Chemistry, University of Helsinki, Helsinki, Finland, 4Institute of Biotechnology, Faculty of Biosciences, University of Helsinki, Helsinki, Finland, 5School of Pharmacy, Biocenter Kuopio, Faculty of Health Science, University of Eastern Finland, Kuopio, Finland</i>
19:30-19.45	<b>Ligand effects on phase behavior of polymer/quantum dots nanocomposites</b> O. Matvienko, Yu. Savin, M. Prodanov, Valerii Vashchenko <i>Institute for Single Crystals, National Academy of Sciences of Ukraine Lenin ave. 60, 61001, Kharkov, Ukraine</i>	19:15-19:30	<b>A novel magnetic filter for utilization in magnetically-assisted haemodialysis: realization and preliminary evaluation in in vitro experiments</b> D. Stamopoulos <sup>1</sup> , E. Manios <sup>1</sup> , N. Papachristos <sup>1</sup> , E. Aristomenopoulou <sup>1</sup> , E. Grapsa <sup>2</sup> <i>1 Institute of Advanced Materials, Physicochemical Processes, Nanotechnology and Microsystems, National Centre for Scientific Research 'Demokritos', Greece 2 Dialysis Unit, General Hospital of Athens 'Aretaieion', Greece</i>
19:45-20.00	<b>Dynamics of hyperbranched polymers in the bulk and under confinement</b> K. Chrissopoulou <sup>1</sup> , K. Androulaki <sup>1,2</sup> , D. Prevosto <sup>3</sup> , M. Labardi <sup>3</sup> , and S. H. Anastasiadis <sup>1,2</sup> <i>1 Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, P.O. Box 1527, 711 10,</i>	19:30-19:45	<b>Enzyme Immobilisation on Electrospun Polymer Micro-nanofibres for Drug Delivery Applications</b> S.D. Psoma <sup>1</sup> , D.W.K. Jenkins <sup>2</sup> <i>1 Department of Engineering of Informatics and Telecommunications, University of Western Macedonia, Kozani, Greece. 2 ChiltonTech, Rutherford Appleton Laboratory, Didcot, Oxfordshire, UK.</i>

	<i>Heraklion, Crete, Greece</i>		
20:00 – 20:15	<b>Flow through Polymer-bearing Nanopores in Anodised Alumina Membranes</b> D. Patroni, A. Christoulaki, S. Dellis, N. Spiliopoulos, D.L. Anastassopoulos, A.A. Vradis, and C. Toprakcioglu <i>Department of Physics, University of Patras, Patras 26500, Greece</i> <i>ctop@physics.upatras.gr</i>	19:45-20:15 Invited	<b>Personalized nanomedicine: toward advancing the practical clinical utility of translational medicine decisions</b> Ioannis Vizirianakis <i>Laboratory of Pharmacology, Department of Pharmaceutical Sciences, AUTH, Greece</i>
20:15 – 20:30	<b>Polypyrrole and composite electrodes for electrochemical supercapacitors</b> I. Zhitomirsky, K.Shi, S.Chen <i>Department of Materials Science and Engineering, McMaster University Hamilton, Ontario, Canada</i>		
<b>END OF THIRD DAY</b>			
<b>20:30</b>	<b>NN13 INVITED DINNER</b>		



**Friday 12 July**

**Porto Palace Conference Centre & Hotel**

	<p><b>Parallel Session</b>  <b>Polymer Nanotechnologies Special Session I</b>            (A Symposium honoring G. Hadziioannou)            Porto Palace Conference Centre &amp; Hotel  <b>Organizers: Spiros H. Anastasiadis and Jannis Kallitsis</b>  <i>Room:</i></p>		<p><b>Parallel Session</b>  <b>W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b>  <b>Session: NanoCharacterization &amp; Nanoengineering I</b>  <i>Chair:</i>  <i>Room:</i></p>		<p><b>Parallel Session</b>  <b>W3 – Nanomedicine</b>  <b>Session: Regenerative Medicine &amp; Clinical Nanomedicine</b>  <i>Chair:</i>  <i>Room:</i></p>
09:00-09:15	<p><b>Welcome by Spiros H. Anastasiadis</b>  <i>Dept of Chemistry, University of Crete, Greece</i></p>	09:00-09:20 Invited	TBA	09:00-09:30 Invited	TBA Thimios Mitsiadis <i>University of Zurich, Switzerland</i>
09:15-09:45	<p><b>Interfacial activity of nano-materials</b>  <b>Thomas P. Russell</b>  <i>Dept. of Polymer Science and Engineering, University of Massachusetts Amherst, USA</i></p>				
09:45-10:15	<p><b>Conducting Polymer Devices for Neural Interfacing</b>  <b>George Malliaras</b>  <i>Dept of Bioelectronics, Ecole Nationale Supérieure des Mines, CMP-EMSE, France</i></p>	09:20-09:35	<p><b>Phase transitions in thin, highly oriented layers of semiconducting discotic liquid crystals as seen by thermo-optical analysis and hot stage AFM</b>            T. Makowski, A. Tracz            Center of Molecular and Macromolecular Studies, Polish Academy of Sciences, Sienkiewicza 112, 90-363 Łódź, Poland</p>	09:30-09:45	<p><b>Effect of Oxygen plasma induced nanotopography on cell behavior</b>  <u>D. Kontziampasis</u><sup>1</sup>, A. Bourkoulou<sup>2</sup>, P. Petrou<sup>2</sup>, A. Tserepi<sup>1</sup>, S. Kakabakos<sup>2</sup>, E. Gogolides<sup>1</sup>  <sup>1</sup> IMEL, N.C.S.R. "Demokritos", Greece</p>
10:15-10:45	<p><b>Designing polymer and hybrid thermoelectrics</b>  <b>Rachel Segalman</b>  <i>Chemical &amp; Biomolecular Engineering Faculty, University of California, Berkeley, USA</i></p>	09:35-09:50	<p><b>On the 3D Control of the Functional Structure of Molecular Thin Films</b>  <u>S. Cataldo</u><sup>1</sup> C. Sartorio,<sup>1</sup> F. Giannazzo<sup>2</sup> and B. Pignataro<sup>*1</sup>  <sup>1</sup> Dipartimento di Fisica e Chimica, Università degli Studi di Palermo V.le delle Scienze, Ed.17 – 90100 Palermo (Italy)  <sup>*</sup>bruno.pignataro@unipa.it</p>	09:45-10:00	<p><b>Development of Curcumin-loaded Electrospun Poly (ε-Caprolactone) Nanofiber Meshes for Cardiovascular Applications</b>  <u>A.M. Pappa</u><sup>1</sup>, V.Karagkiozaki<sup>1</sup>, D.G. Fatouros<sup>2</sup>, P.Kavatzikidou<sup>1</sup>, A. Basgiouraki<sup>1</sup>, M.Seitanidou<sup>1</sup>, S.Logotheidis<sup>1</sup> <i>Nanomedicine Group, Nanotechnology LTFN Lab, Dept. of Physics, Aristotle University of Thessaloniki, Greece</i></p>
		09:50 – 10:05	<p><b>Influence of the density of states and of the extent of the electronic wave function on the small polaron hopping conductivity in 1D</b>            M. Dimakogianni, C. Simserides, G. P. Triberis  <i>University of Athens, Physics Department, Panepistimiopolis, Zografos, 15784 Athens, Greece</i></p>	10:00 – 10:15	<p><b>Multifunctional Nanoplatfrom for Biomedical Applications</b>  <u>A. Millan</u><sup>1</sup>, R. Piñol<sup>1</sup>, L. Mohamed<sup>1</sup>, R. Bustamante<sup>1</sup>, C. Brites<sup>2</sup>, L. Gabilondo<sup>1</sup>, J.L. Murillo<sup>1</sup>, N.J.O. Silva<sup>2</sup>, V. Sorribas<sup>3</sup>, M. Gutierrez<sup>3</sup>, R. Cornudella<sup>3</sup>, L. Carlos<sup>2</sup>, F. Palacio<sup>1</sup>, A. Lascialfiari<sup>4</sup>, J. Carrey<sup>5</sup>, M. Respaud<sup>5</sup>, G. C. Sanmartí<sup>6</sup>, J.P. Salvador<sup>6</sup>, P.</p>

					Marco6, J. Criado7, M. Fuentes7 1 ICMA, Zaragoza,Zaragoza, Spain;
		10:05-10:20	<b>Kinetics of Nanoparticle Self-Assembly at Fluid Interfaces Revealed by a Dynamic Surface Tension Probe</b> M.A. Ioannidis1, N. Bizmark2, D. Henneke3 <i>University of Waterloo, Department of Chemical Engineering 200 University Ave. West, Waterloo, N2L 3G1 Ontario, Canada</i>	10:15-10:35 Invited Oral	<b>Response of human bone marrow mesenchymal stem cells on nano-engineered scaffolds for bone regeneration</b> M. Chatzinikolaidou1,2, S. Rekstyte2, M. Vamvakaki1,2, C. Pontikoglou3, H. Papadaki3 & M. Farsari2 <i>1Dept. of Materials Science and Technology, University of Crete, P.O. Box 2208, Heraklio, Greece2IESL-FORTH, P.O. Box 1527, 71110 Heraklio, Greece</i>
		10:20-10:35	<b>A printable color filter based on the micro-cavity enhanced surface plasmon resonance</b> Yan Ye1,2, Renjin Shao1, Yun Zhou1, Linsen chen1 <i>1Institute of Information Optical Engineering, Soochow University, Suzhou 215006, China 2SVG Optronics,Co., Ltd, Suzhou 215026, China</i>		
		10:35 – 10:50	<b>Doubly Doped Tin Oxide Photoluminescence Spectrum (PL) and Photoluminescence Quantum Yields (PLQY)</b> A. Battal1, D. Tatar2, A. Kocyigit3, B. Duzgun2 <i>1Faculty of Education, Muş Alparslan University, Muş, Turkey</i>		
10:45 – 11:15	<b>Coffee Break-Exhibition-Networking</b>				
	<b>Parallel Session Polymer Nanotechnologies Special Session II (A Symposium honoring G. Hadziioannou) Porto Palace Conference Centre &amp; Hotel Organizers: Spiros H. Anastasiadis and Jannis Kallitsis Room:</b>		<b>Parallel Session W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction Session: NanoCharacterization &amp; Nanoengineering II Chair: Room:</b>		<b>Parallel Session W3 – Nanomedicine Special Session: Nanomedicine for Atherosclerosis Chair: Room:</b>
11:15-11:45	<b>Polymer Ferroelectric Memories</b> Paul W. M. Blom <i>Max Planck Institute for Polymer Research, Mainz, Germany</i>	11:15-11:30	<b>Development of Functional Organic Nanomaterials using Surfactant-based Templates</b> A. Athanasopoulou1,2, M. Karamitrou1,2, A. Moutsiopoulou1,2, G. Ch. Lainioti1,2, G. Bokias1, G. Voyiatzis2, J. K. Kallitsis1,2 <i>1Department of Chemistry, University of Patras, GR-26504 Patras, Greece 2Foundation for Research and Technology-Hellas (FORTH) / Institute of Chemical Engineering Sciences (ICE-HT), P.O. Box</i>	11:15 – 11:45 Invited	<b>From Nano Porous Metallic Stent to Nano Sphere Eluting Sirolimus to Bioresorbable Scaffold</b> P. Serruys <i>Dept. of Cardiology, Thoraxcenter, Erasmus Medical Center, The Netherlands</i>

			1414, GR-265 04 Rio-Patras, Greece		
11:45-12:15	<b>Reversible Magnetic Memory Switch from Liquid-Crystalline Elastomer Nanocomposites</b> Raffaele Mezzenga <i>Laboratory of Food and Soft Materials (FSM), Inst. of Food, Nutrition &amp; Health (IFNH), ETH-Zurich, Zurich, Switzerland</i>	11:30-11:45 <b>Magnetic properties and Giant magnetoimpedance effect in nanocrystalline microwires</b> A. Zhukov <sup>1,2</sup> , A. Talaat <sup>1</sup> , M. Ipatov <sup>1</sup> , M. Churyukanova <sup>3</sup> , S. Kaloshkin <sup>3</sup> , E. Zamiatkina <sup>3</sup> , E. Shuvaeva <sup>3</sup> , L. Gonzalez-Legarreta <sup>4</sup> , B. Hernando <sup>4</sup> and V. Zhukova <sup>1</sup> <i>1Dpto. Fisica de Materiales, UPV/EHU, 20018 San Sebastian, Spain</i> <i>2IKERBASQUE, Basque Foundation for Science, 48011 Bilbao, Spain</i> <i>3National Univer. of Science and Technology «MISIS», Moscow, 119049, Russia</i> <i>4Dpto de Fisica, Universidad de Oviedo, Calvo Sotelo s/n, 33007 Oviedo, Spain</i>	11:45-12:05 Invited	<b>Theoretical study of LDL transport in cardiovascular engineering aiming to computational analysis</b> J.V. Soulis <sup>1</sup> , D. G. Mpairaktaris <sup>1</sup> , G. D. Giannoglou <sup>2</sup> <i>1Fluid Mechanics Division, Faculty of Engineering Demokriton University of Thrace, Xanthi, GR-67100, Greece</i> <i>2AHEPA University General Hospital, 1st Cardiology Department University of Aristotle University of Thessaloniki Thessaloniki, GR-54636, Greece</i>	
		11:45-12:00 <b>Advantages of Bi-chromatic Femtosecond Pulses for Nanostructuring of Polymers and Glasses</b> A. Pikulin, A. Afanasiev, V. Bredikhin, N. Bityurin, A. Alexandrov, N. Agareva, I. Ilyakov, B. Shishkin, R. Akhmedzhanov Institute of Applied Physics Russian Academy of Sciences Nizhny Novgorod, Russia			
12:15-12:45	<b>Title to be announced</b> Ting Xu <i>Dept. Materials Science &amp; Engineering &amp; Chemistry, University of California, Berkeley, USA</i>	12:00-12:15 <b>Wall/fluid interaction in nanochannels: a study based on the radial distribution function</b> F. Sofos, T.E. Karakasidis, A. Liakopoulos Laboratory of Hydromechanics and Environmental Engineering, Department of Civil Engineering, School of Engineering, University of Thessaly, 38834 Pedion Areos, Volos, Greece	12:05 – 12:25 Invited	<b>Retrospective Analysis of 5-year Long-term Outcomes in Patients Underwent Plasmonic Photothermal Therapy of Atherosclerosis</b> A. Kharlamov <i>Erasmus University Medical Center (Department of Interventional Cardiology) Rotterdam, Netherlands</i>	
12:45-13:15	<b>Antifungal polymer-matrix nanocomposites: Imparting new functionalities via nanotechnology and tracing molecular scale origins via computer simulations</b> Evangelos Manias Dept. of Physics and Astronomy, University of Sheffield, Sheffield, UK	12:15-12:30 <b>Surface acoustic wave hydrogen sensor based on Pd nanoporous films imprinted with waveguide channels</b> C. Viespe, I. Nicolae, C. Grigoriu, <i>National Institute of Laser, Plasma and Radiation Physics, Laser Department, Str. Atomistilor, no.409, Magurele, Ilfov, Romania</i>	12:30 - 13:30 Round Table	<b>'NANOMEDICINE CHALLENGES IN ATHEROSCLEROSIS' co-organized by NanoCardio project</b>  <b>Treating atherosclerosis: recent success and remaining challenges</b> A. Tavridou <i>Demokriton University of Thrace</i>	
13:15-13:45	<b>Complex fluids on surfaces: Self-assembly of soft nanostructures</b> Vasileios Koutsos <i>Inst. for Materials and Processes, School of Engineering, The University of Edinburgh, UK</i>	12:30-12:45 <b>Photoluminescence properties of doubly doped SnO<sub>2</sub> thin films prepared by Spray pyrolysis technique</b> B. Duzgun <sup>1</sup> , A. Kocyigit <sup>2</sup> , D. Tatar <sup>1</sup> , A.		<b>TBA</b> A.Kapetanopoulos	

			<p>Battal3 1K.K. Education Faculty, Department of Physics Education, Ataturk University, Erzurum Turkey</p>		<p><b>Nanomedicine approaches for Atherosclerosis Management</b> V. Karagkiozaki, S. Logothetidis Nanomedicine Group, Nanotechnology LTFN Lab, Dept. of Physics, Aristotle University of Thessaloniki, GR 54124, Greece</p>
		12:45-13:00	<p><b>Transmission Electron Microscopy study of LiCoO<sub>2</sub> thin films grown on Al<sub>2</sub>O<sub>3</sub> and Si substrates by Pulsed Laser Deposition</b> A. Breza<sup>1</sup>, C. Lioutas<sup>1</sup>, E. Svoukis<sup>2</sup>, J. Giapintzakis<sup>2</sup> <sup>1</sup> Department of Physics, Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece</p>		
		13:00 – 13:15	<p><b>Effect of organically modified montmorillonite nanoparticles on corrosion performance of epoxy coatings on steel</b> G. Zisimou, P. Spathis, K. Triantafyllidis, P. Giannakoudakis, D. Giliopoulos School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, 54124, Greece</p>	13:30-13:45	<p><b>Noble metal nanoparticles for atheroregression below Glagov threshold</b> A. Kharlamov<sup>1, 2</sup>, J. Gabinsky<sup>1</sup> <sup>1</sup>Ural Institute of Cardiology (Department of Interventional Cardiology) Yekaterinburg, Russia <sup>2</sup>Erasmus University Medical Center (Department of Interventional Cardiology) Rotterdam, Netherlands</p>
		13:15 – 13:30	<p><b>Shape-Control of CdSe/CdS Octapods Using Halogen Impurities</b> Sotirios Christodoulou, Mee Rahn Kim, Mirko Prato, Rosaria Brescia, Iwan Moreels, Liberato Manna * Department of Nanochemistry, Istituto Italiano di Tecnologia, via Morego, 30, 16163 Genova, Italy</p>		
		13:30 – 13:45			
<b>13:45 – 15:00</b>	<b>Lunch Buffet Break</b>				
	<p><b>Poster Session II (DAY 2) - Exhibition – Networking</b> <b>Posters of Workshop 2 (Specific Numbers will be announced Soon), Workshop 3 and Workshop 4 at 14:00 – 15:00</b> Chair:</p>				
	<p><b>Parallel Session</b> <b>Polymer Nanotechnologies Special Session II (A Symposium honoring G. Hadziioannou)</b> <b>Porto Palace Conference Centre &amp; Hotel</b> Organizers: Spiros H. Anastasiadis and Jannis Kallitsis <b>Room:</b></p>		<p><b>Parallel Session</b> <b>W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: NanoCharacterization &amp; Nanoengineering III</b> Chair:</p>		<p><b>Parallel Session</b> <b>W3 – Nanomedicine Special Session V: NANOSAFETY VERSUS NANOTOXICITY, ETHICS &amp; REGULATIONS TOWARDS TRANSLATIONAL MEDICINE</b></p>

			Room:		Chair: Room:
15:00 – 15:30	TBA Christian Collete ARKEMA, France	15:30 – 16:00 Invited	TBA	15:30 – 15:50 Invited	TBA S. Moya CIC biomaGUNE, Spain
15:30 – 16:00	<b>Single molecules on surfaces</b> M. Geoghegan <i>Department of Physics and Astronomy, University of Sheffield, Hicks Building, Sheffield S3 7RH, UK</i>	16:00 – 16:15	<b>Two-stage Mechanism of Quantum Cones Formation on a Surface of Semiconductors</b> A. Medvid', P. Onufrijevs, E. Dauksta <i>Department of Material Science and Applied Chemistry, Riga Technical University, 14 Azenes Str. Riga LV1048, Latvia</i>	15:50 – 16:05	<b>Nanowires impede cell motility, interfere with division and cause DNA damage</b> H. Persson <sup>1,2</sup> , C. Købler <sup>3</sup> , K. Mølhave <sup>3</sup> , L. Samuelson <sup>1,2</sup> , J. O. Tegenfeldt <sup>1,2</sup> , S. Oredsson <sup>2,4</sup> , C. N. Prinz <sup>1,2</sup> <i>1 Department of Physics, Lund University, Box 118, SE22100 Lund, Sweden</i> <i>2 Nanometer Structure Consortium (nmC@LU), Lund University, Box 118, SE22100 Lund, Sweden</i>
16:00 - 16:30	<b>Vitrimers, a new class of polymers</b> Ludwik Leibler <i>Matière Molle et Chimie, ESPCI ParisTech 10 rue Vauquelin, 75005 Paris, France</i>	16:15 - 16:30	<b>IR spectroscopy with plasmonic enhancement</b> A. Pucci <i>Kirchhoff Institute for Physics of the Heidelberg University, Heidelberg, Germany</i>	16:05 - 16:20	<b>Luminescent Silica Nanoparticles for Lateral Flow Immunoassays</b> D. Grönlinger, A. Philippart, S. Thalhammer <i>Helmholtz Zentrum München Department of Radiation Science German Research Center for Environmental Health (GmbH) Ingolstädter Landstraße 1, 85764 Neuherberg, Germany</i>
16:30-17:00	TBA Nikos Hadjichristidis <i>Physical Sciences &amp; Engineering Faculty, King Abdullah University of Science and Technology, Saudi Arabia</i>	16:30-16:45	<b>Optical properties of EMA model</b> S.N. Svitashva <i>Rzhanov Institute of semiconductor physics Siberian Branch of RAS av. Lavrentiev, 13, 630090, Russia</i>	16:20-16:35	<b>Multimodal magnetic nanoparticles for biomedical applications: uptake, intracellular fate and cytotoxicity</b> M. Pavlin <sup>1</sup> , J. Lojk <sup>1</sup> , P. Veranič <sup>2</sup> , V. B. Bregar <sup>1</sup> <i>1 Faculty of Electrical Engineering, University of Ljubljana, SI-1000 Ljubljana, Slovenia (mojca.pavlin@fe.uni-lj.si)</i>
17:00 - 17:40	<b>Organic Electronics: Past and Future</b> Georges Hadzioannou <i>LCPO, CNRS, France</i>	16:45 - 17:00	<b>Optical constants of the thin films of densely packed amorphous silicon nanoclusters</b> O. Yeltsina, D. Andronikov, M. Semeruhin, D. Yavsin, J. Vainshtein, O. Sreseli, S. Gurevich Ioffe <i>Physical-Technical Institute of the Russian Academy of Sciences 194021 St Petersburg, Russian Federation</i>	16:35 - 16:55	<b>Nanogels for drug delivery; a journey into the world of nanotoxicity</b> J. Ray <sup>1</sup> , C. Moia <sup>2</sup> , H. Zhu <sup>2</sup> , C. Brennan <sup>1</sup> , M. Resmini <sup>1</sup> <i>1 SBCS, Queen Mary, University of London, Mile End Road, London, E1 4NS, UK</i>

<p align="center"><b>End of the Symposium honoring Prof. G. Hadziioannou Happy Birthday!</b></p> <p align="center"><b>21:00</b></p> <p align="center"><b>Birthday Dinner: For all the Invited Speakers of the Symposium</b></p>	<p>17:00 – 17:15</p>	<p><b>Flow through Polymer-bearing Nanopores in Anodised Alumina Membranes</b> D. Patroni, A. Christoulaki, S. Dellis, N. Spiliopoulos, D.L. Anastassopoulos, A.A. Vradis, and C. Toprakcioglu <i>Department of Physics, University of Patras, Patras 26500, Greece</i> <a href="mailto:ctop@physics.upatras.gr">ctop@physics.upatras.gr</a></p>	<p>16:55-17:10</p>	<p><b>Surface functionalization of gold nanoparticles influences cellular uptake but it has not effect in the functional properties of human dendritic cells</b> Fytianos Kleantis<sup>1</sup>, Rodriguez-Lorenzo Laura<sup>1</sup>, Seydoux Emilie<sup>2</sup>, Blank Fabian<sup>2</sup>, von Garnier Christophe<sup>2</sup>, Petri – Fink Alke<sup>1</sup>, Rothen – Rutishauser Barbara<sup>1,2</sup> <i>1. Adolphe Merkle Institute, University of Fribourg, Marly, Switzerland</i></p>
	<p>17:15 – 17:30</p>	<p><b>Development of Infrared Nearfield Microscopy for the Analysis of Nanomodified Fibres</b> B. Glauß<sup>1</sup>, M. Beckers<sup>1</sup>, W. Steinmann<sup>1</sup>, G. Seide<sup>1</sup>, T. Gries<sup>1</sup>, B. Hauer<sup>2</sup>, A. Engelhardt<sup>2</sup>, A. van Munster<sup>2</sup>, T. Taubner<sup>2</sup>, G. Roth<sup>3</sup> <i>1Institut für Textiltechnik der RWTH Aachen (ITA), 52056 Aachen (Germany)</i> <i>21. Physikalisches Institut (IA), RWTH Aachen University, 52056 Aachen (Germany)</i> <i>3Institut für Kristallografie (XTAL), RWTH Aachen University, 52056 Aachen (Germany)</i></p>	<p>17:10- 17:25</p>	<p><b>Functionalized graphene oxide as selective regulators of immune factors, protease, and microbial growth</b> Xiaofang Tan, Liling Jin, Jing Zhang, Kai Yao, Jia Tang, Kai Yang, Shuai Zhang, Zhuang Liu, Rui Peng* <i>Institute of Functional Nano &amp; Soft Materials (FUNSOM) and Jiangsu Key Laboratory for Carbon-Based Functional Materials and Devices, Soochow University 199 Ren'ai Rd, Box 32, Suzhou, Jiangsu, P. R. China</i></p>
	<p>17:30 – 17:45</p>	<p><b>Radiation Forces as a Novel Micropatterning Tool</b> Loukas Athanasekos<sup>1,2</sup>, Miltiadis Vasileiadis<sup>1,2</sup>, Stergios Pispas<sup>2</sup>, and Nikolaos A. Vainos<sup>1,2</sup> <i>1. Department of Materials Science, University of Patras, Patras 26500, Greece,</i> <i>2. Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens 11635, Greece</i></p>	<p>17:25-17:45</p>	<p><b>Round Table</b></p>
<p>17:45 –18:00</p>	<p align="center"><b>Coffee Break-Exhibition-Networking</b></p>			
	<p><b>Parallel Session W2 – Nanomaterials, Nanofabrication, Nanoengineering &amp; Nanoconstruction</b> <b>Session: NanoCharacterization &amp; Nanoengineering IV</b> Chair: Room:</p>		<p><b>Parallel Session W3 – Nanomedicine</b> <b>Session:</b> Chair: Room:</p>	
<p>18:00-18:30 Invited</p>	<p><b>TBA</b> Panagiotis Patsalas <i>Dept. of Physics, AUTH, Thessaloniki, Greece</i></p>	<p>18:00-18:15</p>	<p><b>Self-Association and Complexation of the Anti-Cancer Drug Doxorubicin with PEGylated Hyperbranched Polyesters in an Aqueous Environment</b></p>	

			K. Karatasos <i>Aristotle University of Thessaloniki, Chemical Engineering Department</i>
18:30 – 18:45	<b>Effect of substrate temperature on the some physical properties of SnO2 thin films deposited by spray pyrolysis technique</b> D. Tatar <sup>1</sup> , G. Turgut <sup>1</sup> and B. Duzgun <sup>1</sup> <i>1 K.K. Education Faculty, Department of Physics Education, Ataturk University, Erzurum Turkey</i>	18:15 – 18:30	<b>Biomedical applications of novel silver-biologically active protein hydrids</b> <u>Amihay Freeman</u> <sup>1</sup> , Gil Mor <sup>1</sup> , Hila Moscovich-Dagan <sup>2</sup> , Carmit Ophir-Porat <sup>1</sup> , Hadar Ben-Yoav <sup>2</sup> , Yossi Shacham-Diamand <sup>2</sup> <i>1Department of Molecular Microbiology and Biotechnology; 2Department of Physical Microelectronics, Tel Aviv University, Tel Aviv, 69978, ISRAEL</i>
18:45 – 19:00	<b>Critical Stress intensity factor evaluation of nanosilica epoxy composites through experiments and Finite element Modeling</b> D. Tzetzis <sup>1,2</sup> , A. Korlos <sup>3</sup> , G. Mansour <sup>1</sup> , E. Zouridi <sup>1</sup> , E. Pavlidou <sup>4</sup> <i>1Aristotle University of Thessaloniki, Department of Mechanical Engineering, Thessaloniki, 54124, Greece 2 International Hellenic University, 14km Thessaloniki-Moudania, Themi, 57001, Greece 3Alexander Technical Educational Institution, Vehicle Engineering Department, 57400, Greece 4 Aristotle University of Thessaloniki, Department of Physics, Thessaloniki, 54124, Greece</i>	18:30 – 18:45	<b>Biomimetic at the Nanoscale: The Inspiration We can Draw from Endogenous Systems Interactions</b> J. C. Y. Kah <i>Department of Bioengineering, National University of Singapore 9 Engineering Drive 1, EA-03-12, Singapore 117576</i>
19:00 – 19:15	<b>Ceramic textiles: a view to improve fabrics performances</b> S. Ortelli <sup>1*</sup> , A. L. Costa <sup>1</sup> , M. Blosi <sup>1</sup> , M. Dondi <sup>1</sup> <i>CNR-ISTEC, Via Granarolo 64, 48018 Faenza (RA), Italy</i>	18:45 – 19:00	<b>Ultrafine Forms of Meloxicam with Improved Dissolution Behaviour</b> S. Myz <sup>1,2</sup> , A. Ogienko <sup>1,3</sup> , N. Tumanov <sup>1,2</sup> , A. Yunoshev <sup>1,4</sup> , A. Stoporev <sup>1,3</sup> , A. Manakov <sup>1,3</sup> , T. Shakhtshneider <sup>1,2</sup> , E. Boldyreva <sup>1,2</sup> , V. Boldyrev <sup>1,2</sup> <i>1REC-008 "Molecular Design and Ecologically Safe Technologies", Novosibirsk State University, Novosibirsk, Russia 2Institute of Solid State Chemistry and Mechanochemistry SB RAS, Novosibirsk, Russia 3Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk, Russia 4Lavrentiev Institute of Hydrodynamics SB RAS, Novosibirsk, Russia</i>
19:15– 19:30	<b>TOWARDS A PROMISING FUTURE IN THE SAFE INDUSTRIAL USE OF NANOMATERIALS</b> <u>C. Delpivo</u> <sup>1</sup> , S. Ortelli <sup>1</sup> , M. Blosi <sup>1</sup> , A. L. Costa <sup>1</sup> , A. Vaccari <sup>2</sup> , M. Dondi <sup>1</sup> <i>1 Nanotechnologies and Colloidal Processing, CNR-ISTEC, Faenza (RA) Italy</i>	19:00– 19:20 Invited Oral	<b>TBA</b> Bert Muller <i>University of Basel, Switzerland</i>
		19:20– 19:40 Invited Oral	<b>TBA</b> G. Kousoulas
<b>19:40</b>	<b>AWARDS CEREMONY NN13 CLOSING REMARKS</b>		