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| 08:00 – 09:00 Registration | | | |
| 08:45-09:00 Welcome and Opening Remarks Crystal Hall S. Logothetidis, NN23 Chairman | | | |
| 09:00-09:30 Nanostructures achieved by the heterogeneous integration of a superconductor and Wide Bandgap Semiconductor KEYNOTE Prof. A. Christou University of Maryland, USA | | | |
| 09:30-11:00 Crystal Hall | WS1: Nanoelectronics Chair: A. Jha | 09:30-11:00 Dock Six I | WS2: Nanoengineering Chair: R. Arenal |
| 09:30-10:00 INVITED | Greener manufacturing of sustainable nanoelectronics D. G. Georgiadou Electronics and Computer Science, University of Southampton, Highfield Campus, SO17 1BJ Southampton, UK | 09:30-10:00 INVITED | Nanomanufacturing: self-assembly using soft matter systems Prof. V. Koutsos University of Edinburgh, UK |
| 10:00-10:15 | Radiofrequency co-planar diodes fabricated by adhesion lithography and flash lamp annealing L. Panagiotidis ¹ , H. Faber ¹ , L. Luo ¹ , H. F. M. Mantilla ¹ , G. Pappas ¹ , W. AlGhamdi ² , T. D. Anthopoulos ¹ ¹ King Abdullah University of Science and Technology, Saudi Arabia | 10:00-10:15 | Fluid or Solid Ligand-Carrying Surface Nanostructured Microspheres Utilized in Extraction and Recognition of Metal Ions A. Honciuc, A. M. Solonaru, O.I. Negru, M. Honciuc "Petru Poni" Inst. of Macromolecular Chemistry41A Grigore Ghica Voda Alley 700487 Iasi, Romania |
| 10:15-10:30 | Fabrication of nanoscale electronics via adhesion lithography H. Faber, L. Luo, L. Panagiotidis, H. M. Mantilla, E. Yengel, T. D. Anthopoulos King Abdullah University of Science and Technology (KAUST), Physical Science and Engineering Division, KAUST Solar Center (KSC), Thuwal Saudi Arabia | 10:15-10:30 | Automated overlay with the NanoFrazor, alignment at the nanoscale. V. Theofylaktopoulos, A. Damyanova, J. Chaaban, J. Verges, Z. Wu, E. Cagin Heidelberg Instruments Nano AG, Bändliweg 30, 8048 Zürich, Switzerland |
| 10:30-10:45 | Nanogap Based Self-Aligned Gate IGZO Transistors with Bilayer Electrodes Processed via Rapid Photonic Curing L. Luo, E. Yarali, H. Faber, H. Mantilla, L. Panagiotidis, S. Doukas, E. Lidorikis, T. D. Anthopoulos King Abdullah University of Science and Technology, KAUST Solar Center, Saudi Arabia | 10:30-10:45 | Scalable Fabrication of High Performance, All-Inorganic Metalenses, Waveguides and Diffractive Optics via Nanoimprint Lithography D. E. Jung ¹ , V. J. Einck ³ , L. Verrastro ¹ , A. Arbabi ² and J. J. Watkins ¹ ¹ Dept. of Polymer Science & Engineering, Univ. of Massachusetts, Amherst, MA, USA ² Dept. of Electrical and Computer Engineering, Univ. of Massachusetts, Amherst, MA, USA |
| 10:45-11:00 | Electrical characterization of two dimensional MoS₂ DC Field Effect Transistor F. Iacovella ¹ , G. Fanourakis ^{1,2} , E. del Corro ³ , M. Delgà ³ , C. Schaefer ³ , J. A. Garrido ³ , M. Sledzinska ³ , C. M. Sotomayor Torres ³ and D. Deligeorgis ^{1,2} ¹ Inst. of Electronic Structure and Laser (IESL), Foundation for Research and Technology – Hellas (FORTH), Greece ² Dept. of Physics, University of Crete Heraklion, Greece ³ Catalan Inst. of Nanoscience and Nanotechnology (ICN2), CSIC and BIST, Barcelona, Spain | 10:45-11:00 | Ultrathin, flexible silicon for optically controlled micro-mechanical systems W. Wren ^{1,2} , L. Hague ³ , M. Halsall ^{1,2} , T. Echtermeyer ^{1,2,3} ¹ Dept. of Electrical & Electronic Engineering, The University of Manchester, United Kingdom ² Photon Science Inst., The University of Manchester, United Kingdom ³ Nat. Graphene Inst., The University of Manchester, United Kingdom |
| 11:00 – 11:30 Coffee Break NN23 Poster 1 (SEE POSTER PROGRAMME) – Exhibition-Networking | | | |
| 11:30-12:00 KEYNOTE Chair: V. Koutsos Dock Six I | Development of Superhydrophobic Surfaces with Controllable Water Adhesion S. H. Anastasiadis ^{1,2} ¹ Inst. of Electronic Structure and Laser, FORTHs, 70013 Heraklion, Crete, Greece ² Dept. of Chemistry, University of Crete, 71003 Heraklion Crete, Greece | | 11:30-13:30 Dock Six II |
| | | | Bioelectronics II (Joined Session of NN23 & ISFOE23) Chair: F. Biscarini |

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| 12:00-13:30 Crystal Hall | WS1: Nanophotonics Chair: A. Christou | 12:00-13:30 Dock Six I | WS2: Polymer Chair: V. Koutsos | 11:30-12:00 INVITED | Conducting polymer scaffolds: A route towards 3D bioelectronics Prof. C. Pitsalidis Khalifa University, Abu Dhabi, UAE |
| 12:00-12:30 INVITED | Q-dot Glass Engineering for Renewable Energy Harvesting and Photocatalytic Applications M. Al-Murish ¹ , V. Autade ² , J. Mottram ¹ , N. Petrou ¹ , R. P. Panmand ² , S. W. Gosavi ³ , B. B. Kale ² , A. Scott ¹ , E. K. Barimah ¹ and A. Jha ¹ ¹ School of Chemical and Process Engineering, University of Leeds, UK ² Center for Materials for Electronics Technology (C-MET), Ministry of Electronics and Information Technology (MeitY), India. ³ Dept. of Physics, Savitribai Phule Pune University (SPPU), India | 12:00-12:30 INVITED | Experimental evaluation of reversible primers for the active disassembly of printed electronics-based products L. Tenchine ¹ , S. Gout ¹ ¹ IPC (Centre Technique Industriel de la Plasturgie et des Composites) 2 rue Pierre et Marie Curie, 01100 Bellingnat, France | 12:00-12:30 INVITED | Cell membranes on chip A.-M. Pappa Department of Biomedical Engineering, Khalifa University, PO Box – 127788, Abu Dhabi, United Arab Emirates (UAE) |
| 12:30-12:45 EU PROJECT | GRACED: Ultra-compact, low-cost plasmo-photonic bimodal multiplexing sensor platforms as part of a holistic solution for food quality monitoring E. Chatzianagnostou ^{1,2} , D. Spasopoulos ^{1,2} , K. Fotiadis ^{1,2} , D. Bellas ³ , E. Lampadariou ³ , S. Simos ^{1,2} , E. Lidorikis ³ , N. Pleros ^{1,2} ¹ Dept. of Informatics, AUTH, Greece ² Center for Interdisciplinary Research and Innovation (CIRI-AUTH), Balkan Center, Buildings A & B, Thessaloniki, Greece ³ Dept. of Materials Science and Engineering, University of Ioannina, Ioannina, Greece | 12:30-12:45 | Different Perspective of Polydopamine Analogues A. Petran ¹ , T. Radu ¹ , A. Bogdan ¹ , A. Falamas ¹ , A. Bunge ¹ , C. Lar ¹ Dept. of Physics of Nanostructured Systems, Nat. Inst. for Research and Development of Isotopic and Molecular Technologies 67-103 Donat PO 5 Box 700 400293 Cluj-Napoca Romania | 12:30-13:00 INVITED | Materials and Technologies for Hydrogel-based Bioelectronics A. Da Silva University of Sheffield, UK |
| 12:45-13:00 EU PROJECT | AMBROSIA - "A Multiplexed plasmo-photonic Biosensing platform for rapid and intelligent Sepsis diagnosis at the point of care" E. Chatzianagnostou ^{1,2} , D. Spasopoulos ^{1,2} , K. Fotiadis ^{1,2} , S. Simos ^{1,2} , D. Bellas, E. Lampadariou ³ , E. Lidorikis ³ , N. Pleros ^{1,2} ¹ Dept. of Informatics, AUTH, Thessaloniki, Greece ² Center for Interdisciplinary Research and Innovation (CIRI-AUTH), Balkan Center, Buildings A & B, Thessaloniki, Greece ³ Dept. of Materials Science and Engineering, University of Ioannina, Ioannina, Greece | 12:45-13:00 YRA Candidate | Block copolymer-templated synthesis of mixed transition-metal oxide nanowires for sensing applications P. Pula ¹ , P. W. Majewski Chemistry Dept., University of Warsaw, Pasteur 1 Street, 02093 Warsaw, Poland | | |
| 13:00-13:15 | Parameter space exploration of porous silicon based Tamm Plasmon Resonance sensors P. Varasteanu, Nat. Inst. for R&D in Microtechnology - IMT Bucharest, Romania | 13:00-13:15 | Renewable cellulose as a component in polymer adhesives for wood-based products E. Karagiannidis ¹ , E. Athanassiadou ¹ , G. Penloglou ² , M. Sarafidou ³ , E. G. Nteze ⁴ , E. Psochia ⁵ ¹ CHIMAR HELLAS S.A., 15 km NR Thessaloniki– Polygyros, Greece ² Centre for Research and Technology Hellas (CERTH/CPERI), Thessaloniki, Greece ³ Dept. of Food Science and Human Nutrition, Agricultural University of Athens, Athens, Greece ⁴ API Europe MEPE, Research & Experimental studies in Biotechnology, Athens, Greece ⁵ Dept. of Chemistry, AUTH, Thessaloniki, Greece | 13:00-13:15 YRA Candidate | Practical and mechanistic aspects of mercury – polythymine aptamer interaction in the design of an electrochemical DNA biosensor A. Szymczyk ¹ , M. Olszewski ² , R. Ziótkowski ¹ , E. Malinowska ^{1,3} ¹ Chair of Medical Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Poland ² Chair of Drug and Cosmetics Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Poland ³ Centre for Advanced Materials and Technologies CEZAMAT, Warsaw University of Technology, Poland |
| 13:15-13:30 | | 13:15-13:30 | Study of the composition of Coaxial Microfibers with Phase Change Materials under Thermal Analysis N. Hammes ^{1,2} , C. Pinheiro ¹ , I. Rocha Segundo ^{1,3} , N. Homem ⁴ , H. P. Felgueiras ² , G. M. B. Soares ² , E. Freitas ³ , M. F. M. Costa ¹ , J. Carneiro ¹ ¹ Centre of Physics of Minho and Porto Universities (CF-UM-UP), Azurém Campus, University of Minho, Guimarães, Portugal ² Centre for Textile Science and Technology, University of Minho (2C2T - UM), Azurém Campus, Guimarães, Portugal ³ University of Minho, IRISE, ARISE, Department of Civil Engineering, Guimarães, Portugal ⁴ Simoldes Plastics, Portugal | 13:15-13:30 | BIOASSEMBLER - Bioinspired Assembly of Binders on Multiplex MEMS Biosensors P. Saviranta ¹ VTT, Sensing Solutions, Tietotie 2, Espoo, Finland |

13:30 – 15:00 Lunch Break
NN23 Posters (SEE POSTER PROGRAMME) – Exhibition – Networking
BUSINESS FORUM

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| 15:00-15:30 KEYNOTE Chair: D. Georgiadou Room: Crystal Hall | | Highly designed flux-grown crystals for next-generation LIBs Prof. K. Teshima Shinshu University, Japan | | 15:00-17:00 Dock Six II | | Bioelectronics III (Joined Session of NN23 & ISFOE23) Chair: A. da Silva | |
| 15:30-17:30 Crystal Hall | WS1: Energy Chair: D. Georgiadou | 15:30-17:00 Dock Six I | WS2: Nanocharacterization Chair: L. Tenchine | 15:00-15:30 INVITED | Bioelectronic devices and Therapeutic applications: The selective Vagus nerve stimulation as a paradigm of the new Bioelectronic Medicine era Dr. D Koutsouras <i>Imec, The Netherlands</i> | | |
| 15:30-16:00 KEYNOTE | Solid-state Sodium Battery Li Lu <i>Nat. University of Singapore, Singapore</i> | 15:30-16:00 INVITED | Low Dimensional Materials Investigated by Advanced TEM: Atomic Structure/Configuration and Physical Properties Studies R. Arenal <i>University of Zaragoza, Spain</i> | 15:30-16:00 INVITED | Photo-sensitive bio-hybrid interfaces for biophotonic applications: from plants to human living cells. M.Ciocca¹, T.M. Brown², L. Petti¹, P. Lugli¹ ¹ Faculty of Engineering, Free University of Bozen-Bolzano, Piazza Domenicani 5, 39100 Bolzano, Italy ² Dept. of Electronic Engineering, University of Rome Tor Vergata, Via del Politecnico 1, 00133 Rome, Italy | | |
| 16:00-16:30 INVITED | Amorphous silicon nano-aqueduct architecture for Li-ion battery anodes P. Grammatikopoulos <i>Guangdong Technion - Israel Inst. of Technology (GTIIT), China</i> | 16:00-16:30 INVITED | The challenge of nanostochasticiy: Complexity concepts and methods in the characterization of random-like nanostructured surfaces and materials V. Constantoudis^{1,4}, G. Papaveros^{1,3,4}, A. Kondi^{1,2}, A. Arapis¹, E. Gogolides^{1,4} ¹ Inst. of Nanoscience and Nanotechnology, NCSR Demokritos, Greece ² Dept. of Physics, Nat. and Kapodistrian University of Athens, Greece ³ Dept. of Physics, AUTH, Greece ⁴ Nanometrisis p.c., Agia Paraskevi, Attiki 15310, Greece | 16:00-16:30 INVITED | In Situ-Actuated, Minimally Invasive Spinal Cord Stimulator (MI-SCS): A Ground-breaking Approach in Pain Management B. J. Woodington¹, V. F. Curto¹, Yi-Lin Yu^{2,3}, H. Martínez-Domínguez⁴, L. Coles¹, El Hadwe Salim², G. G. Malliaras¹ C. M. Proctor¹, D. G. Barone^{1,2} ¹ Department of Engineering, University of Cambridge, UK ² Department of Clinical Neurosciences, University of Cambridge, UK ³ Department of Neurological Surgery, Tri-Service General Hospital, Nat. Defense Medical Center, Taipei, Taiwan ⁴ Tecnológico Nacional de México, Campus Morelia, Morelia, Mexico | | |
| 16:30-17:00 INVITED | Crystalline Silicon Photovoltaic Technologies: From Raw Silicon to Solar Modules M. Ç. Arslan¹ ¹ KalyonPV Research and Development Center, Kalyon Günes Teknolojileri Üretim A.S, 06909 Ankara, Turkey | 16:30-16:45 | The challenging detection of per- and polyfluoroalkyl substances (PFAS) with Surface Enhanced Raman Scattering (SERS), in the context of SCENARIOS project Z.G. Lada^{1,2}, G.N. Mathioudakis^{1,3}, A. Soto Beobide¹, K.S. Andrikopoulos^{1,4}, G.A. Voyiatzis¹ ¹ Inst. of Chemical Engineering Sciences, FORTH, Greece ² Dept. of Chemistry, University of Patras, Greece ³ Dept. of Materials Science, University of Patras, Greece ⁴ Dept. of Physics, University of Patras, Greece | 16:30-16:45 | A sprayed graphene Lab-on-PCB platform for multi-analyte detection B. Fenech-Salerno, M. Holicky, C. Yao, F. Torrisi <i>Dept. of Chemistry, Imperial College London 82 Woodlane, London, United Kingdom</i> | | |
| 17:00-17:15 | Spatially-Resolved EELS Analysis of Surface Species on Metallic Lithium for the Development of the Next Generation Li-Batteries. M.L. Trudeau¹, F. Voisard², R. Veillette¹ and K. Zaghib³, R. Gauvin⁴ ¹ CETEES, IREQ, Hydro-Quebec, Varennes, Quebec, Canada ² 3IT, Sherbrooke University, Sherbrooke, Quebec, Canada ³ Chemical and Materials Engineering, Concordia University, Montreal, Quebec, Canada ⁴ Materials Engineering, McGill University, Montreal, Canada | | | 16:45-17:00 | Surface density - dependent orientation of antibody on silicon: TOF-SIMS analysis of noncovalent and covalent immobilization methods A. Budkowski¹, P. Petrou², K. Gajos¹ ¹ Smoluchowski Inst. of Physics, Jagiellonian University, Łojasiewicza 11, 30-348 Kraków, Poland ² INRASTES, Nat. Center for Sci. Research "Demokritos", Greece | | |
| 17:15-17:30 | Optimization of pyrolysis conditions on the physicochemical and electrochemical properties of reed straw derived hard carbon as anode electrode material for Sodium Ion Batteries J. Papavasiliou^{1,3}, D. Katsoulotou^{1,2}, D. Roumelioti³, M. Athanasiou¹, Th. Ioannides¹, G. Avgouropoulos³ ¹ FORTH/ICE-HT, Patras, Greece ² Dept. of Chemistry, University of Patras, Patras, Greece ³ Dept. of Materials Science, University of Patras, Greece | | | | | | |

17:00 – 18:30 **Coffee Break**
NN23 Posters (SEE POSTER PROGRAMME) – Exhibition – Networking

18:30

PLENARY SESSION



1 - 8 July 2023
Thessaloniki
Greece

18:30-19:00



Introduction by Prof. S. Logothetidis, ISFOE23 & NN23 Chairman

19:00 – 19:30
PLENARY



Prof. Magnus Berggren
Lab of Organic Electronics and Wallenberg Initiative Materials Science for Sustainability, Linköping University, Sweden
Thiophene-Based Trimers for Evolvable and In-Vivo-Manufactured Electrodes and Electronics

19:30 – 20:00
PLENARY



Prof. Peer Fischer
Heidelberg University & Max Planck Inst. for Medical Research, Germany
Nanostructures in motion: chemical motors and nanorobotic systems

20:00 – 20:30
PLENARY



Prof. Sir David King
Founder & Chair, Centre for Climate Repair at Cambridge University, UK
The Climate Crisis: The State of Climate Science, and What Must be Done Now

21:00

OFFICIAL NANOTECHNOLOGY GALA DINNER
PORTO PALACE CONFERENCE CENTRE & HOTEL - ROOF GARDEN

08:00 - 09:00 Registration

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| 09:00-09:30 KEYNOTE Chair: Y. Missirlis Dock Six I | Nanostructuring contact lenses for therapeutic applications Prof. C. Alvarez-Lorenzo <i>University of Santiago de Compostela, Spain</i> | | | | |
| 09:30-11:00 Crystal Hall | WS2: Nanomaterials Chair: M. Gioti | 09:30-11:00 Dock Six I | WS3: Tissue Engineering Chair: Y. Missirlis | 09:30-11:00 Timber Hall II | Bioelectronics IV (Joined Session of NN23 & ISFOE23) Chair: D. Koutsouras |
| 09:30-10:00 INVITED | Polarity and Doping in ZnO Nanowires as Critical Issues for Piezoelectric Devices V. Consonni <i>University of Grenoble Alpes, CNRS, Grenoble INP, LMGP, 3 parvis Louis Néel, 38016 Grenoble, France</i> | 09:30-10:00 INVITED | 3D dynamic cultures in bone tissue engineering: mimicking the <i>in vivo</i> situation M. Chatzinikolaïdou ^{1,2} ¹ Dept. of Materials Science and Technology, University of Crete, Heraklion, Greece ² Foundation for Research and Technology Hellas (FO.R.T.H.)-IESL, Heraklion, Greece | 09:30-10:00 INVITED | Peripheral nerve interfaces: Non-invasive stimulation using temporal interference and optoelectronics M. Donahue <i>Linköping University, Sweden</i> |
| 10:00-10:15 | Synthesis and experimental-theoretical study of a new type of heterostructures A. Dauletbekova ¹ , A. Akilbekov ¹ , Z. Baimukhanov ¹ , D. Djunisbekova ¹ , A.I. Popov ² , S. Piskunovs ² , A. Platonenko ² , ¹ L.N. Gumilyov Eurasian Nat. University, Kazakhstan ² Inst. of Solid State Physics, University of Latvia, Latvia | 10:00-10:15 | Gold-enhanced Brachytherapy by a Nanoparticle-Releasing Hydrogel and 3DPrinted Subcutaneous Radioactive Implant Approach M M.-A. Fortin ^{1,2} , M. Kiseleva ^{1,2} , T. Lescot ^{1,2} , S. Selivanova ³ ¹ Laboratoire de Biomatériaux pour l'Imagerie Médicale (BIM), Axe Médecine Régénératrice, Centre de Recherche du Centre Hospitalier Universitaire de Québec –Université Laval, Canada; ² Département de Génie des Mines, de la Métallurgie et des Matériaux, Université Laval, Québec, QC, Canada; ³ Faculty of Pharmacy, Université Laval, and Axe Oncologie, Centre de Recherche du CHU de Québec – Université Laval, Québec, Canada. | 10:00-10:30 INVITED | DNA – A bio-organic electronic material C. Yumusak <i>Linz Inst. for Organic Solar Cells (LIOS), Inst. of Physical Chemistry, Johannes Kepler University Linz, Altenbergerstr. 69, 4040 Linz, Austria</i> |
| 10:15-10:30 | Approaches to building Nanoscaled Hybrid Plasmonic Materials and Applications N. Guarrotxena <i>Nanohybrids and Interactive Polymers Group, Inst. of Polymer Science and Technology, Spanish Nat. Research Council (ICTP-CSIC) Madrid, Spain</i> | 10:15-10:30 | Peptides for Regeneration –Rational Design of Ultrashort Self-Assembling Peptides at the Nanoscale for Tissue and Organoid Formation C. A. E. Hauser <i>King Abdullah University of Science and Technology, Saudi Arabia</i> | | |
| 10:30-10:45 | Efficient methanol reforming CuZn oxide catalysts synthesized via flame spray pyrolysis K.Ar. Papageorgiou ¹ , A. Zindrou ² , Y. Deligiannakis ² , M. Kuśmierz ³ , G. Słowik ³ , W. Gac ³ and J. Papavasilou ¹ ¹ Dept. of Materials Science, University of Patras, Greece ² Dept. of Physics, University of Ioannina, Greece ³ Faculty of Chemistry, Maria-Curie Skłodowska University, Poland | 10:30-10:45 | Soft and hard polymeric foams for tissue engineering M. Beran ¹ , K. Panuskova ¹ , J. Musilkova ² , A. Sedlar ² , P. Slepicka ³ , D. Fajstavr ³ ¹ Food Research Inst. Prague, Prague, CZ10200, Czech Republic ² Inst. of Physiology CAS, Prague, CZ14220, Czech Republic ³ University of Chemistry and Technology, CZ16628, Prague, Czech Republic | 10:30-10:45 YRA Candidate | A 3D printed wearable piezoelectric platform for energy harvesting from artery pulsation I. Sobianin ¹ , S.D. Psoma ¹ , A. Tourlidakis ² ¹ School of Engineering & Innovation, The Open University, UK ² School of Engineering, University of Western Macedonia Greece |
| 10:45-11:00 | Colloidal nitrides nanoparticles through short-pulsed laser ablation for flexible printed electronics applications S. Panos, N. Pliatsikas, S. Kassavetis, M. Gioti, P. A. Patsalas <i>Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</i> | 10:45-11:00 | | 10:45-11:00 | Fluorescence emission angular dependence on a nanostructured plasmonic grating M. Angelini ¹ , E. Manobianco ² , P. Pellacani ² , F. Floris ¹ , F. Marabelli ¹ ¹ Dept. of Physics, University of Pavia, Pavia, Italy ² Plasmore S.r.l, Via Vittorio Emanuele II 4, 27100 Pavia, Italy. |
| 11:00-11:30 | Coffee Break NN23 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking | | | | |

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| <p>11:30-12:00 KEYNOTE Chair: S. Kassavetis Room: Crystal Hall</p> | <p>Temporally modulated vapor fluxes: a tool for controlling morphology and atomic arrangement in multicomponent thin films Prof. K. Sarakinos <i>University of Helsinki, Finland</i></p> | | | | |
| <p>12:00-13:30 Crystal Hall</p> | <p>WS2: Thin Films Chair: S. Kassavetis</p> | <p>12:00-13:30 Dock Six I</p> | <p>WS3: Nanoparticles for Clinical Applications I Chair: M. Chatzinikolaïdou</p> | <p>12:00-13:30 Timber Hall II</p> | <p>Bioelectronics V (Joined Session of NN23 & ISFOE23) Chair: M. Donahue</p> |
| <p>12:00-12:30 INVITED</p> | <p>Epitaxial Growth of Complex Al-Fe Thin Films: From Metastable to High Temperature phases J. Ledieu^{1,4}, D. Dubaux^{1,4}, F. Brix^{1,4}, É. Gaudry^{1,4}, M.-C. de Weerd^{1,4}, P. Gille², S. Šturm^{3,4}, M. Podlogar^{3,4}, J. Ghanbaja^{1,4}, S. Migot^{1,4}, M. Sicot^{1,4} and V. Fournée^{1,4} ¹Université de Lorraine, CNRS, IJL, F-54000 Nancy, France ²Dept. of Earth and Environmental Sciences, Crystallography Section, Ludwig Maximilians Universität München, , Germany ³Jožef Stefan Inst., Dept. for Nanostructured Materials, Slovenia ⁴InterNat. Associated Lab PACS₂, CNRS Université de Lorraine, Nancy, France and Jožef Stefan Inst., Slovenia</p> | <p>12:00-12:30 INVITED</p> | <p>Recombinant vault nanoparticle: a potential tool for the targeted delivery of siRNA as therapeutic molecules G. Tomaino^{1,2}, A. Dutriaux², D. Flagiello², P. Tortora¹, G. Frascotti¹, D. Prospero¹, M. Colombo¹, ¹Dept. of Biotechnology and Biosciences, University of Milan Bicocca, Italy ² Institut Jacques Monod UMR 7592, Université Paris Cité / CNRS, France</p> | <p>12:00-12:30 INVITED</p> | <p>Nanocarbon bioelectronics: From cellular investigations to clinical translation R. Garg <i>Dept. of Neurology, Center for Neuroengineering and Therapeutics, University of Pennsylvania, Philadelphia, PA-19104, USA.</i></p> |
| <p>12:30-12:45</p> | <p>Upconversion properties of LaF₃:Yb,Er/Tm and NaYF₄:Yb,Er/Tm nanoparticles and their composite coatings B. Tegze¹, E. Albert¹, B. Borbás¹, D. Hessz¹, M. Kubinyi¹, G. Tolnai², Z. Hórvölgyi¹ ¹Dept. of Physical Chemistry and Materials Science, Budapest University of Technology and Economics, Budapest, Hungary ²Holikem Kft, H-1082, Budapest, Hungary</p> | <p>12:30-13:00 INVITED</p> | <p>Applying multi-omics profiling and machine learning approaches to advance pharmacogenomics-based decisions in cardiovascular precision medicine I. S. Vizirianakis, Ph.D. <i>Lab of Pharmacology, School of Pharmacy, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece; and Dept. of Life and Health Sciences, University of Nicosia, CY-1700 Nicosia, Cyprus</i></p> | <p>12:30-12:45</p> | <p>Fully-printed glucose sensor for Continuous Monitoring of metabolism in micro-physiological systems L. Sappia¹, A. B. Aissa¹, M. Alique¹, P. Lacharmonie¹, C. D. Sima¹, A. Moya¹ <i>Eurecat, Centre Tecnològic de Catalunya, Functional Printing and Embedded Devices Unit, 08302 Mataró, Spain</i></p> |
| <p>12:45-13:00</p> | <p>Ni-Cr/CrN bilayer thin films resistor prepared using magnetron sputtering V. C. Yen¹, Y. C. Lee² ¹Dept. of Mechanical Engineering, Nat. Pingtung University of Science & Technology, Pingtung 91201, Taiwan; ²Inst. of Precision Electronic Components, Nat. Sun Yat-sen University, Kaohsiung 804, Taiwan</p> | <p>12:30-13:00 INVITED</p> | <p>Core-shell-shell up-converting nanoparticles for photodynamic therapy and bioimaging R. Pastawska^{1,2}, T. Wojciechowski¹, K. Sobczak³, A. Borodziuk¹, P. Kowalik¹, B. Sikora¹ ¹Inst. of Physics, Polish Academy of Sciences, Poland ²Faculty of Physics, University of Warsaw, Poland ³Biological and Chemical Research Centre, University of Warsaw, Zwirki i Poland</p> | <p>12:45-13:00</p> | <p>Ultra-sensitive bio-detection by surface plasmon resonance assisted by spectral polarimetry G. Dyankov^{1,2}, B. Zhang³, B. Zhao³, P. Kolev¹, P. Genova-Kalou⁴ ¹Inst. of Optical Materials and Technologies "Acad. J. Malinowski" (IOMT), Bulgarian Academy of Sciences (BAS), Bulgaria ²Central Lab of Applied Physics, Bulgarian Academy of Sciences, Bulgaria ³Beihang University, China ⁴Nat. Center of Infectious and Parasitic Diseases Bulgaria</p> |
| <p>13:00-13:15</p> | <p>Nanostructured materials as gas sensors for food packaging applications E. Gagaoudakis¹, A. Sfakianou^{1,2}, E. Mantsiou¹, L. Zouridi^{1,3}, M. Pervolaraki¹, E. Stratakis¹, V. Binas^{1,2} ¹Inst. of Electronic Structure & Laser (IESL), Foundation for Research and Technology (FORTH) Hellas, Heraklion, Crete, Greece ²Physics Dept., University of Crete, Heraklion, Crete, Greece ³Dept. of Materials Science and Technology, University of Crete, Heraklion, Crete, Greece</p> | <p>13:00-13:15 YRA Candidate</p> | <p>The influence of surface functionalization, size, and production method on nanodiamonds cytotoxicity against glioblastoma cell line T98G and fibroblast cell line HFF-1 B. Wójcik¹, K. Zawadzka¹, S. Jaworski¹, M. Kutwin¹, M. Sosnowska¹, A. Ostrowska¹, M. Grodzik¹, A. Matolepszy², M. Mazurkiewicz-Pawlicka², M. Wierzbicki¹ ¹ Department of Nanobiotechnology, Inst. of Biology, Warsaw University of Life Sciences, Poland ² Faculty of Chemical and Process Engineering, Warsaw University of Technology, 00-654 Warsaw, Poland</p> | <p>13:00-13:15</p> | <p>Development and characterization of flexible electrochemical biosensors using inkjet printing I.E. Chatziioannou¹, K. Papadopoulos¹, A. Batsi¹, C. Papoulia², P. Rampota¹, A. Orfanos³, V. Karagiokozaki³, S. Logothetidis^{1,3}, A. Laskarakis¹ ¹Nanotechnology Lab LTFN, Dept. of Physics, Aristotle University of Thessaloniki, Greece ²EIMicLab, Department of Physics, Aristotle University of Thessaloniki, Greece ³BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece</p> |
| <p>13:15-13:30</p> | <p>Deposition and Study of the Superhydrophilic and Hydrophobic Nanocomposite Films Containing Amorphous Carbon and Silicon Oxide A. Vasiliauskas, R. Gudaitis, M. Andrulevičius, A. Guobienė, Š. Jankauskas, B. Abakevičienė, Š. Meškiniš <i>Inst. of Materials Science, Kaunas University of Technology, Lithuania</i></p> | <p>13:15-13:30 YRA Candidate</p> | <p>The influence of surface functionalization, size, and production method on nanodiamonds cytotoxicity against glioblastoma cell line T98G and fibroblast cell line HFF-1 B. Wójcik¹, K. Zawadzka¹, S. Jaworski¹, M. Kutwin¹, M. Sosnowska¹, A. Ostrowska¹, M. Grodzik¹, A. Matolepszy², M. Mazurkiewicz-Pawlicka², M. Wierzbicki¹ ¹ Department of Nanobiotechnology, Inst. of Biology, Warsaw University of Life Sciences, Poland ² Faculty of Chemical and Process Engineering, Warsaw University of Technology, 00-654 Warsaw, Poland</p> | <p>13:15-13:30</p> | |
| <p>13:30-15:00</p> | <p>Lunch Break NN23 Poster (SEE POSTER PROGRAMME)– Exhibition-Networking BUSINESS FORUM</p> | | | | |

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| <p>15:00-15:30 KEYNOTE Chair: Y. Missirlis Room: Dock Six I</p> | | <p>Plasmonic Solid-state Nanopores: Toward Single-molecule identification of protein and RNA by Raman Scattering Dr. F. De Angelis <i>Italian Institute of Technology, Italy</i></p> | | | | <p>15:00-17:30 Dock Six II</p> | | <p>WS on Centers of Excellence (NN23 & ISFOE23) Chair: G. Hadziioannou, University of Bordeaux A. Laskarakis, LTFN, AUTH</p> |
| <p>15:30-17:00 Crystal Hall</p> | <p>WS2: Thin Films Chair: J. Ledieu</p> | | | | | <p>15:30-17:00 Timber Hall II</p> | <p>Graphene I (NN23 & ISFOE23) Chair: G. Deligeorgis</p> | <p>15:00-15:20</p> <p>Greece: Centre of Excellence for Organic, Printed Electronics & Nanotechnologies (COPE-Nano) S. Logothetidis <i>Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece</i></p> |
| <p>15:30-16:00 INVITED</p> | <p>Chemical synthesis of hBN crystals from preceramic polymers C. Journet-Gautier Claude Bernard University Lyon 1, France</p> | <p>16:00-17:00 Dock Six I</p> | <p>WS3: Nanoparticles for Clinical Applications II Chair: Y. Missirlis</p> | <p>15:30-16:00 INVITED</p> | <p>Graphene chemistry: reactions under cover L. Vattuone¹ <i>Physics Dept., University of Genoa & IMEM-CNR, Via Dodecaneso 33, 16146 Genoa, Italy</i></p> | <p>15:20-15:40</p> | <p>Latvia: Excellence Centre of Advanced Material Research and Technology Transfer (CAMART2) A. Anspoks <i>Institute of Solid State Physics, University of Latvia, Latvia</i></p> | |
| <p>16:00-16:15</p> | <p>Multi-parameter thermal annealing of block copolymer thin film in a single Lab-on-Chip experiment F. Powala, P. Majewski, A. Leniart <i>Dept. of Chemistry, University of Warsaw, Poland</i></p> | <p>16:00-16:15</p> | <p>Therapeutic Effect of Iron Oxide Nanoparticle-Loaded Peptide Gels on <i>in vitro</i> 3D Model of Parkinson's Disease S. Tasdemir¹, Z. G. Morcimen², S. E. Turunc Ozoglu³, A. Sendemir^{2,4,5} ¹<i>Dept. of Bioengineering, Celal Bayar University, Manisa, Türkiye</i> ²<i>Dept. of Bioengineering, Ege University, Türkiye</i> ³<i>Dept. of Biochemistry, Basic Pharmacy Sciences, Izmir Katip Çelebi University, Izmir, Türkiye</i> ⁴<i>Dept. of Biomedical Technologies, Ege University, Izmir, Türkiye</i> ⁵<i>Dept. of Bioengineering, Ege University, Türkiye</i></p> | <p>16:00-16:30 INVITED</p> | <p>Pressure and temperature dependent photoconductivity in two-dimensional transition metal dichalcogenide transistors A. Di Bartolomeo^{1,2,*}, A. Kumar¹, O. Durante^{1,2}, A. Sessa¹, E. Faella^{1,2}, L. Viscardi^{1,2}, K. Intonti^{1,2}, F. Giubileo², N. Martucciello², A. Pelella³. ¹ <i>Department of Physics "E.R. Caianello", University of Salerno, Italy.</i> ² <i>CNR-SPIN, Italy</i> ³ <i>Dipartimento di Scienze e Tecnologia, Università del Sannio, Italy</i></p> | <p>15:40-16:00</p> | <p>Cyprus: Research and Innovation Centre of Excellence for Illigent, Efficient and Sustainable Energy Solutions (PHAETHON) C. Christofides <i>University of Cyprus, Cyprus</i></p> | |
| <p>16:15-16:30</p> | <p>The effect of the sintering method on the conductivity of coatings based on nickel@silver core@shell nanoparticles A. Pajor-Świerzy¹, R. Pawłowski², P. Sobik², A. Kamyszny³, K. Szczepanowicz¹ ¹<i>Jerzy Haber Inst. of Catalysis and Surface Chemistry Polish Academy of Sciences, Poland</i> ²<i>Casali Center for Applied Chemistry, Inst. of Chemistry, Israel</i></p> | <p>16:15-16:30</p> | <p>N-acetylated chitosan coatings: wettability, swelling and electrochemical investigations P. Márton¹, Ö. T. Nagy², D. Kovács¹, B. Szolnoki¹, J. Madarász¹, N. Nagy³, A. Deák³, D. Zámbo³, G. S. Szabó², Z. Hörvölgyi¹ ¹<i>Budapest University of Technology and Economics, Hungary</i> ²<i>Universitatea Babeş-Bolyai, Dept. of Chemistry and Chemical Engineering of Hungarian Line of Study, Romania</i> ³<i>Inst. for Technical Physics and Materials Science, Centre for Energy Research, Hungary</i></p> | <p>16:30-16:45</p> | <p>Sonification Methods for Enabling Augmented Data Analysis Applied to Graphene Optoelectronics A. J. Bergren¹, A. Beltaos², A. van Dijk² ¹ <i>Nanotechnology Research Centre, Nat. Research Council of Canada, Canada</i> ² <i>Faculty of Science and Technology, Athabasca University, 1 University Dr, Athabasca, Canada</i></p> | <p>16:00-16:20</p> | <p>Poland: Centre of Excellence for nanophotonics, advanced Materials and novel crystal growth-Based technologiEs (ENSEMBLE3) D. Pawlak <i>Institute of Electronic Materials Technology, Poland</i></p> | |
| <p>16:30-16:45</p> | <p>TEM investigations of thermochromic VO₂ thin films for smart windows applications A. Rai¹, C.M. Istrate², N. Iacob², C. Locovei², A. Leca², G. Dorcioman³, G. Socol³, V. Hansen¹, V. Kuncser², C.N. Mihailescu³, A. Delimitis¹ ¹<i>(Dept. of Mechanical and Structural Engineering and Materials Science, University of Stavanger) N-4036 Stavanger, Norway</i> ²<i>(Nat. Inst. of Materials Physics, Atomistilor 405A) RO-077125 Magurele, Romania</i> ³<i>(Nat. Inst. for Laser, Plasma and Radiation Physics) Romania</i></p> | <p>16:30-16:45</p> | <p>Towards the standardization of pharmaceutical nanocrystals production L. Castillo¹, B. Bahloul², K. Alharet¹, F. Oyoun¹, L. Kostka³, T. Etrych³, L. Kalshoven⁴, A. Guillaume⁴, N. Mignet¹, Y. Corvis¹ ¹<i>Université Paris Cité, CNRS, INSERM, UTCBS, Chemical and Biological Technologies for Health Group France</i> ²<i>Drug Development Lab LR12ES09, Faculty of Pharmacy, University of Monastir, 5060 Monastir, Tunisia</i> ³<i>Institute of Macromolecular Chemistry, Czech Academy of Sciences, Czech Republic</i> ⁴<i>EuroAPI France, 63480 Vertolaye, France</i></p> | <p>16:45-17:00</p> | <p>Gold-Decorated Graphene Hybrid Nanomaterial Integrated with A Sensing Device for Agricultural Applications L. Dinu¹, I. Geana², A. Baracu¹, M. Stoian¹, O. Brincoveanu¹, C. Pachiou¹ ¹ <i>Nat. Inst. for Research and Development in Microtechnologies (IMT Bucharest), Romania</i> ² <i>Nat. Inst. for Research and Development for Isotopic and Cryogenic Technologies, Romania</i></p> | <p>16:20-17:00</p> | <p>Round Table Discussion: Building and Governing a successful CoE - CoE Establishment and Complementary Funding - Challenges during the expansion of Centers - Business Models of CoE and Best Practices - Discussion on Future Collaboration</p> | |

16:45-17:00

A post-process method for the enhancement of scanning probe/electron microscopy images

E. Stai^{1,2}, V. Constantoudis^{1,3}

¹INN, NCSR Demokritos, Greece

²Dept. of Physics, Nat. and Kapodistrian University of Athens, Greece

³Nanometrasis p.c., Agia Paraskevi, Attiki 15310, Greece

16:45-17:00

Structural investigations of fluorapatite and chitosan composites

G. Sharma¹, S. K. Loganathan¹, E. Kumi Barimah¹, G. K. Pouroutzidou², A. Scott¹, E. Kontonasaki², A. Jha¹

¹School of Chemical and Process Engineering, University of Leeds, Leeds, United Kingdom

²School of Dentistry, Aristotle University of Thessaloniki

17:30-18:00

NANOTECHNOLOGY 2023 Beach Party

Boarding to buses at Porto Palace Hotel entrance for transfer to Beach Bar RIVIERA

Please bring your batch and coupons to participate to the Beach Party

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| 08:00 - 9:00 Registration | | | |
| 9:00-9:30 KEYNOTE Chair: L. Tsetseris Room: Dock Six I | Topology and ground states of layers M. Damnjanovic <i>University of Belgrade, Serbia</i> | | |
| 09:30-11:00 Dock Six I | WS2: Computational I Chair: L. Tsetseris | 09:30-11:00 Timber Hall II | Graphene II (Joined Session of NN23 & ISFOE23) Chair: A. Di Bartolomeo |
| 9:30-10:00 INVITED | Topological Carbon Nanotubes as Thouless Adiabatic Pumps Z. P. Popović ¹ , M. Damnjanović ² , I. Milošević ¹ ¹ <i>Faculty of Physics, University of Belgrade, 12 Studentski trg, Belgrade, Serbia</i> ² <i>Serbian Academy of Sciences and Arts, 35 Kneza Mihaila St, Belgrade, Serbia</i> | 9:30-10:00 INVITED | 2D electronics and sensors, towards smart electronic circuits G. Deligeorgis^{1,2}, F. Iacovella¹, D.M. Kosmidis¹, A. Provias^{1,2}, N. Armaou^{1,2}, A.Papadopoulou¹ 1. Inst. of Electronic Structure and Laser (IESL), Foundation for Research and Technology – Hellas (FORTH), Greece 2. Department of Physics, University of Crete Heraklion 70013, Greece |
| 10:00-10:30 INVITED | Tailoring magnetic exchange bias and Curie temperature in Ni-based nanoclusters M. Bohra ^{1,2} , S. Giaremis ³ , V. Singh ¹ , S. Steinhauer ¹ , J. Kioseoglou ³ , P. Grammatikopoulos ¹ ¹ <i>Nanoparticles by Design Unit, Okinawa Inst. of Science and Technology Graduate University, Japan</i> ² <i>Mahindra University École Centrale School of Engineering (MECIndia)</i> ³ <i>Dept. of Physics, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece</i> | 10:00-10:30 INVITED | Graphene Oxide: Progress and Surprises W.K. Maser¹, A.M. Benito² <i>Instituto de Carboquímica (ICB-CSIC), E-50018 Zaragoza, Spain</i> |
| 10:30-11:00 INVITED | In-silico Design of Polymer-based Nanostructured Materials via Simulations Across Scales and Machine-Learning Algorithms V. Harmandaris <i>Computation-based Science and Technology Research Center, The Cyprus Inst., 2121 Nicosia, Cyprus, & Department of Mathematics and Applied Mathematics, University of Crete, GR-71409, & IACM FORTH, GR-71110 Heraklion, Crete, Greece.</i> | 10:30-10:45 | Laser-assisted high-quality graphene-like structures for energy storage applications M. Athanasiou¹, N. Samartzis^{1,2}, K. Bhorkar¹, V. Dracopoulos¹, T. Ioannides¹, S. N. Yannopoulos¹ ¹ <i>Foundation for Research and Technology Hellas – Inst. of Chemical Engineering Sciences (FORTH/ICE-HT), P.O. Box 1414, GR-26504, Rio-Patras, Greece</i> ² <i>Dept. of Physics, University of Patras, GR-26504, Rio-Patras, Greece</i> |
| | | 10:45-11:00 | Effects of ambient humidity on composite graphene-thymine and graphene-lipid thin films as a platform for molecular sensing R. Panajotović¹, J. Vujin¹, M. Vorokhta², I. Khalakhan², I. Milošević¹, W. Huang³, and S. Ptasinska⁴ ¹ <i>Lab for 2D materials, Inst. of physics, Serbia</i> ² <i>Dept. of Surface and Plasma Science of the Faculty of Mathematics and Physics, Charles University, Czech Republic,</i> ³ <i>Dept. of Chemistry and Biochemistry, University of Notre Dame USA</i> ⁴ <i>Dept. of Physics and Astronomy, University of Notre Dame, USA</i> |
| 11:00-11:30 Coffee Break NN23 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking | | | |
| 11:30-13:30 Dock Six I | WS2: Computational II Chair M. Damnjanovic | 11:30-13:30 Timber Hall II | WS3: Advanced in Nanobiomaterials Chair: G. Kousoulas |
| 11:30-12:00 INVITED | Charge transfer and transport in bio-organic wires C. Simserides <i>Nat. and Kapodistrian University of Athens, Greece</i> | 11:30-12:00 KEYNOTE | Technology for Bioelectronic Medicine G. Malliaras <i>University of Cambridge, UK</i> |
| 12:00-12:30 INVITED | Safe and Sustainable by Design (SSbD) – a vital challenge for nanoinformatics T. Puzyn^{1,2} ¹ <i>University of Gdansk, ul. Bazynskiego 8, 80-309 Gdansk, Poland,</i> ² <i>QSAR Lab Ltd., Poland</i> | 12:00-12:30 KEYNOTE | Design of Multi-functional Biomaterials for Advanced Medical Devices: The Intermediate Water Concept M. Tanaka, S. Kobayashi, S. Nishimura, K. Nishida, S. Shiimoto, D. Murakami, T. Anada <i>Inst. for Materials Chemistry and Engineering, Kyushu University, Japan</i> |
| 12:30-13:00 INVITED | Computational studies on the detection of atmospheric radicals L. Tsetseris¹ <i>Department of Physics, School of Applied Mathematical and Physical Sciences, Nat. Technical University of Athens, GR-15780 Athens, Greece</i> | 12:30-13:00 INVITED | Vascular remodelling of injured tissues T. Mitsiadis <i>University of Zurich, Switzerland</i> |
| 13:00-13:15 | Improving the precision of quantum-chemical calculations by novel embedding scheme including Friedel oscillations A. Siklitskaya¹, J. Pogrebetsky¹, T. Bednarek¹, A. Kubas¹ ¹ <i>Inst. of Chemical Physics Polish Academy of Sciences Kasprzaka 44/52 01-224 Warsaw, Poland</i> | 13:00-13:15 | Nanomaterial-loaded polymer coating prevents the <i>in vitro</i> growth of <i>Candida albicans</i> biofilms on silicone biomaterials A. Tsikopoulos¹, K. Tsikopoulos¹, G. Meroni², S. Soukiourogrou³, A. Chatzimoschou⁴, L. Drago⁵, S. Triaridis⁶, P. Papaioannidou¹ ¹ <i>1st Dept. of Pharmacology, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece</i> ² <i>One Health Unit, Dept. of Biomedical, Surgical and Dental Sciences, School of Medicine, University of Milan, Milan, Italy</i> ³ <i>Lab of Microbiology, Hippokraton General Hospital, Thessaloniki, Greece</i> ⁴ <i>Lab of Infectious Diseases, Hippokraton General Hospital, Thessaloniki, Greece</i> ⁵ <i>Lab of Clinical Microbiology & Microbiome, Dept. of Biomedical Sciences for Health, School of Medicine, U. of Milan, Italy</i> ⁶ <i>1st Dept. of Otorhinolaryngology - Head and Neck Surgery, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece</i> |

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| 13:15-13:30 | <p>Band structure unfolding of van der Waals heterostructures G. Vailakis^{1,2}, G. Kupidakis^{1,2} ¹ Dept. of Materials Science and Technology, University of Crete GR-70013 Heraklion, Greece ² Inst. of Electronic Structure and Laser, Foundation for Research and Technology–HellasGR, Greece</p> | 13:15-13:30 | <p>Cell cultivation in dynamic patterning conditions for tissue regeneration applications K. Tsimenidis¹, A. Orfanos¹, V. Karagkiozaki¹ ¹ BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece</p> |
| <p>Lunch Break NN23 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking BUSINESS FORUM</p> | | | |
| 15:00-16:30 Dock Six I | <p>WS2: Nanoparticles-Nanocomposites Chair: M. Gioti</p> | 15:00-17:30 Timber Hall II | <p>WS3: Special Session on Law and ethics of nanotechnology safety and health in food Chair: Dr Ilise Feitshans</p> |
| 15:00-15:30 INVITED | <p>Alternative nanomaterials for plasmonic applications S. Kassavetis <i>Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece</i></p> | | <p>Enjoying the benefits of nanotechnology while minimizing risks to workers' safety, health and well-being Dr John Howard <i>USA Nat. Inst. for Occupational Safety and Health (NIOSH)</i></p> |
| 15:30-15:45 | <p>Harnessing Magnetic Fields to Control Air CO₂ Adsorption using MgO/Mg(OH)₂ Nanocomposites P. Wu*¹ ¹ Entropic Interface Group, Engineering Product Development, Singapore University of Technology and Design, Singapore 487372</p> | | <p>The Role of Lawyers Advancing Nanoscience: Important Things Scientific Researchers Need to Know John Koehler <i>Esq, Executive Director Virginia Mountain Valley Lawyers Alliance (VMVLA)</i></p> |
| 15:45-16:00 | <p>Nanocapsules of ZnO or Ca(OH)₂ Nanoparticles with geraniol as a novel mean for effective control of Botrytis cinerea P. Tryfon¹, N. N. Kamou², A. Pavlou¹, S. Mourdikoudis^{3,4}, U. Menkissoglu-Spiroudi², and C. Dendrinou-Samara¹ ¹ Lab of Inorganic Chemistry, Dept. of Chemistry, Aristotle University of Thessaloniki, Greece ² Pesticide Science Lab, School of Agriculture, Faculty of Agriculture Forestry and Natural Environment, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece ³ Biophysics Group, Dept. of Physics and Astronomy, University College London, London, UK ⁴ UCL Healthcare Biomagnetics and Nanomaterials Laboratories, UK</p> | | <p>Legislative Roles of a Health and Safety Research Scientist to Anticipate, Recognize, Evaluate, Control, and Confirm (ARECC) Protection from Risks Dr. Mark D Hoover <i>LLC, Scientist Emeritus for NIOSH Morgantown, WV, USA</i></p> |
| 16:00-16:15 | <p>Laser-assisted, graphene-like structures for oil-spill clean up M. Zamparas¹, M. Athanasiou¹, N. Samartzis^{1,2}, V. Drakopoulos¹, S.N. Yannopoulos¹, T. Ioannides¹ ¹ Foundation for Research and Technology Hellas, Inst. of Chemical Engineering Sciences (FORTH/ICE-HT), Patras, Greece ² Dept. of Physics, University of Patras, Patras, Greece</p> | | <p>Practical bioethical issues of food safety and global health for patients Dr. C. Vassara <i>Reg. Cardiologist AUTH, Researcher AUTH</i></p> |
| 16:15-16:30 YRA Candidate | <p>Multiple Approach Modelling of Optical Responses For Aluminum Island Films H. Kamble, J. Sancho-Parramon, V. Janicki <i>Ruder Bošković Inst., Bijenička Cesta 54, Zagreb, Croatia</i></p> | | <p>Law and Ethics of Nanotechnology Safety and Health In Food Dr. I. Feitshans <i>ESI SAFERNANO European Scientific Inst., Archamps France, Virginia Mountain Valley Lawyers Alliance Representative for Lawyers Abroad, Legal Advisor, NANORIGO</i></p> |
| <p>17:00 – 18:30 Coffee Break NN23 Posters (SEE POSTER PROGRAMME) – Exhibition – Networking</p> | | | |

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| 08:00 - 9:00 Registration | | | |
| 09:30-11:00 Timber Hall I | WS1: Nanophotonics-Nanoelectronics Chair: M. Gioti | 09:30-11:00 Crystal Hall | WS2: Nanoparticles Chair: C. Gravalidis |
| 09:30-10:00 INVITED | Simulation strategies for the characterization of realistic radiation-pumped dispersion force-driven nanoscale parametric amplifiers F. Pinto <i>Izmir University of Economics, Turkey</i> | 09:30-09:45 | Hybrid L1₀ Phase Magnetic Nanostructures for Spintronic Devices O. Crisan ¹ , E. Th. Papaioannou ^{1,2} , A. Stanciu ¹ , A.D. Crisan ¹ ¹ <i>Nat. Inst. for Materials Physics, PO Box MG-7, 077125 Magurele, Ilfov, Romania</i> ² <i>Dept. of Physics, Aristotle University of Thessaloniki, Greece</i> |
| 10:00-10:15 | Demonstration of atoms as information carriers in atomic-scale tin transistors operated with gate potential in the millivolt F. Xie ^{1,5} , F. Ducry ² , M. Luisier ² , J. Leuthold ³ , and T. Schimmel ^{1,4,5} ¹ <i>Inst. of Applied Physics, Karlsruhe Inst. of Technology (KIT), Karlsruhe, Germany</i> ² <i>Integrated Systems Lab, Swiss Federal Inst. of Technology in Zurich (ETHZ), 8092 Zürich, Switzerland</i> ³ <i>Inst. of Electromagnetic Fields, ETHZ, 8092 Zürich, Switzerland</i> ⁴ <i>Inst. of Nanotechnology, KIT, Campus North, 76344 Eggenstein-Leopoldshafen, Germany</i> ⁵ <i>Material Research Center for Energy Systems, KIT, Campus South, 76131 Karlsruhe, Germany</i> | 09:45-10:00 | A new methodology for the preparation of chiral gold nanorods S. Baulde ¹ , K. Van Gordon ² , S. Bals ³ , L. M. Liz-Marzán ⁴ and J. Mosquera ¹ ¹ <i>Universidade da Coruña, Centro Interdisciplinar de Química e Biología - As Carballeiras, s/n, Spain</i> ² <i>CIC biomaGUNE, Basque Research and Technology Alliance (BRTA), 20014 Donostia-San Sebastián, Spain</i> ³ <i>EMAT, University of Antwerp, 2020 Antwerp, Belgium</i> |
| 10:15-10:30 | Emerging Materials for Photovoltaics Correct Assessment of Optical and Structural Properties A.C. Galca, O. El Khouja, S. Derbali, V. Stancu, A.G. Tomulescu, H. Mehdi, L.N. Leonat, C.C. Negrlia, I. Pintilie <i>Nat. Inst. of Materials Physics, 405A Atomistilor, 077125 Magurele, Romania</i> | 10:00-10:15 | Novel 3D Hollow Nanostructural (Ni,Co)Se₂/Carbon Electrocatalyst for Efficient Overall Water-Splitting Z. Wang <i>Dept. of Chemical Engineering, College of Chemistry and Chemical Engineering Xiamen University, China</i> |
| 10:30-10:45 | | 10:15-10:30 | Cu_S Catalysts by Ag-Mediated Corrosion of Cu for Electrochemical Reduction of Sulfur-Containing CO₂ Gas to HCOOH J. Wook Lim ¹ , W. J. Dong ¹ , W. S. Cho ¹ , C. J. Yoo ² , and J.-L. Lee ^{1,2*} ¹ <i>Dept. of Materials Science and Engineering, Pohang University of Science and Technology (POSTECH) Korea</i> ² <i>Division of Advanced Materials Science, Pohang University of Science and Technology (POSTECH), Korea</i> |
| 10:45-11:00 | | 10:30-10:45 | Photocatalytic TiO₂ Nanoparticles Processed at Low Temperature A. Stepanova ¹ , T. Tite ¹ , M. Enculescu ¹ , C. Radu ^{1,2} , D.C. Culita ³ , A.M. Rostas ⁴ , A.C. Galca ¹ ¹ <i>Nat. Inst. of Materials Physics, Atomistilor 405A, 077125 Magurele, Romania</i> ² <i>Faculty of Physics, University of Bucharest, Atomistilor 405, 077125 Magurele, Romania</i> ³ <i>Ilie Murgulescu Inst. of Physical Chemistry, Splaiul Independentei 202, 060021 Bucharest, Romania</i> ⁴ <i>Nat. Inst. of Isotopic and Molecular Technologies, Donath 67-103, 400293 Cluj-Napoca, Romania</i> |
| 11:00-11:30 | Coffee Break NN23 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking | 10:45-11:00 | Simple mechanochemical synthesis and characterization of a nanostructured silver (I) selenide semiconductor M. Achimovičová ¹ , K. Gáborová ^{1,2} , V. Girman ^{3,4} , M. Lisnichuk ^{3,4} , E. Dutková ¹ , J. Briančin ¹ ¹ <i>Inst. of Geotechnics, Slovak Academy of Sciences, Watsonova 45, 04001 Košice, Slovakia</i> ² <i>Faculty of Materials, Metallurgy and Recycling, Technical University, Letná 1/9, 04201 Košice, Slovakia</i> ³ <i>Faculty of Science, P.J. Šafárik University, Park Angelinum 9, 04154 Košice, Slovakia</i> ⁴ <i>Inst. of Materials Research, Slovak Academy of Sciences, Watsonova 47, 04001 Košice, Slovakia</i> |
| 11:30-13:30 Crystal Hall | WS3: Nanoparticles for Clinical Applications III Chair: Y. Missirlis | | |
| 11:30-11:45 | Virus-based enzymatic nanoreactors for enzyme replacement therapy R. Vazquez-Duhalt <i>Center for Nanosciences and Nanotechnology, Nat. Autonomus University of Mexico Ensenada, Baja California, Mexico 22860</i> | | |
| 11:45-12:00 EU PROJECT | pH- and Redox-Responsive Cancer Nanotheranostics Based on Cyclodextrin-Capped Mesoporous Silica N. Ž. Knežević ¹ , M. Mundžić ¹ , M. Mladenović ¹ , A. Pavlović ¹ , A. Ultimo ² , O. L. Gobbo ² , E. Ruiz-Hernandez ² , M. Santos-Martinez ² ¹ <i>BioSense Inst., University of Novi Sad, Dr Zorana Djindjica 1, 21000 Novi Sad, Serbia.</i> ² <i>School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin, D02 PN40 Dublin, Ireland</i> | | |
| 12:00-12:15 | Ready-to-use nanopore platform for label-free small molecule quantification: ethanolamine as first example I. Quint ¹ , J. Simantzik ¹ , L. Kaiser ³ , S. Laufer ^{2,3} , W.E.A. Krames ¹ , R. Csuk ⁴ , D. Smith ⁵ , M. Kohl ¹ , H.-P. Deigner ^{1,6,7} | | |

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| | <p>¹<i>Inst. of Precision Medicine, Furtwangen University, Jakob-Kienzle-Strasse 17, Villingen-Schwenningen, 78054, Germany</i></p> <p>²<i>Inst. of Pharmaceutical Sciences, Dept. of Pharmacy and Biochemistry, Eberhard-Karls-University Tuebingen, Auf der Morgenstelle 8, Tuebingen, 72076, Germany</i></p> <p>³<i>Tuebingen Center for Academic Drug Discovery & Development (TüCAD2), 72076 Tuebingen, Germany</i></p> <p>⁴<i>Inst. of Organic Chemistry, Martin-Luther University Halle-Wittenberg, Kurt-Mothes-Str. 2, 06120 Halle (Saale), Germany</i></p> <p>⁵<i>Fraunhofer Inst. IZI (Leipzig), Perlickstrasse 1, 04103 Leipzig, Germany</i></p> <p>⁶<i>Fraunhofer Inst. IZI (Leipzig), Schillingallee 68, 18057 Rostock, Germany</i></p> <p>⁷<i>Faculty of Science, Eberhard-Karls-University Tuebingen, Auf der Morgenstelle 8, Tuebingen, 72076, Germany</i></p> |
| 12:15-12:30 EU PROJECT | <p>European Sustainable BIO-based nanoMAterials Community (BIOMAC)</p> <p>An open innovation test bed for the upscaling, the market-readiness and the production of Nano structured Bio-based Materials</p> <p>Z. Terzopoulou¹, K. Triantafyllidis², D. Bikiaris¹</p> <p>¹<i>Lab of Polymer and Colors Chemistry and Technology, Dept. of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece</i></p> <p>²<i>Lab of Chemical and Environmental Technology, Dept. of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece</i></p> |
| 12:30-12:45 | <p>Preparation and preclinical testing of biofunctional Curcumin-PLGA nanoparticles for targeted delivery of antithrombotic and antioxidant agents for the treatment of atherosclerosis</p> <p>M. Kioutsouki¹, K. Meliopoulou¹, S. Ploumistou¹, I.E. Chatzioannou¹, E. Rampota¹, K. Tsimenidis², A. Orfanos², M. Gioti¹, A. Laskarakis¹, V. Karagiakozaki², S. Logothetidis¹</p> <p>¹<i>Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</i></p> <p>²<i>BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece</i></p> |
| 12:45-13:00 | <p>Synthesis and characterization of Mn-based nanoparticles for biological applications</p> <p>E. Pantelidou¹, E. Fylaktou², S. Mourdikoudis³, L. Storozhuk³, R. Papi², C. Dendrinou-Samara¹</p> <p>¹<i>Inorganic Chemistry Lab, Chemistry Dept., Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece</i></p> <p>²<i>Dept. of Biochemistry, School of Chemistry, Faculty of Sciences, Aristotle University of Thessaloniki (A.U.Th), Thessaloniki, Greece</i></p> <p>³<i>Biophysics Group, Dept. of Physics and Astronomy, University College London, Gower Street, London, WC1E 6BT, UK</i></p> |
| 13:00-13:15 YRA Candidate | <p>Physical properties and biological activity study of green synthesized nano-fillers for dental applications</p> <p>E. Ismail¹</p> <p>¹<i>Dept. of Restorative Dentistry, Faculty of Dentistry, University of the Western Cape, Cape Town 7535, South Africa</i></p> |
| 13:30-15:00 | <p style="text-align: center;">Lunch Break NN23 Poster (SEE POSTER PROGRAMME) – Exhibition-Networking</p> |
| 15:00-17:00 Crystal Hall | <p>WS3: Regenerative Medicine Chair: G. Kousoulas</p> |
| 15:00-15:30 INVITED | <p>Nanomechanics and Nanobiology</p> <p>Y. Missirlis</p> <p><i>University of Patras, Greece</i></p> |
| 15:30-16:00 INVITED | <p>Ferritin Heteropolymers in Physiology and Nanobiotechnology</p> <p>G. C. Papaefthymiou</p> <p><i>Dept. of Physics, Villanova University 800 E. Lancaster Ave., Villanova PA 19085, USA</i></p> |
| 16:00-16:30 INVITED | <p>Biomimetic Scaffolds endowed genetically with specific short peptides “deliver” osteogenic or chondrogenic signals to human mesenchymal cells</p> <p>A. Mantsou¹, E. Papachristou¹, P. Keramidas¹, P. Lamprou¹, M. Pitou¹, R. M. Papi¹, K. Dimitriou², A. Aggeli² and T. Choli-Papadopoulou¹</p> <p>¹<i>Lab of Biochemistry, School of Chemistry, Faculty of Sciences, Aristotle University of Thessaloniki, University Campus 54124 Thessaloniki, Greece</i></p> <p>²<i>Lab of Chemical Engineering A', School of Chemical Engineering, Faculty of Engineering, Aristotle University of Thessaloniki, University Campus 54124 Thessaloniki, Greece</i></p> |
| 16:30-17:00 | <p style="text-align: center;">NN23 Closing Ceremony – Young Researcher Awards</p> |

WS1 POSTER SESSION

Tuesday 4 July to Friday 7 July: Poster Display

Thursday 6 (17:30-20:00): Poster Presentation

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| P1-1 | <p>Incorporation of 2D perovskite flakes into optical microcavity. J. Misiak¹, S. Galan¹, M. Kedziora¹, K. Lempicka-Mirek¹, R. Mazur², P. Morawiak², W. Piecek², J. Szczytko¹ and B. Pietka¹ ¹<i>Faculty of Physics, University of Warsaw, Warsaw, Poland</i> ²<i>Institute of Applied Physics, Military University of Technology, Warsaw, Poland</i></p> |
| P1-2 YRA Candidate | <p>Black Phosphorus based field-effect transistors Ni and NiCr alloy as metal contacts in Black Phosphorus field-effect transistors L. Viscardi^{1,2}, K. Intonti^{1,2}, A. Kumar¹, E. Faella^{1,2}, A. Pelella³, F. Giubileo², S. Sleziona⁴, O. Kharsah⁴, M. Schleberger⁴, and A. Di Bartolomeo^{1,2} ¹<i>Dept. of Physics "E.R. Caianiello", University of Salerno Via Giovanni Paolo II 132, Fisciano, 84084, Italy</i> ²<i>CNR-SPIN</i> ³<i>Dept. of Science and Technology, University of Sannio Via de Sanctis, Benevento, 82100, Italy</i> ⁴<i>Faculty of Physics and CENIDE, University of Duisburg-Essen Lotharstrasse 1, Duisburg, 47057, Germany</i></p> |
| P1-3 YRA Candidate | <p>Investigation of the photo-response of few-layer ReSe2 field effect transistors at different pressures K. Intonti^{1,2}, E. Faella^{1,2}, L. Viscardi^{1,2}, A. run Kumar¹, O. Durante^{1,2}, F. Giubileo², M. Passacantando³, H. Tung Lam⁴, A. Konstantinos⁴, M. Craciun⁴, S. Russo⁴ and A. Di Bartolomeo^{1,2,*} ¹<i>Dept. of Physics "E.R. Caianiello", University of Salerno, Fisciano 84084, Salerno, Italy</i> ²<i>CNR-SPIN, Fisciano 84084, Salerno, Italy</i> ³<i>Dept. of Physical and Chemical Science, University of L'Aquila, , Italy</i> ⁴<i>University of Exeter, Stocker road 6, Exeter EX4 4QL, Devon, UK</i></p> |
| P1-4 | <p>Preparation and characterization of Carbon-based Electrocatalysts M. F. De Riccardis¹, M. Re¹, D. Carbone¹, C. Mele² ¹<i>Italian National Agency for New Technology, Energy and Sustainable Economic Development, Italy</i> ²<i>University of Salento-Dept. of Engineering for Innovation, Via per Monteroni - 73100 LECCE (Italy)</i></p> |
| P1-5 | <p>Optimization of high-security anti-counterfeit holographic SMART labels for product monitoring C. Parvulescu¹, R. Tomescu¹, B. Comanescu², V. Anastasoae¹, D. Cristea¹ ¹<i>National Institute for Research and Development in Microtechnology – IMT Bucharest, 126A, Erou Iancu Nicolae Street, 077190, Voluntari, Ilfov, ROMANIA</i> ²<i>S.C. Optoelectronica2001 S.A., P.O. Box: MG-22, Ilfov, Romania</i></p> |
| P1-6 | <p>Comparison of ultrafast optical response of multimodal hybrid metasurface at plasmonic and polaritonic resonances G. S. Ostanin¹, D.A.Sufiullin¹, M. A. Kiryanov¹, T. V. Dolgova¹, M. Inoue², & A. A. Fedyanin¹ ¹<i>Faculty of Physics, Lomonosov Moscow State University, 119991, Moscow, Russia</i> ²<i>Dept. of Electrical and Electronic Information Engineering, Toyohashi University of Technology, 1-1 Tempaku-cho, Toyohashi, Aichi 441-8580, Japan</i></p> |
| P1-7 | <p>Correlations between synthesis conditions of CsPbBr3 perovskite and its properties U. Malecka¹, A. Woyciechowska¹, M. Kędziora¹, K. Łempicka-Mirek¹, P. Morawiak², W. Piecek², J. Szczytko¹, B. Piętko¹ ¹<i>Institute of Experimental Physics, Faculty of Physics, University of Warsaw, Poland</i> ²<i>Institute of Applied Physics, Military University of Technology, Warsaw, Poland</i></p> |
| P1-8 | <p>Supercapacitor based on biomass-derived hard carbon electrodes D. Katsoulotou^{1,2}, M. Athanasiou¹, J. Papavasiliou^{1,3}, T. Ioannides¹ ¹<i>FORTHs, Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Patras, Greece</i> ²<i>Dept. of Chemistry, University of Patras, Patras, Greece</i> ³<i>Dept. of Materials Science, University of Patras, Patras, Greece</i></p> |
| P1-9 | <p>Functionalized Multi-Wall Carbon Nanotubes: Enhancing Lithium-Ion Battery Performance for Sustainable Energy Storage W. Ciesielski, D. Kulawik, S. Żarska <i>Jan Długosz University in Częstochowa, 13/15 Armii Krajowej Ave., 42-200 Częstochowa, Poland</i></p> |
| P1-10 | <p>Gate current control and pressure dependency in the ReS2 bilayer-based field-effect transistor (FET) for thermally assisted non-volatile memories O. Durante^{1,2}, K. Intonti^{1,2}, L. Viscardi^{1,2}, A. Pelella³, F. Giubileo², M. S. G. Alghamdi⁴, M. A. S. Alshehri⁴, M. Craciun⁴, S. Russo⁴, and A. Di Bartolomeo^{1,2} ¹<i>Dept. of Physics "E.R. Caianiello", University of Salerno, Via Giovanni Paolo II 132, Fisciano, 84084, Salerno, Italy</i> ²<i>CNR-SPIN, Via Giovanni Paolo II 132, Fisciano, 84084, Salerno, Italy</i> ³<i>Dept. of Science and Technology, Università degli studi del Sannio, via dei mulini 59/A, Benevento, 82100, Italy</i> ⁴<i>University of Exeter, Stocker Road 6, Exeter EX4 4QL, Devon, UK</i></p> |

- P1-11 Plasmonic Photocatalysis Driven by Indirect Gold Excitation via Upconversion Nanoparticle Emission Monitored in-Situ by SERS**
G. P. Sousa¹, A. Barros¹, F. M. Shimizu², F. A. Sigoli¹, I. O. Mazali¹
¹Functional Materials Lab, Institute of Chemistry, University of Campinas, Brazil; Brazilian Nanotechnology National Lab, Campinas, Brazil. email: mazali@unicamp.br
- P1-12 Fabrication of high quality ordered Titanium Nitride plasmonic nanostructures**
P. Rampota, S. Panos, S. Kassavetis, N. Pliatsikas, D. Tselekidou, P. Patsalas
Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece

WS2 POSTER SESSION

Tuesday 4 July to Friday 7 July: Poster Display

Thursday 6 (17:30-20:00): Poster Presentation

- P2-1 Oxygen-vacancy induced ferroelectricity in vanadium pentoxide**
S. Vulpe¹, M. Dragoman¹, D. Dragoman^{2,3}, A. Dinescu¹, F. Nastase¹, C. Romanitan¹, O. Brincoveanu¹, A. Moldovan⁴, A. Nicolae⁵
¹National Institute for Research and Development in Microtechnologies -IMT Bucharest, 077190
²Faculty of Physics, University of Bucharest, PO Box MG-11, 077125, Magurele, Romania
³Academy of Romanian Scientists, Splaiul Independentei 54, 050094 Bucharest, Romania
⁴National Institute for Lasers, Plasma & Radiation Physics, Atomistilor 409, 077125 Magurele, Ilfov, Romania
⁵National Institute for Materials Physics, Atomistilor 405 A, 077125 Magurele, Ilfov, Romania
- P2-2 Nanostructured silver based antibacterial thin films obtained by magnetron sputtering on polymeric transparent foils**
C. Vitelaru¹, A. C. Parau¹, A. E. Kiss¹, I. Pana¹, M. Dinu¹, L. R. Constantin¹, A. Vladescu (Dragomir)¹, L. E. Tonofrei², C. S. Adochite³, S. Costinas³, L. Rogozea³, M. Moga³, M. E. Idomir³, M. Badea³
¹National Institute for Research and Development in Optoelectronics INOE 2000, Magurele, Romania;
²ATS Novus SRL, Bucharest, Romania
³Faculty of Medicine, Transylvania University of Brasov, Brasov, Romania
- P2-3 CrSiCN coatings obtained by cathodic arc synthesis and used as protective coatings for improved performance of stainless steel tools in industrial woodworking applications**
L. R. Constantin, Anca C. Parau, M. Dinu, I. Pana, C. Vitelaru, A. Vladescu (Dragomir)
National Institute of Research and Development for Optoelectronics - INOE 2000, 409 Atomistilor St., R077125, Magurele, Romania
- P2-4 ZrCuCa- quaternary thin film metallic glasses used for applications in medicine**
A. Vladescu (Dragomir), I. Pana, A. C. Parau, I. M. Marinescu, L. R. Constantin, M. Dinu, C. Vitelaru
National Institute of Research and Development for Optoelectronics - INOE 2000, 409 Atomistilor St., R077125, Magurele, Romania
- P2-5 SUSAAAN project: Sustainable Antimicrobial and Antiviral Nanocoatings**
Z. Sideratou¹, A. Papavasiliou¹, K.M. Lyra¹, C. Fernandez², L. Hernández Ruiz², T. Oroz Mateo², F.K. Katsaros¹
¹Institute of Nanoscience and Nanotechnology, NCSR "Demokritos", Aghia Paraskevi Attikis, Athens 15310, Greece
²Centro Tecnológico Lurederra, Industrial Area Pergueta, C/A Nº 1 31210, Los Arcos, Navarra, Spain
- P2-6 Quantification of solid-liquid interactions by the Capillary Bridge Probe method: Accurate contact angle and direct adhesion work determination**
N. Nagy¹
Centre for Energy Research ,1121 Budapest, Konkoly-Thege Miklós út 29-33., Hungary
- P2-7 Accurate contact angle determination by the Capillary Bridge Probe method: from perfect wetting to complete repellency**
N. Nagy¹
Centre for Energy Research, 1121 Budapest, Konkoly-Thege Miklós út 29-33., Hungary
- P2-8 Synthesis and applications of metal nanoparticles by non-thermal plasma jet**
T. R. Acharya^{1,2}, Minji Jang^{1,2}, Eun Ha Choi^{1,2*}, Geon Joon Lee^{1,2*}
¹Dept. of Electrical and Biological Physics, Seoul 01897, Korea
²Plasma Bioscience Research Center, Kwangwoon University, Seoul 01897, Korea
- P2-9 Improving the light transmittance of photoactive TiO₂ sol-gel coatings**
E. Albert, A. Bors, K. Kovács, P. Márton, B. Sándor, Z. Hórvölgyi
Dept. of Physical Chemistry and Materials Science, Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics, H-1111 Budapest Műegyetem rakpart 3, Hungary
- P2-10 Novel Rare Earth (RE)-Free Nanocomposite Magnets Derived from L1₀-Phase Systems**
O. Crisan¹, A.D. Crisan¹
¹National Institute for Materials Physics, PO Box MG-7, 077125 Magurele, Ilfov, Romania

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| P2-11 | <p>Electrochemical monitoring of anticancer drug Doxorubicin A. Grozdanov¹, P. Paunovik¹, I. Dimitrievska¹, K. Keller², F. Greco², ¹<i>Faculty of Technology and Metallurgy, University Ss Cyril and Methodius in Skopje, Ruger Boskovic 16, 1000 Skopje, Republic of North Macedonia</i> ²<i>Institute of Solid State Physics, Graz University of Technology, Petersgasse 16, 8010 Graz - Austria</i></p> |
| P2-12 | <p>Optical neuron based on exciton-polariton condensation. Kuba K.P., Opala A. <i>Faculty of Physics, University of Warsaw, Ludwika Pasteura 5, Warsaw</i></p> |
| P2-13 | <p>Self-assembled Nanostructures based on Conformational Isomerism of Supramolecular Squares with Sn(IV)-porphyrins and Re(I)-corners N. K. Shee, H. J. Kim <i>Dept. of Chemistry and Bioscience, Kumoh National Institute of Technology</i></p> |
| P2-14 | <p>Influence of irradiation on properties of ZrO₂ nanostructured pellets A. Akilbekov, S. Nikiforov, A. Dauletbekova, Zh. Karipbayev <i>L N Gumilyov Eurasian National University, 2 Satbayev Str., 010008 Astana, Kazakhstan, Ural Federal University, 19 Mira Str., 620002 Yekaterinburg, Russian Federation</i></p> |
| P2-15 | <p>Thermal Stability of Subcritical Dried TiO₂ Aerogels Prepared by Sol-Gel Synthesis J. Doneliene^{1,2}, E. Fataraitė-Urbonienė^{2,3}, J. Ulbikas^{1,2} ¹<i>Applied Research Institute for Prospective Technologies, Vismaliuku str. 34, LT-10243 Vilnius, Lithuania</i> ²<i>JSC Modern E-Technologies, Vismaliuku str. 34, LT-10243 Vilnius, Lithuania</i> ³<i>Kaunas University of Technology, K. Donelaicio str. 73, LT-44249 Kaunas, Lithuania</i></p> |
| P2-16 | <p>Dispersibility and Self-Assembly of Graphene Oxide – M13 Bacteriophage Aerogels K. Stokes¹, P. Passaretti², Y. Sun¹, H. White³, P. Goldberg Oppenheimer¹ ¹<i>School of Chemical Engineering, University of Birmingham, B15 2TT, UK</i> ²<i>Institute of Cancer and Genomic Sciences, University of Birmingham, B15 2TT</i> ³<i>BAE Systems – Air Sector, Buckingham House, FPC 267, Filton, Bristol, UK</i></p> |
| P2-17 | <p>Nano-engineered composite catalyst for on-board hydrogen production for fuel cell applications S. Ahmed¹ and U. Baduruthamal <i>Center for Refining and Advanced Chemicals, King Fahd University of Petroleum & Minerals Dhahran-31261, Saudi Arabia</i></p> |
| P2-18 | <p>Hydrophobic, ultraviolet protective fibers achieved by graphene oxide nanosheets functionalized via poly (glycidyl methacrylate) nanoparticles A. Jang, Anuja P. Ramanavare, B. Chun, J. Lee <i>Dept. of Fiber System Engineering, Yeungnam University, Gyeongsan, Korea, 38541, Republic of Korea.</i></p> |
| P2-19 YRA Candidate | <p>The black, the thin, and the porous: carbonization of polysaccharide self-standing films for highly selective gas separation membranes G. Trentini^{1,2}, A. Gaiardo², M. Valt², M. Scarpa³, S. Krik¹, L. Petti¹ ¹<i>Sensing Technologies Lab, Faculty of Engineering, Free University of Bozen-Bolzano, Piazza Domenicani 3, Bolzano 39100, Italy</i> ²<i>MNF-Micro Nano Facility Unit, Sensors and Devices Center, Bruno Kessler Foundation, Via Sommarive 18, Trento 38123, Italy</i> ³<i>Lab of Nanoscience, Dept. of Physics, University of Trento, Via Sommarive 4, 38123 Trento, Italy</i></p> |
| P2-20 | <p>Pickering Emulsion Polymerization Technology (PEmpTech) Applied for Ion Imprinted Polymers M. Honciuc, A.M. Solonaru, O.I. Negru, A. Honciuc <i>"Petru Poni" Institute of Macromolecular Chemistry 41A Grigore Ghica Voda Alley, 700487 Iasi, Romania</i></p> |
| P2-21 | <p>Metallic nanoparticles modified with tannic acid for antiviral applications K. Bednarczyk, K. Ranoszek-Soliwoda, E. Tomaszewska, G. Celichowski, J. Grobelny <i>Dept. of Materials Technology and Chemistry, Faculty of Chemistry, University of Lodz Pomorska 163, 90236 Lodz, Poland</i></p> |
| P2-22 | <p>Tuning of photonic properties of AgNWs@SnO₂ for remote heating applications A. Lech, M. Psarski, J. Grobelny, G. Celichowski, <i>Dept. of Materials Technology and Chemistry, Faculty of Chemistry, University of Lodz, Pomorska St. 163, 90-236 Lodz, Poland</i></p> |
| P2-23 | <p>Nanostructured ZnO films used as surface enhanced fluorescence substrates A. Falamas¹, I. Marica¹, F. Nekvapil^{1,2}, M. Stefan¹, N. D. Sankir³, A.M. Rostas¹, C. Farcau^{1,4} ¹<i>Molecular and Biomolecular Physics Dept., National Institute for Research and Development of Isotopic and Molecular Technologies, 67-103 Donat, 400293, Cluj-Napoca, Romania</i> ²<i>Ioan Ursu Institute, Babeş-Bolyai University, 1 Kogalniceanu, 400084 Cluj-Napoca, Romania</i> ³<i>Micro and Nanotechnology Graduate Program, TOBB University of Economics and Technology, Sogutozu Caddesi No 43 Sogutozu, 06560 Ankara, Turkey</i> ⁴<i>Institute for Interdisciplinary Research in Nano-Bio-Sciences, Babeş-Bolyai University, 42 T. Laurian, 400271, Cluj-Napoca, Romania</i></p> |

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| P2-24 | <p>Electrophotocatalytic reactions in aqueous solutions R. Bartoš, M. Veselý, P. Dzik <i>Institute of Physical and Applied Chemistry; Faculty of Chemistry, Brno University of Technology, Purkyňova 464/118, Královo Pole, 61200 Brno 12, Czech Republic</i></p> |
| P2-25 | <p>Bottom-up and Top-down Approaches for Creating Luminescent AlN Nanomaterials R. Ruska¹, P. Jankovska¹, B. Berzina¹ ¹<i>Institute of Solid State Physics, University of Latvia, Kengaraga St.8, Riga LV-1063, Latvia</i></p> |
| P2-26 | <p>Development of new cellulose-Chitosan Nanocomposite Functionalised with tannic acid as active packaging for dry food O. Brincoveanu^{1,2}, I. Marinas^{2,3}, A. Matej¹ ¹<i>National Institute for R&D in Microtechnology - IMT Bucharest, Romania</i> ²<i>Research Institute of the University of Bucharest – ICUB Bucharest, Romania</i> ³<i>Research & Development for Advanced Biotechnologies and Medical Devices, SC Sanimed International Impex SRL, Calugareni, Romania</i></p> |
| P2-27 | <p>Block copolymer-templated synthesis of Au-Pd bimetallic alloyed nanowires J. Król, P. Puła, P. Połczyński, P. Majewski <i>Faculty of Chemistry, University of Warsaw, Pasteura 1, 02-093 Warsaw, Poland</i></p> |
| P2-28 | <p>Aerogel-like materials for thermally-insulating mortars A. Athanasiadi^{1,3}, M. Andrikopoulou^{1,2}, Y. Georgiou¹, M. Zamparas¹, V. Dracopoulos¹, T. Ioannides¹ ¹<i>Foundation for Research and Technology Hellas, Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Patras, Greece</i> ²<i>Dept. of Chemistry, University of Patras, Patras, Greece</i> ³<i>Dept. of Chemical Engineering, University of Patras, Patras, Greece</i></p> |
| P2-29 | <p>AMP2-based correction scheme to approach the limit of a complete pair natural orbitals space in DLPNO-CCSD(T) calculations J. L. Pogrebetsky¹, A. Siklitckaia¹, A. Kubas¹ <i>Institute of Physical Chemistry Polish Academy of Sciences, Kasprzaka 44/52, 01-422 Warsaw, Poland</i></p> |
| P2-30 | <p>Sensitivity of gold nanocatalysts during prolonged operation in catalytic converter for emission control in formaldehyde production plants M. Smyrnioti, V. Dracopoulos, T. Ioannides* <i>FORTHs, Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Patras, Greece</i></p> |
| P2-31 | <p>VOC Oxidation over Co₃O₄ Nanocatalysts: Investigation of Catalytic Surface Reactivity via Dynamic TPD/TPSR Techniques Y. Georgiou, P. Dimitropoulos, M. Smyrnioti, N. Apostolopoulos, V. Dracopoulos, T. Ioannides* <i>FORTHs, Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Patras, Greece</i></p> |
| P2-32 | <p>Tunable zinc oxide materials for photonic applications S. Tombros¹, K. Papachristopoulou¹, G. Avgouropoulos¹, N. Vainos¹ ¹<i>Dept. of Materials Science, University of Patras, GR-26504, Rio-Patras, Greece</i></p> |
| P2-33 | <p>HelixJet – Atmospheric Pressure Plasma for Nanotechnology and Medicine J. Schäfer, R. Foest, A. Naumann <i>Leibniz Institute for Plasma Science and Technology e.V. (INP) Felix-Hausdorff-Straße 2, 17489 Greifswald, Germany</i></p> |
| P2-34 | <p>Reliability Performance of Metallization Materials for Application in Nanostructures K. Weide-Zaage¹, T. Gao¹, V. Hein² ¹<i>IMS-RESRI Leibniz University Hannover Appelstr.4 30167 Hannover, Germany</i> ²<i>X-FAB Global Services GmbH Haarbergstr. 67 99097 Erfurt, Germany</i></p> |
| P2-35 | <p>Submicron-grain alumina ceramics prepared from (α+θ) phase nano-powders W. C. Huang¹, E. S. Chang¹, C. Y. Huang¹, F. S. Yen¹, C. L. Huang² ¹<i>Depts. of Resources Engineering¹ and Electrical Engineering², National Cheng Kung University One University Road, 70101 Tainan City, TAIWAN</i></p> |
| P2-36 | <p>Improving the photoelectrochemical activity of inverse opal-like TiO₂ thin film deposited by a spin-coating process K. Rustembekkyzy¹, A. Molkenova², M. Kaikanov³, T.S. Atabaev¹ ¹<i>Dept. of Chemistry, Nazarbayev University, Astana 010000, Kazakhstan</i> ²<i>Institute of Advanced Organic Materials, Pusan National University, Busan 46241, South Korea</i> ³<i>Dept. of Physics, Nazarbayev University, Astana 010000, Kazakhstan</i></p> |
| P2-37 YRA Candidate | <p>UV light blocking and conversion by porous europium-doped titanium dioxide (TiO₂-Eu) thin films for potential protection of photovoltaic devices K. Zhumanova¹, L. Serik¹, A. Molkenova², T. S. Atabaev¹ ¹<i>Dept. of Chemistry, Nazarbayev University, Astana 010000, Kazakhstan</i> ²<i>Institute of Advanced Organic Materials, Pusan National University, Busan 46241, South Korea</i></p> |

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| P2-38 | Deposition of Luminescent and Hydrophobic PDMS-based Thin Film for Potential UV Screening and Conversion D. Goponenko¹, K. Zhumanova¹, T.S. Atabaev¹ ¹ <i>Dept. of Chemistry, Nazarbayev University, Astana 010000, Kazakhstan</i> |
| P2-39 | Mesoporous silica microparticles for quick Methylene Blue dye removal from water M. Sissenbay, B. Myrzatay, T.S. Atabaev <i>Dept. of Chemistry, Nazarbayev University, Astana 010000, Kazakhstan</i> |
| P2-40 | Microwave-assisted synthesis of graphene oxide/ZnO nanorods (GO-ZnO) for efficient Methylene Blue dye degradation under solar light illumination A. Bazenova¹, L. Khamkhash¹, T. S. Atabaev¹ ¹ <i>Dept. of Chemistry, Nazarbayev University, Astana 010000, Kazakhstan</i> |
| P2-41 | Effect of storage time on antioxidant activity of LDPE films loaded with bioactive nanocarriers K. Safakas, G.C. Lainioti, A. Ladavos <i>Department of Food Science & Technology, University of Patras, GR-30100 Agrinio, Greece</i> |
| P2-42 | Photoresponse enhancement of nanostructured ZnO ultraviolet photodetector by reduced graphene oxide M. Purica¹, C. Obreja¹, F. Comanescu¹ ¹ <i>Institute for Research and Development in Microtechnologies – IMT Bucharest, Romania</i> |
| P2-43 | Chiral plasmonic assemblies based on light-responsive supramolecular nanotubes A.Jedrych¹, M. Pawlak¹, W. Lewandowski¹, M. Wojcik¹ <i>Faculty of Chemistry, University of Warsaw, Poland</i> |

WS3 POSTER SESSION

Tuesday 4 July to Friday 7 July: Poster Display

Thursday 6 (17:30-20:00): Poster Presentation

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| P3-1 YRA Candidate | Nanodiamond nanofilm inhibit proliferation and enhance adhesion of breast cancer cell line MDA.MB.231, in vitro studies using 2D and bio-printed 3D models B. Wójcik¹, K. Zawadzka¹, A. Ostrowska¹, M. Wierzbicki¹ ¹ <i>Department of Nanobiotechnology, Institute of Biology, Warsaw University of Life Sciences, Ciszewskiego 8, 02-786 Warsaw, Poland</i> |
| P3-2 YRA Candidate | Design and development of a sweat-based glucose monitoring graphene nanodevice (closed-loop) with controlled transdermal nanoemulsion release for hypoglycemic drug delivery E. Papanikolaou^{1,2,7}, Y. V. Simos^{1,2}, E. Tzianni³, V. Fiska⁴, C. Alatzoglou⁵, K. Spyrou^{2,6}, M. Patila^{2,5}, S. Evangelou⁴, K. Tsamis^{1,2}, E. Dounousi^{2,7}, H. Stamatis^{2,5}, M. Prodromidis^{3,8}, M. G. Tsipouras⁴, D. P. Gournis^{2,6}, D. Peschos^{1,2} ¹ <i>Department of Physiology, Faculty of Medicine, School of Health Sciences, University of Ioannina, Ioannina, 45110, Greece;</i> ² <i>Nanomedicine and Nanobiotechnology Research Group, University of Ioannina, Ioannina, 45110, Greece;</i> ³ <i>Lab of Analytical Chemistry, University of Ioannina, Ioannina, 45110, Greece;</i> ⁴ <i>Department of Electrical and Computer Engineering, Faculty of Engineering, University of Western Macedonia, 50100 Kozani, Greece;</i> ⁵ <i>Biotechnology Lab, Department of Biological Applications and Technologies, University of Ioannina, Ioannina, 45110, Greece;</i> ⁶ <i>Department of Materials Science and Engineering, University of Ioannina, Ioannina, 45110, Greece;</i> ⁷ <i>Department of Nephrology, Faculty of Medicine, School of Health Sciences, University of Ioannina, Ioannina, 45110, Greece;</i> ⁸ <i>Institute of Materials Science and Computing, University Research Center of Ioannina (URCI), Ioannina, 45110, Greece</i> |
| P3-3 YRA Candidate | Evaluation of fiber and debris release from protective COVID-19 mask textiles and in vitro acute cytotoxicity effects Meier P.¹, Zabara M.², Hirsch C.¹, Gogos A.¹, Tscherrig D.³, Richner G.³, Nowack B.⁴, Wick P.¹ ¹ <i>Particles-Biology Interactions Lab, Empa – Swiss Federal Laboratories for Materials Science and Technology, St. Gallen 9014, Switzerland</i> ² <i>SVP Technology/Science and Consumer Interface, Livinguard AG, Cham 6330, Switzerland</i> ³ <i>Federal Office for Civil Protection FOCP, Spiez Lab, Spiez 3700, Switzerland</i> ⁴ <i>Technology and Society Lab, Empa – Swiss Federal Laboratories for Materials Science and Technology, St. Gallen 9014, Switzerland</i> |
| P3-4 | Polysaccharides-based Capsules as Magnetically Navigated Smart Delivery Systems E. Gumieniczek-Chłopek¹, J. Odrobińska-Baliś², C. Kapusta¹, S. Zapotoczny³ ¹ <i>Faculty of Physics and Applied Computer Science, AGH University of Science and Technology, Ave. Adama Mickiewicza 30, Cracow, Poland</i> ² <i>Jerzy Haber Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences, Niezapominajek 8, Cracow, Poland</i> ³ <i>Faculty of Chemistry, Jagiellonian University, Gronostajowa 2, Cracow, Poland</i> |
| P3-5 | Diamond nanoparticles regulate mechanosensing of endothelial cell. M. Wierzbicki¹, M. Sosnowska¹, K. Zawadzka¹, B. Wójcik¹ <i>Department of Nanobiotechnology, Institute of Biology, Warsaw University of Life Sciences, Ciszewskiego 8 St, 02-786 Warsaw, Poland</i> |

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| P3-6 | <p>Composite of silver nanoparticles - farnesol as an antibacterial agent S. Jaworski, A. Lange, A. Ostrowska, M. Kutwin, M. Wierzbicki, B. Strojny-Cieślak, E. Sawosz <i>Department of Nanobiotechnology, Institute of Biology, Warsaw University of Life Sciences, Poland</i></p> |
| P3-7 | <p>Modulation of <i>in vitro</i> angiogenesis in breast cancer with functionalized diamond nanoparticles K. Zawadzka¹, B. Wójcik², S. Jaworski³, M. Wierzbicki⁴ <i>Department of Nanobiotechnology, Institute of Biology, Warsaw University of Life Sciences, Poland</i></p> |
| P3-8 | <p>Functionalized ZnPc phthalocyanine with the prospect of conjugation to nanoparticles T. Potlog¹, V. Suman², A. Popusoi³ <i>Lab of Organic/Inorganic Materials for Optoelectronics, Moldova State University, 60, A. Mateevici str. Chisinau MD 2009, Republic of Moldova</i></p> |
| P3-9 | <p>Disruption of bacterial cells through three-compound nanocomposites based on graphene oxide A. Lange¹, M. Wierzbicki¹, A. Ostrowska¹, S. Jaworski¹ <i>Dept. of Nanobiotechnology, Institute of Biology, Warsaw University of Life Sciences Ciszewskiego 8 str, 02-786 Warsaw, Poland</i></p> |
| P3-10 | <p>Nanoelectrospray ionization mass spectrometry reveals novel glycolipids biomarker associated with human temporal lobe epilepsy R. Ica¹, M. Sarbu¹, K. Mlinac-Jerkovic², S. Kalanj-Bognar², A. D. Zamfir^{1,3} ¹<i>Dept. of Condensed Matter, National Institute for Research and Development in Electrochemistry and Condensed Matter, 300224, Timisoara, Romania</i> ²<i>Croatian Institute for Brain Research, School of Medicine, University of Zagreb, 10 000 Zagreb, Croatia</i> ³<i>Dept. of Technical and Natural Sciences, "Aurel Vlaicu" University of Arad, Romania</i></p> |
| P3-11 | <p>Glycomics of human decorin by nanoelectrospray ion mobility tandem mass spectrometry A. D. Zamfir^{1,2}, M. Sarbu¹, R. Ica¹, E. Sharon³, D. E. Clemmer³ ¹<i>Dept. of Condensed Matter, National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania</i> ²<i>Dept. of Technical and Natural Sciences, "Aurel Vlaicu" University of Arad, Arad, Romania</i> ³<i>Dept. of Chemistry, The College of Arts & Science, Indiana University, Bloomington, Indiana, USA</i></p> |
| P3-12 | <p>Determination of the active domains in chondroitin/dermatan sulfates from human biglycan by nanoelectrospray ion mobility mass spectrometry M. Sarbu¹, R. Ica¹, E. Sharon², D. E. Clemmer², A. D. Zamfir^{1,3} ¹<i>Dept. of Condensed Matter, National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania;</i> ²<i>Dept. of Chemistry, The College of Arts & Science, Indiana University, Bloomington, Indiana, USA</i> ³<i>Dept. of Technical and Natural Sciences, "Aurel Vlaicu" University of Arad, Arad, Romania</i></p> |
| P3-13 | <p>Spectral monitoring via Raman spectroscopy of selective dental restorative materials and assessment of their capacity to treat cavities in extensively damaged teeth A.-M. Iordache¹, E. Gatin^{2,3}, C.-R. Luculescu⁴, S.-M. Iordache¹, I. C. Vasiliu¹, M. Elisa¹, I. Chilibon¹, C.E.A. Grigorescu¹, R. R. Ilici⁵ ¹<i>Optospintronics Dept., National Institute for Research and Development for Optoelectronics—INOE 2000, Atomistilor 409, Magurele, 077125, Romania;</i> ²<i>Faculty of Medicine, University of Medicine and Pharmacy "Carol Davila", Blv. Eroii Sanitari 8, sector 5, 050474 Bucharest, Romania</i> ³<i>Faculty of Physics, DMSFAPA Dept., University of Bucharest, 405 Atomistilor Str., 077125 Magurele, Romania</i> ⁴<i>CETAL Dept., National Institute for Laser, Plasma and Radiation Physics, Atomistilor Str. 409, 077125 Magurele, Romania</i> ⁵<i>Faculty of Dental Medicine, University of Medicine "Carol Davila", Plevnei Route No. 17-23, Sector 1, 020021 Bucharest, Romania</i></p> |
| P3-14 | <p>Electrospun double layered clickable membrane: a versatile wound dressing Torresi S.¹, Montejo U.², Alonso-Varona A.², Martín L.³, Gabilondo N.¹, Eceiza A.¹ ¹<i>Materials+Technologies' Group (GMT), Chemistry and Environmental Engineering Dept., Faculty of Engineering of Gipuzkoa, University of the Basque Country (UPV/EHU), Spain</i> ²<i>Dpto. Biología Celular e Histología, Facultad de Medicina y Enfermería (UPV/EHU), Bº Sarriena s/n, 48940 Leioa, Spain</i> ³<i>Macrobbehaviour-Mesostructure-Nanotechnology SGiker Service, Faculty of Engineering of Gipuzkoa, University of the Basque Country (UPV/EHU), Plaza Europa 1, 20018 Donostia-San Sebastián, Spain</i></p> |
| P3-15 | <p>A noble magnetic anticancer compound for drug delivery Y. Ishikawa <i>CVRI, Yokohama City University School of Medicine, Yokohama, Japan</i></p> |
| P3-16 | <p><i>In vivo</i> evaluation of tumour targeting potential of ⁶⁸Ga-labelled cyclodextrins using positron emission tomography I. Kálmán-Szabó^{1,2}, J. P. Szabó¹, K. Csige^{1,3}, S. N. Dénes¹, I. Kertész¹, Z. Képes¹, G. Trencsényi¹, I. Hajdu^{1,3} ¹<i>Division of Nuclear Medicine and Translational Imaging, Medical Imaging Dept., University of Debrecen, Debrecen, Hungary,</i> ²<i>Gyula Petronyi Doctoral School of Allergy and Clinical Immunology, University of Debrecen, Debrecen, Hungary,</i> ³<i>Doctoral School of Pharmaceutical Sciences, University of Debrecen, Debrecen, Hungary</i></p> |

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| P3-17 | <p>In vivo preclinical evaluation of Gallium and Bismuth labelled beta-cyclodextrin for targeted alpha therapy I. Hajdu^{1,3}, K. Csige^{1,3}, I. Kálmán-Szabó^{1,2}, J. P. Szabó¹, S. N. Dénes¹, I. Kertész¹, Z. Képes¹, G. Trencsényi¹, ¹<i>Division of Nuclear Medicine and Translational Imaging, Medical Imaging Dept., University of Debrecen, Debrecen, Hungary,</i> ²<i>Gyula Petronyi Doctoral School of Allergy and Clinical Immunology, University of Debrecen, Debrecen, Hungary,</i> ³<i>Doctoral School of Pharmaceutical Sciences, University of Debrecen, Debrecen, Hungary,</i></p> |
| P3-18 | <p>Electrospun nanofibers loaded with disulfiram for glioblastoma treatment A. Concheiro¹, I. Gonzalez-Prada¹, E. Garcion², C. Alvarez-Lorenzo¹ ¹<i>Dept. of Pharmacology, Pharmacy and Pharmaceutical Technology, I+DFarma Group, Faculty of Pharmacy, Materials Institute (iMATUS), and Health Research Institute of Santiago de Compostela (IDIS), University of Santiago de Compostela, Spain</i> ²<i>University of Angers, University of Nantes, Inserm, CRCI2NA, SFR ICAT, F-49000 Angers, France</i></p> |
| P3-19 | <p>Piezoelectric scaffolds enhance osteogenesis N. N. Tavernaraki¹, V. Platania¹, M. Chatzinikolaïdou^{1,2} ¹<i>Dept. of Materials Science and Technology, University of Crete, Heraklion, Greece</i> ²<i>Foundation for Research and Technology Hellas (FO.R.T.H)-IESL, Heraklion, Greece</i></p> |
| P3-20 | <p>Synthesis and characterization of inorganic copper oxide nanoparticles for topical application Chaikali C.¹, Lampropoulou P.², Papoulis D.² and Hatziantoniou S.¹ ¹<i>Dept. of Pharmacy, University of Patras, Patras GR-26504, Greece</i> ²<i>Dept. of Geology, University of Patras, Patras GR-26504, Greece</i></p> |
| P3-21 | <p>Towards the standardization of pharmaceutical nanocrystals production L. Castillo¹, B. Bahloul², K. Alharet¹, F. Ouyoun¹, L. Kostka³, T. Etrych³, L. Kalshoven⁴, A. Guillaume⁴, N. Mignet¹, Y. Corvis¹ ¹<i>Université Paris Cité, CNRS, INSERM, UTCBS, Chemical and Biological Technologies for Health Group (utcb.u-paris.fr), F-75006 Paris, France</i> ²<i>Drug Development Lab LR12ES09, Faculty of Pharmacy, University of Monastir, 5060 Monastir, Tunisia</i> ³<i>Institute of Macromolecular Chemistry, Czech Academy of Sciences, Heyrovského náměstí 2, CZ-162 06 Prague 6, Czech Republic</i> ⁴<i>EuroAPI France, 63480 Vertolaye, France</i></p> |
| P3-22 | <p>Intracellular NO Delivery by Si-Based Ni Composite Nanoflowers D. N. Lee¹, K. Gwon², J. H. Yu³, Y. R. Kim⁴, G. Park³, I. Han⁵, S. J. Lee¹, J. H. Shin⁴, and J. S. Yu³ ¹<i>Ingenium College of Liberal Arts (Chemistry), Kwangwoon University, Seoul 01897, Republic of Korea</i> ²<i>Dept. of Physiology and Biomedical Engineering, Mayo Clinic, Rochester, MN, 55902, USA</i> ³<i>Dept. of Energy Science and Engineering, Daegu Gyeongbuk Institute of Science, and Technology (DGIST), Daegu 42988, Republic of Korea</i> ⁴<i>Dept. of chemistry, Kwangwoon University, Seoul 01897, Republic of Korea</i> ⁵<i>Plasma Bioscience Research Center, Applied Plasma Medicine Center, Kwangwoon University, Seoul 01897, Korea</i></p> |
| P3-23 | <p>Preparation and characterization of biopolymer nanogels and growth of cancer cells in their presence N. Karipidou^{1,5}, C. Katrilaka^{1,5}, M. Naoum¹, Z. Bolla¹, K. Pattas¹, D. Bratsios¹, E. Rizos^{1,5}, K. Domvri², K. Porpodis³, N. Michailidis^{4,5} & A. Aggeli^{1,5*} ¹<i>Dpt of Chemical Engineering, School of Engineering, Aristotle University of Thessaloniki</i> ²<i>Lab of Histology-Embryology, Medical School, Aristotle University of Thessaloniki</i> ³<i>Pulmonary Dept., Medical School, Aristotle University of Thessaloniki</i> ⁴<i>Dpt of Mechanical Engineering, School of Engineering, Aristotle University of Thessaloniki</i> ⁵<i>Centre for Research & Development of Advanced Materials (CERDAM), Center for Interdisciplinary Research and Innovation, Balkan Center, 57001 Thessaloniki, Greece</i></p> |
| P3-24 | <p>Fabrication and characterization of optimized nanostructured collagen-based scaffolds for tissue regeneration N. Karipidou^{1,5}, C. Katrilaka^{1,5}, A.N. Tzavellas², M. Pitou³, E. Rizos^{1,5}, E. Dimitriou^{4,5}, N. Michailidis^{4,5}, E. Tsiridis², T. Choli-Papadopoulou^{3*} & A. Aggeli^{1,5*} ¹<i>Dpt of Chemical Engineering, School of Engineering, Aristotle University of Thessaloniki</i> ²<i>Dpt of Orthopedics, School of Medicine, Aristotle University of Thessaloniki</i> ³<i>School of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece</i> ⁴<i>Dpt of Mechanical Engineering, School of Engineering, Aristotle University of Thessaloniki</i> ⁵<i>Centre for Research & Development of Advanced Materials (CERDAM), Center for Interdisciplinary Research and Innovation, Balkan Center, 57001 Thessaloniki, Greece.</i></p> |

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| P3-25 | <p>Bone regeneration via in vivo tissue engineering using novel collagen-based scaffolds C. Katrilaika¹, A. Cheva², N. Karipidou¹, A.N. Tzavellas³, M. Pitou⁴, E. Tsiridis³, T. CholiPapadopoulou^{4*} & A. Aggeli^{1*} ¹Dpt of Chemical Engineering, School of Engineering, Aristotle University of Thessaloniki ²Dpt of Pathology, School of Medicine, Aristotle University of Thessaloniki ³Dpt of Orthopedics, School of Medicine, Aristotle University of Thessaloniki ⁴School of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece</p> |
| P3-26 | <p>Development and design of a variety of hybrid materials for Photothermal Therapy E. Cakir¹, A. Firat², K. Onbasli^{3,4}, H. Acar⁴ ¹Department of Materials Science and Engineering, Graduate School of Sciences and Engineering, Koç University, 34450, Istanbul, Turkey ²Department of Biomedical Sciences and Engineering, College of Sciences, Koç University, 34450, Istanbul, Turkey ³Istanbul Technical University, Faculty of Chemical and Metallurgical Engineering, Metallurgical and Materials Engineering Department, 34469, Maslak, Istanbul, Turkey ⁴Department of Chemistry, College of Sciences, Koç University, 34450, Istanbul, Turkey</p> |
| P3-27 | <p>Characterization of Exosomes Isolated from Thermally Stressed Bone Marrow Mesenchymal Stem Cells Using Raman-Spectroscopy Method Kovan S. Mohammed Amin Mohammed Amin¹, Ecenaz Merve Namli², Aylin Sendemir¹⁻³ ¹Ege University, Faculty of Engineering, Department of Bioengineering, Izmir, Türkiye ²Ege University, Institute of Health Sciences, Department of Stem Cell, Izmir, Türkiye ³Ege University, Institute of Natural and Applied Sciences, Department of Biomedical Technologies, Izmir, Türkiye</p> |
| P3-28 | <p>Mesoporous silica-based nanoparticles with antibacterial and regenerative potential for local drug delivery G. K. Pouroutzidou^{1,2}, D. Gkiliopoulos³, K. Tsachouridis⁴, K. S. Triantafyllidis³, A. D. Anastasiou⁴, and E. Kontonasaki² ¹School of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece ²School of Dentistry, Aristotle University of Thessaloniki, Thessaloniki, Greece; ³School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece; ⁴Department of Chemical Engineering and Analytical Science, University of Manchester, Manchester M1 3AL, UK</p> |
| P3-29 | <p>Antibacterial activity of novel CuO doped CeO₂ nanoparticles against periopathogenic bacteria A. Beketova¹, G. Pouroutzidou^{1,2}, I Tsamesidis¹, V. Giourieva³, R M. Papi³, Konstantinos Tsachouridis⁴, A. Anastasiou⁴, E. Kontonasaki¹ ¹School of Dentistry, Aristotle University of Thessaloniki, Thessaloniki, Greece; ²School of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece; ³School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece; ⁴Department of Chemical Engineering and Analytical Science, University of Manchester, Manchester M1 3AL, UK</p> |
| P3-30 | <p>Co-delivery of 6-bromo-indirubin-3-oxime and copper diethyldithiocarbamate using nanoparticle hybrids for the treatment of refractory melanoma R. A. Paun^{1,2}, Daciana C. Dumut^{2,3}, Ling Li¹, Danuta Radzioch^{2,3,4}, Maryam Tabrizian^{1,5} ¹Department of Biomedical Engineering, McGill University, 3775 University St, Montreal, QC H3A 2B4 CA ²Research Institute of the McGill University Health Center, 1001 Decarie Blvd, Montreal, QC H4A 3J1 CA ³Department of Medicine, McGill University, 1001 Decarie Blvd, Montreal, QC H4A 3J1 CA ⁴Department of Human Genetics, McGill University, 3640 University St, Montreal, QC H3A 0C7 CA ⁵Faculty of Dentistry and Oral Health Sciences, McGill University, H3A 1G1 CA</p> |
| P3-31 | <p>Use of titania nanoparticles for the treatment of <i>Staphylococcus aureus</i> condition A. Ul-Hamid^{1,2}, N. Baig³, A. Haider⁴, A. S. Hakeem⁵, and M. Ikram⁶ ¹Core Research Facilities, King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia. ²Interdisciplinary Research Center for Advanced Materials, King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia. ³Interdisciplinary Research Center for Membranes and Water Security, King Fahd University of Petroleum and Minerals, Dhahran, 31261, Saudi Arabia. ⁴Department of Clinical Sciences, Faculty of Veterinary and Animal Sciences, Muhammad Nawaz Shareef University of Agriculture (MNSUA) Multan, 66000, Pakistan. ⁵Interdisciplinary Research Center for Hydrogen and Energy Storage, King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia. ⁶Solar Cell Applications Research Lab, Department of Physics, Government College University Lahore 54000, Pakistan.</p> |

WS4 Biosensors & Bioelectronics (Common POSTER Session in ISFOE23 & NN23)

Tuesday 4 to Thursday 6 July: Poster Display & Presentations

Thursday 6 July (17:00-20:00): Poster Presentation

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| P4-1 | <p>“Bottom-Up and “Top-Down” Approaches for the Fabrication of Nanostructured Surfaces with Sensing Applications</p> <p>Colniță A.¹, Marconi D.¹, Brezeștean I.¹, Dina, N.E.¹, Calborean, A.¹, Barbu-Tudoran L.^{1,2}, Turcu I.¹</p> <p>¹Molecular and Biomolecular Physics Dept., National Institute for Research and Development of Isotopic and Molecular Technologies, 67-103 Donat St., 400293, Cluj-Napoca, Romania</p> <p>²Electron Microscopy Centre, Faculty of Biology and Geology, Babes-Bolyai University, 44 Republicii St., 400015 Cluj-Napoca, Romania</p> |
| P4-2 | <p>Serotonin detection in artificial plasma based on modified graphene-aniline electrochemical sensors</p> <p>S.-M. Iordache¹, A. M. I. Trefilov^{2,3}, A.- M. Iordache¹, A. V. Filip³, I. C. Vasiliu¹, M. Elisa¹, I. Chilibon¹, S. Caramizoiu⁴, C. E. A. Grigorescu¹</p> <p>¹Optospintronics Dept., National Institute of Research and Development for Optoelectronics—INOE 2000, Atomistilor 409, Magurele, 077125, Romania;</p> <p>²Nano-SAE Research Center, Faculty of Physics, University of Bucharest, Atomistilor 405, Magurele, Ilfov, 077125, Romania</p> <p>³National Institute for Laser, Plasma and Radiation Physics, Atomistilor Street, No. 409, Magurele city, Ilfov county, Postal code: RO-077125, Romania;</p> <p>⁴National Institute for Research and Development in Microtechnologies, 126A, Erou Iancu Nicolae Street, 077190, Voluntari, Ilfov, ROMANIA</p> |
| P4-3 | <p>Spectro-electrochemical properties of a new non-enzymatic modified working electrode used for histamine assessment in the diagnosis of food poisoning</p> <p>S.-M. Iordache¹, A.-M. Iordache¹, A. Zubarev², M. Cuzminschi³, R.-E. Bohiltea⁴, C. Giuglea⁴, S. Caramizoiu⁵, I. C. Vasiliu¹, M. Elisa¹, I. Chilibon¹, C.E.A. Grigorescu¹</p> <p>¹Optospintronics Dept., National Institute of Research and Development for Optoelectronics—INOE 2000, Atomistilor 409, Magurele, 077125, Romania;</p> <p>²National Institute for Laser, Plasma and Radiation Physics, Atomistilor Street, No. 409, Magurele city, Ilfov county, Postal code: RO-077125, Romania;</p> <p>³Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering, No. 30, Reactorului Street, Magurele, Ilfov, ROMANIA (077125)</p> <p>⁴University of Medicine and Pharmacy “Carol Davila”, Eroii Sanitari Bvd., no. 8, sector 5, Bucharest, Romania;</p> <p>⁵National Institute for Research and Development in Microtechnologies, 126A, Erou Iancu Nicolae Street, 077190, Voluntari, Ilfov, ROMANIA;</p> |
| P4-4 | <p>Complex colorimetric and thermochromic sensor array for the evaluation of urea in artificial saliva</p> <p>A.M. Iordache¹, S.-M. Iordache¹, T. Soare², A. Rizea³, A. Mazlum³, I. C. Vasiliu¹, M. Elisa¹, I. Chilibon¹, C.E.A. Grigorescu¹</p> <p>¹Optospintronics Dept., National Institute for Research and Development for Optoelectronics—INOE 2000, Romania;</p> <p>²Dept. of Pathology, Faculty of Veterinary Medicine, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania</p> <p>³Roxy Veterinary S.R.L, Romania</p> |
| P4-5 YRA Candidate | <p>Label- free electrochemical DNA biosensor to mercury ions detection</p> <p>Szymczyk A.¹, Olszewski M.², Ziótkowski R.¹, Malinowska E.^{1,3}</p> <p>¹Chair of Medical Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Noakowskiego 3, 00-664 Warsaw, Poland</p> <p>²Chair of Drug and Cosmetics Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Koszykowa 75, 00-664 Warsaw, Poland</p> <p>³Centre for Advanced Materials and Technologies CEZAMAT, Warsaw University of Technology, Poleczki 19, 02-822 Warsaw, Poland</p> |
| P4-6 YRA Candidate | <p>Printed oxygen indicator for smart food packaging</p> <p>V. Dobiáš¹, D. Filipi², M. Veselá³, M. Veselý⁴</p> <p>^{1,2,4}Institute of Physical and Applied Chemistry, Faculty of Chemistry, Brno University of Technology, Purkyňova 464/118, 612 00 Brno, Czech Republic</p> <p>³Institute of Food Science and Biotechnology, Faculty of Chemistry, Brno University of Technology, Purkyňova 464/118, 612 00 Brno, Czech Republic</p> |
| P4-7 | <p>3D silver metallized nanotrenches and heterostructured ZnO@Ag hybrid substrates used as a highly sensitive and flexible SERS detection platform</p> <p>Brezeștean I.A.¹, Marconi D.¹, Suci M.^{1,2}, Dina N.E.¹, Turcu I.¹, Colniță A.¹</p> <p>¹Dept. of Molecular and Biomolecular Physics, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania</p> <p>²Electron Microscopy Centre, Faculty of Biology and Geology, Babes-Bolyai University, Romania</p> |
| P4-8 | <p>Nanotechnology to monitor the SERS response of Cojocna salt lake waters from Transylvania</p> <p>Molnár Cs.^{1,3}, Drigla T. D.², Cîntă Pînzaru S.^{2,3}</p> <p>¹National Institute for Research and Development of Isotopic and Molecular Technologies, 67-103 Donath, 400293 Cluj-Napoca, Romania</p> <p>²Institute for Research, Development and Innovation in Applied Natural Sciences, Babes-Bolyai University, Fantanele 30, Cluj-Napoca, Romania</p> <p>³Biomolecular Physics Dept., Babes–Bolyai University, Kogălniceanu 1, 400084, Cluj Napoca, Romania</p> |
| P4-9 | <p>Surface-enhanced Raman scattering (SERS) for bioanalysis and diagnosis</p> <p>N.E. Dina¹, A. Colniță¹, D. Marconi¹, I.A. Brezeștean¹ and A.M.R. Gherman¹</p> <p>¹Dept. of Molecular and Biomolecular Physics, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania</p> |
| P4-10 | <p>Development of sodium-ion pouch type batteries based on biochar anode materials</p> <p>D. Batsouli¹, D. Hoxha¹, D. Vlachos¹, A. Vavouliotis¹, D. Katsoulotou^{2,3}, J. Papavasiliou^{2,3}, T. Ioannides², G. Avgouropoulos³</p> <p>¹Adamant Composites Ltd., Platani-Patras, 26504 Patras, Greece</p> <p>²Foundation for Research and Technology Hellas – Institute of Chemical Engineering Sciences (FORTH/ICE-HT), P.O. Box 1414, GR-26504, Platani-Patras, Greece</p> <p>³Dept. of Materials Science, University of Patras, GR-26504, Rio-Patras, Greece</p> |

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| P4-11 | Bio-functionalized Memristive Nanowires for Ultrasensitive and Specific Electrochemical Bio-sensing and Cancer Early-Detection. I. Tzouvadaki¹, S. Carrara² ¹ Centre for Microsystems Technology, Ghent University – IMEC, Ghent, Belgium ² Bio/CMOS Interfaces (BCI) Lab, EPFL, Lausanne, Switzerland |
| P4-12 | Bio-functionalization of flexible printed electrochemical biosensors to detect D-Glucose A. Batsi¹, P. Stavropoulos¹, I. E. Chatziioannou¹, K. Tsimenidis², A. Orfanos², V. Karagkiozaki², S. Logothetidis^{1,2}, A. Laskarakis¹ ¹ Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ² BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece |
| P4-13 | Biocompatibility Experiments of Albumin & Fibrinogen on Conductive Metal Nitride Nanocomposites T. Odutola¹, N. Pliatsikas¹, S. Panos¹, I. Fekas¹, S. Kassavetis¹, M. Gioti¹, P. Patsalas¹ ¹ Physics Department, Aristotle University of Thessaloniki - Thessaloniki (Greece) |
| P4-14 | Wearable textile organic electrochemical transistor for sweat monitoring E. Dembech¹, P. D'Angelo¹, G. Tarabella¹, V. Sinisi¹, S.L. Marasso^{1,2}, V. Vit¹, M. Bettelli¹, A. A. Babatunde^{1,3}, N. Coppedè¹ ¹ Institute of Materials for Electronics and Magnetism, (IMEM), Italian National Council (CNR), Parco Area delle Scienze 37/A, Italy ² χlab-Materials and Microsystems Lab, Department of Applied Science and Technology, Politecnico di Torino-Via Lungo Piazza d'Armi 6, 10034 Chivasso, Turin, Italy ³ Department of Physics University of Illorin, Kwara State, Nigeria |
| P4-15 | Electrodeposition of Gold nanoparticles on flexible substrate for electrochemical bio-sensing applications P. Stavropoulos¹, A. Batsi¹, K. Tsimenidis², A. Orfanos², S. Panos¹, P. Rampota¹, V. Karagkiozaki², S. Logothetidis^{1,2}, A. Laskarakis¹ ¹ Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ² BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece |

WS5 Graphene (Common POSTER Session in ISFOE23 & NN23)
Tuesday 4 to Thursday 6 July: Poster Display & Presentations
Thursday 6 July (17:00-20:00): Poster Presentation

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| P5-1 | Raman microscopy and spectroscopy studies of nano carbonic material growth by PECVD method C. Pachiu, O. Simionescu, B. Adiaconita, A. Avram, O. Buiu, R. Marinescu, R. Popa, L. Dinu <i>National Institute for Research and Development in Microtechnologies (IMT-Bucharest), 126A Erou Iancu Nicolae Street, Voluntari 077190, Romania</i> |
| P5-2 | In-situ microwave-hydrothermal synthesis of TiO₂-rGO composite structures C. Bandas¹, Carmen Lazau¹, Mircea Nicolaescu^{1,2}, Corina Orha¹, Aniela Pop², Simona Caprarescu³ ¹ National Institute for Research and Development in Electrochemistry and Condensed Matter Timisoara, Dr. A.P. Podeanu No. 144, 300569 Timisoara, Romania ² Dept. of Applied Chemistry and Engineering of Inorganic Compounds and Environment, University "Politehnica" of Timisoara, P-ta Victoriei No. 2, 300006 Timisoara, Romania ³ Dept. of Inorganic Chemistry, Physical Chemistry and Electrochemistry, Faculty of Chemical Engineering and Biotechnologies, University "Politehnica" of Bucharest, Romania |
| P5-3 | Magnesium Boride/Graphene as Potential Electrode Material in Supercapacitors H. A. Kahyaoglu¹, S.S. Gultekin¹, B. Gultekin¹ <i>Solar Energy Institute, Ege University, Izmir, Turkey</i> |
| P5-4 | Recycled industrial graphite wastes for the sustainable synthesis of high added value nanomaterials M. Subrati¹, E. Galata¹, I. Toliou¹, K.M. Lyra¹, G. Petrou², P. Magkaniaris², G. Romanos¹, Z. Sideratou¹, F.K. Katsaros¹ ¹ Institute of Nanoscience and Nanotechnology, NCSR "Demokritos", Aghia Paraskevi Attikis, Athens 15310, Greece ² CARBONTEC E.E., 32 Dervenion Street 14451Metamorfofi, Athens, Greece |
| P5-5 | GO-biochar hybrids as anode materials for sodium ion batteries C. Rista¹, J. Papavasiliou^{1,2}, S. Tombros, G. Avgouropoulos¹, V. Georgakilas¹ ¹ Dept. of Materials Science, University of Patras, GR-26504, Rio-Patras, Greece ² Foundation for Research and Technology Hellas – Institute of Chemical Engineering Sciences (FORTH/ICE-HT), P.O. Box 1414, GR-26504, Rio-Patras, Greece |
| P5-6 YRA Candidate | 2D-Material Based Plasmonic Devices for Infrared Spectroscopy of Biological Samples Y. W. Kang^{1,3}, P. Gardner^{2,3}, T. Echtermeyer^{1,3,4} ¹ Dept. of Electrical & Electronic Engineering, The University of Manchester, United Kingdom ² Dept. of Chemical Engineering, The University of Manchester, United Kingdom ³ Photon Science Institute, University of Manchester, United Kingdom ⁴ National Graphene Institute, University of Manchester, United Kingdom |