POSTER PRESENTATION PROGRAM

POSTER SESSIONS will take place DAY 2 and DAY 3 of the Conference
POSTER SESSION 1: 18:00 – 20:00 & POSTER SESSION 2: 18:00 – 20:00
(as shown in the main NANOBIO2018 Program)
The NanoBio2018 Poster Committee will take the decision for the BEST POSTER PRESENTATION!

POSTER SESSION 1 Tuesday, 25th September 2018	POSTER SESSION 2 Wednesday, 26th September 2018
WS1: P1 up to P25 WS2: P1 up to P3 WS3: P1 up to P10 WS4: P1 up to P4 WS5: P1 up to P8	WS1: P26 up to P50 WS2: P5 up to P6 WS3: P11 up to P20 WS4: P5 up to P8 WS5: P9 up to P16

WORKSHOP 1
NANOBIOMATERIALS AND NANOMEDICINE

WS1-P1	**Composite active surfaces for biosensing applications** V. Dinca1*, A. Palla Papavlu1, A. Vasilescu2, M. Filipescu1, S. Brajnicov1, A. Bonciu1,2 and M. Dinescu1 1National Institute for Lasers, Plasma and radiation Physics, Bucharest, Romania 2International Center of Byodinamics, Bucharest, Romania
WS1-P2	**Effect of Myoglobin on Photoluminescence of ZnO-Gd2O3 Films** I.A. Hayrullina1*, T.F. Sheshko1, I.A. Nagovitsyn2,3, G.K. Chudinova2,4, A.G. Cherednichenko1, E.A. Sarycheva1 1RUDN University - Peoples' Friendship University of Russia, Moscow Miklukho-Maklaya str.6, Moscow, Russia, 2Natural Science Center of General Physics Institute RAS, Moscow, Russia 3Semenov Institute of Chemical Physics RAS, Moscow, Russia 4National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow, Russia
WS1-P3	**Nanoparticle-mediated Enzyme Replacement Therapy and Autophagy Modulation: a new perspective for Krabbe disease** Ambra Del Grosso 1,2*, Lucia Angella2, Marianna Galliani 2,3, Nadia Giordano2,4, Ilaria Tonazzini1, Melissa Santi3, Matteo Caleo2,4, Giovanni Signore3 and Marco Cecchini1,2. 1NEST, Istituto Nanoscienze-CNR and Scuola Normale Superiore, Piazza San Silvestro 12, 56127 Pisa (ITALY) 2NEST, Scuola Normale Superiore, Piazza San Silvestro 12, 56127 Pisa (ITALY)

	3 Center for Nanotechnology Innovation@NEST, Istituto Italiano di Tecnologia, Piazza San Silvestro 12, 56127 Pisa (ITALY) 4 CNR Neuroscience Institute, via G. Moruzzi 1, 56124 Pisa, (ITALY)
WS1-P4	**Gold Nanoparticles Against Clinically Isolated Pathogens** Rokas Žalnėravičius1, 2*, Arūnas Jagminas1, Marija Kurtinaitienė1, Vaclovas Klimas1 and Algimantas Paškevičius3 1State Research Institute Centre for Physical Sciences and Technology, Vilnius, Lithuania 2Department of Chemistry and Bioengineering, Vilnius Gediminas Technical University, Vilnius, Lithuania 3Laboratory of Biodeterioration Research, Nature Research Centre, Vilnius, Lithuania
WS1-P5	**Silver Nanowire Endoscopy for Single-Cell Investigation** Monica Ricci1*, Beatrice Fortuni1, Tomoko Inose2, Susana Rocha1 and Hiroshi Uji-i1,2 1KU Leuven, Celestijnenlaan 200F 3001 Leuven, Belgium 2RIES, Hokkaido University, Sapporo, 001-0020, Japan
WS1-P6	**Probing surface-driven interactions of fluorescently labeled hyaluronic acid with nanomaterials** Liviana Mummolo*, Damiano Genovese, Francesco Palomba, Luca Prodi University of Bologna, Bologna, Italy
WS1-P7	**SERS-based microfluidic chips for sensitive label-free detection of miRNAs** Chiadò A.1*, Novara C.1, Paccotti N.1, Condorelli G.2,3, De Franciscis V.3, Rivolo P.1, Geobaldo F.1, and Giorgis F.1 1Department of Applied Science and Technology, Politecnico di Torino, Torino, Italy 2Institute of Endocrinology and Experimental Oncology of Italian National Research Council, Naples, Italy 3Department of Molecular Medicine and Medical Biotechnology, "Federico II" University of Naples, Naples, Italy
WS1-P8	**Phage-based capture and concentrating system for single step detection of pathogens in liquid samples** Domenico Franco1*, Sebastiano Trusso2, Laura M. De Plano3 , Enza Fazio1 , Maria G. Rizzo3 , , Santina Carnazza3, Fortunato Neri1 and Salvatore P. P. Guglielmino3 1 Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences, University of Messina, Messina, Italy 2IPCF-CNR Institute for Chemical-Physical Processes, Viale Ferdinando Stagno d'Alcontres 37, 98158, Messina, Italy 3Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
WS1-P9	**In vivo Hepatotoxicity and its Molecular Mechanisms of Gd2O3:Eu3+ Dual-modal Nanoprobe** Cunjing Zheng1, Xiumei Tian, Fukang Xie*, Li Li Department of Histology and Embryology, Zhongshan School of Medicine, Sun Yat-san University, Guangzhou 510080, China
WS1-P10	**Downregulation of receptor for advanced glycation end products (RAGE) in the aorta of APOE-deficient mice using P-selectin targeted RAGE-shRNA lipoplexes** Cristina Ana Constantinescu1*, Elena-Valeria Fuior1, Daniela Rebleanu1, Geanina Voicu1, Mariana Deleanu1, Monica Tucureanu1, Elena Butoi1, Ileana Manduteanu1, Virginie Escriou2,3,4,5, Maya Simionescu1, Manuela Calin1

	1Institute of Cellular Biology and Pathology "Nicolae Simionescu", Bucharest, Romania, 2CNRS, Unité de Technologies Chimiques et Biologiques pour la Santé (UTCBS) UMR 8258, Paris, France, 3INSERM, UTCBS U 1022, Paris, France, 4Université Paris Descartes, Sorbonne-Paris-Cité University, UTCBS, Paris, France, 5Chimie ParisTech, PSL Research University, UTCBS, Paris, France
WS1-P11	**Studies on transfection efficiency and toxicity of different nanocarriers of shRNA-expressing plasmid on human valvular interstitial cells** Daniela Rebleanu1, Cristina Ana Constantinescu1, Geanina Voicu1, Agneta Simionescu1,2, Ileana Manduteanu1, Manuela Calin1* 1Institute of Cellular Biology and Pathology "Nicolae Simionescu" of Romanian Academy, Bucharest, Romania 2Department of Bioengineering, Clemson University, United States of America
WS1-P12	**Nanopatterns of Surface-bound ephrinB1 Ligands produce Multivalent Effects on EphB2 Receptor Clustering** Verónica Hortigüela1, Enara Larrañaga1*, Francesco Cutrale2, Anna Seriola3, María García-Díaz1, Anna Lagunas4,1, Jordi Andilla5, Pablo Loza-Alvarez5, Josep Samitier1,4,6, Samuel Ojosnegros2, Elena Martínez1,4,6 1Institute for Bioengineering of Catalonia (IBEC), Barcelona, Spain 2University of Southern California, Translational Imaging Center, Los Angeles, CA, USA 3Center of Regenerative Medicine in Barcelona, Barcelona, Spain 4Centro de Investigación Biomédica en Red (CIBER), Madrid, Spain 5ICFO-Institut de Ciencies Fotoniques, Castelldefels, Spain 6Dep. of Electronics and Biomedical Engineering, University of Barcelona (UB), Barcelona, Spain
WS1-P13	**Poly(ethylene oxide) as Protective Barrier of Carbon Nanotubes against Protein Adsorption-Molecular Dynamics Study** Z. Benková1,2*, P. Čakánek1*, M. N. Dias Soeiro Cordeiro2 1Polymer Institute, Slovak Academy of Sciences, Dúbravská cesta 9, 845 41 Bratislava, Slovakia 2LAQV@REQUIMTE, Department of Chemistry and Biochemistry, Faculty of Sciences, University of Porto, Rua do Campo Alegre 687, 4168-007 Porto, Portugal
WS1-P14	**Solvent Mediated Effects in Nanoassembly of Amyloidogenic Peptides** Nikolay Blinov1* and Andriy Kovalenko1 1University of Alberta and Nanotechnology Research Centre, Edmonton, Canada
WS1-P15	**Antibody-free magnetic lateral flow immunoassay for quantitative amyloid beta detection** Monserrat Rivas1, Jose Carlos Martínez1, María Salvador1, Amanda Moyano2, María C. Blanco-López2, Apostolos C. Tsolakis3, Eleftherios Halevas3 and George Litsardakis3 1Departamento de Física & IUTA, Universidad de Oviedo, Gijón, Spain 2Departamento de Química Física y Analítica, Universidad de Oviedo, Oviedo, Spain 3Department of Electrical & Computer Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece

WS1-P16	**Immobilization and Electrochemical Behavior of Hemoglobin on Hybrid Graphite/TiO2 electrodes** Efstathios Deskoulidis1*, Vasilios Georgakilas1 and Emmanuel Topoglidis1 1Department of Materials Science, University of Patras, Rion 26504, Greece
WS1-P17	**Self-assembly of anionic liposomes on cationic biodegradable polymer particles** Andrey Sybachin*, Vasiliy Spiridonov, Olga Novoskoltseva, Nikolay Melik-Nubarov and Alexander Yaroslavov 1Lomonosov Moscow State University, Chemistry Department Polymer Division, Russia
WS1-P18	**A novel characterization of silver nanoparticles using Artemisia Annua: green synthesis, characterization and anti-malarial activity** Elisabetta Avitabile1*, Cristina D'Avino1, Ioannis Tsamesidis1, Serenella Medici2 and Antonella Pantaleo1 1Department of Biomedical Sciences, University of Sassari, Italy 2Department of Chemistry and Pharmacy, University of Sassari, Sassari, Italy
WS1-P19	**Enhanced Vibrational Circular Dichroism signal as a result of interaction between water soluble gold nanocluster and CoCl2** Sarita Bhattacharya1* and Thomas Bürgi1 1Department of Physical Chemistry, University of Geneva, Geneva, Switzerland
WS1-P20	**Effect of CNT with mechanical strain on cell differentiation** Eliška Mázl Chánová1,2*, Petr Knotek3, Jan Svoboda2, Petr Kutálek4, Jana Kredatusová2, Dana Kubies2 and Ying Yang1 1Institute for Science&Technology in Medicine, Keele University, Stoke-on-Trent, UK 2Institute of Macromolecular Chemistry AS CR, Prague, CR 3Dpt. of General and Inorganic Chemistry, University of Pardubice, Pardubice, CR 4 Joint Laboratory of Solid State Chemistry of IMC AS CR and University of Pardubice, Pardubice, CR
WS1-P21	**Characterization of magnetic nanoparticles coated with chitosan derivatives for tissue engineering application** Adriana Gilarska1,2*, Sylwia Fiejdasz1, Szczepan Zapotoczny2, Maria Nowakowska2 and Czesław Kapusta1 1AGH University of Science and Technology, Faculty of Physics and Applied Computer Science, Mickiewicza 30, 30-059 Kraków, Poland 2Jagiellonian University, Faculty of Chemistry, Gronostajowa 2, 30-387 Kraków, Poland
WS1-P22	**VCAM-1 TARGETED NARINGENIN-LOADED LIPID NANOEMULSIONS REDUCE MONOCYTE ADHESION TO ACTIVATED ENDOTHELIAL CELLS** Elena-Valeria Fuior1*, Geanina Voicu1, Mariana Deleanu1,2, Daniela Rebleanu1, Cristina Ana Constantinescu1,3, Florentina Safciuc1, Maya Simionescu1, Manuela Calin1 1Institute of Cellular Biology and Pathology "Nicolae Simionescu" of the Romanian Academy, Bucharest, Romania 2 UASVM, Faculty of Biotechnologies, Bucharest, Romania 3UASVM, Faculty of Veterinary Medicine, Bucharest, Romania

WS1-P23	**Effects of Ag/TiO2 and Ag/N-TiO2 nanoparticles on human lung epithelial cells** Daniela Rebleanu1*, Cristina Ana Constantinescu1, Geanina Voicu1, Mariana Deleanu1, Carmen Gaidau2, Madalina Ignat2, Aurora Petica2, Manuela Calin1 1 Institute of Cellular Biology and Pathology "Nicolae Simionescu" of Romanian Academy, Bucharest, Romania; 2R&D National Institute for Textiles and Leather (INCDTP)–Leather and Footwear Research Institute (ICPI) Division, Bucharest, Romania
WS1-P24	**Effect of Carbon Nanotubes on Zirconium Ceramics Used for Biomedical Applications** Sergei Ghyngazov1*, Sergei Shevelev1 1National Research Tomsk Polytechnic University, Tomsk, Russia
WS1-P25	**Synthesis, physico-chemical characterization and anticancer potential of flavonoid chrysin-loaded hybrid PCL and PHB nano-formulations**. E. Halevas1*, C. Kokotidou2, A. Mitraki2, G. Litsardakis1, A. Pantazaki3 1 Department of Electrical & Computer Engineering, Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece. 3 Department of Materials Science and Technology, University of Crete, 70013, Heraklion, Greece 2 Department of Chemistry, Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece.
WS1-P26	**Graphene Acid: Ready-to-derivatize Biocompatible Nanocarrier Towards Biomedical Applications** Jan Belza1*, Katerina Polakova1, Tomas Malina1, Aristides Bakandritsos1, Veronika Sedajova1 and Radek Zboril1 1Regional Centre of Advanced Technologies and Materials, Department of Physical Chemistry, Faculty of Science, Palacky University Olomouc, 17. Listopadu 1192/12, 771 46 Olomouc, Czech Republic
WS1-P27	**Addition of graphene nanoparticles to PDMS matrix significantly improve hemocompatibility of samples** Nina Recek1*, Karthika Prasad2, Alenka Vesel1 1Department of Surface Engineering and Optoelectronics, Jožef Stefan Institute, Ljubljana SI-1000, Slovenia 2Science and Engineering Faculty, Queensland University of Technology, Brisbane QLD 4000, Australia
WS1-P28	**Interactions of mitoxantrone-modified superparamagnetic iron oxide nanoparticles with biomimetic membranes and cells.** Dorota Nieciecka1*, Krystyna Kijewska1 and Paweł Krysinski1 1Department of Chemistry, University of Warsaw, Pasteur 1, 02-093 Warsaw, Poland
WS1-P29	**Fe3O4 nanoparticles formation by ball milling of hematite** Elena Lysenko*, Anatoliy Surzhikov Tomsk Polytechnic University, Tomsk, Russia

WS1-P30	**Gold Coated Cobalt Ferrite Nanoparticles via Methionine Inducted Reduction** Agne Mikalauskaite1*, A. Jagminas 1 1State research institute Center for Physical Sciences and Technology, Vilnius, Lithuania
WS1-P31	**Magnetic field sensible nanocomposites based on cross-linked sodium alginate and maghemite** Vasiliy Spiridonov*,Andrey Sybachin, Irina Panova, Olga Novoskoltseva and Alexander Yaroslavov 1Lomonosov Moscow State University, Chemistry Department Polymer Division, Russia
WS1-P32	**Fluorescent Carbogenic Nanoparticles** Dr Marta Krysmann1* 1 University of Central Lancashire, School of Pharmacy and Biomedical Sciences, Preston, UK
WS1-P33	**PEGylating magnetic nanocrystals clusters through electrostatic interactions** A. Kolokithas-Ntoukas1*, G. Mountrichas2, S. Pispas2, R. Zboril3, K. Avgoustakis4, A. Bakandritsos3 1University of Patras, Materials Science Dept., Rio, Greece 2Theoretical and Physical Chemistry Institute N.H.R.F., Athens, Greece 3Regional Centre of Advanced Technologies and Materials, Olomouc, Czech Republic 4University of Patras, Pharmacy Dept., Rio, Greece
WS1-P34	**Multiplex analysis of tumor markers using surface enhanced Raman spectroscopy (SERS).** Anna Balzerová1, Václav Ranc1, Radek Zbořil1 Regional Centre of Advanced Technologies and Materials, Department of Physical Chemistry, Faculty of Science, Palacký University in Olomouc, 17 listopadu 12, CZ-77146 Olomouc, Czech Republic.
WS1-P35	**Evaluation of milk-derivate exosomes as natural liposomes in theragnostic.** González M.I.1,2, Sobrino G.1,2, Cañadas M. 1, Desco M.1,2,3,4, Salinas B.1,2,3 (1) Inst. de Investig. Sanitaria Gregorio Marañón, Experimental Medicine and Surgery Unit, Madrid, Spain (2) Centro Nacional de Investigaciones Cardiovasculares Carlos III, Advanced Imaging Unit, Madrid, Spain (3) Universidad Carlos III de Madrid, Bioengineering and Aerospace Engineering Dept, Madrid, Spain (4) Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Spain
WS1-P36	**In situ synthesis of silver nanoparticles on organic and inorganic colloidal particles for theranostic applications** Bogdan Parakhonskiy1,2*, Anatolii Abalymov1, Ekaterina Lengert1,2, Maria Saveleva1,2, Alexey Yashchenok3, Yulia Svenskaya2, Andre Skirtach1 1Ghent University, Ghent, 9000, Belgium 2 Saratov State University, Saratov, 410012, Russia

	3 Skoltech center of Photonics & Quantum Materials, Skolkovo Institute of Science and Technology, 143026 Moscow, Russia
WS1-P37	**Ultrasound-responsive Smart Liposomes as Theranostic agents for Treatment of Glioblastoma multiforme** Rishi Rajat Adhikary1* and Rinti Banerjee1 1Indian Institute of Technology Bombay, Mumbai, India
WS1-P38	**Antibacterial Layer-by-Layer assemblies based on Graphene** Ella Gibbons1, Antonios Kelarakis2, Marta Krysmann1 University of Central Lancashire, Preston, England 1School of Pharmacy and Biomedical Sciences, University of Central Lancashire, Preston, United Kingdom 2School of Physical Sciences and Computing, University of Central Lancashire, Preston, United Kingdom
WS1-P39	**Production of antibacterial polymeric materials** Graham M Reid1*, Shauna Flynn1,2, Laura Quinn2, Eoin Casey2, Susan Mulansky3 and Susan M Kelleher1 1School of Chemistry, University College Dublin, Dublin 4, Ireland 2School of Bioprocessing Engineering, University College Dublin, Dublin 4, Ireland 3Institute of Food and Biochemical Engineering, Technische Universität Dresden
WS1-P40	**Shell-dependent antimicrobial efficiency of cobalt ferrite nanoparticles** Simonas Ramanavicius1*, Rokas Zalneravicius1 and Arunas Jagminas1 1State research institute Center for Physical Sciences and Technology, Vilnius, Lithuania
WS1-P41	**Fe-doped C-dots combining exceptional optical, magnetic and antimicrobial properties** Joanna Stachowska1, Antonios Kelarakis2*, Marta Krysmann1 1School of Pharmacy and Biomedical Sciences, University of Central Lancashire, Preston, United Kingdom 2School of Physical Sciences and Computing, University of Central Lancashire, Preston, United Kingdom
WS1-P42	**Preparation and characterization of Pistacia lentiscus var. Chia essential oil-loaded poly(lactic acid) nanoparticles as novel wound healing agent** I. Vrouvaki1*, E. Koutra2, M. Kornaros2, K. Avgoustakis1, F. N. Lamari1, and S. Hatziantoniou1 1University of Patras, Department of Pharmacy, Patras, Greece 2University of Patras, Department of Chemical Engineering, Patras, Greece

WS1-P43	**Polysaccharides-based Capsules Loaded with Magnetic Nanoparticles** Elżbieta Gumieniczek-Chłopek 1,2*, Joanna Odrobińska2, Czesław Kapusta1, Szczepan Zapotoczny2 1 Faculty of Physics and Applied Computer Science, AGH University of Science and Technology, Cracow, Poland 2 Faculty of Chemistry, Jagiellonian University, Cracow, Poland
WS1-P44	**Designing of Highly Programmable and Modular Nanorobotic Platform for Smart Drug Delivery** Soumyananda Chakraborti1* and Jonathan G Heddle1 1Malopolska Centre of Biotechnology, Jagiellonian University, Krakow, Poland
WS1-P45	**Electrospun Nanofibers as Controlled-Release Carriers of Echinochrome A** Stefanos Kikionis1, Elena A. Vasileva2, Natalia P. Mishchenko2, Sergey A. Fedoreyev2, Vassilios Roussis1 and Efstathia Ioannou1* 1Section of Pharmacognosy and Chemistry of Natural Products, Department of Pharmacy, National and Kapodistrian University of Athens, Athens, Greece 2G.B. Elyakov Pacific Institute of Bioorganic Chemistry, Far-Eastern Branch of the Russian Academy of Sciences, Vladivostok, Russia
WS1-P46	**Injectable Dual release Nanoformulation based Hydrogel for Blood Borne Bacterial Infections** Vimal Rohan K 1*, Rohit Srivasatava2* 1Academy of Medical Sciences, Pariyaram, Kerala, India 2Indian Institute of Technology, Bombay, India
WS1-P47	**Nanoengineered Dual Release Graft for Pain and Inflammation Management in Osteoarthritis** Bavya M C1*, Rohit Srivasatava2* 1,2Indian Institute of Technology, Bombay, India
WS1-P48	**Promiscous phage-peptide as possible approach to a multiple drug targeted therapy** Laura M. De Plano1*, Domenico Franco2, Maria G. Rizzo1 , Santina Carnazza1, Marco S. Nicolò1 and Salvatore P. P. Guglielmino1 1 Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina,Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy 2Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences, University of Messina, Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy
WS1-P49	**Biomonitoring air pollution in leaves of carob tree** Sophia Papadopoulou*, Maria-Sonia Meletiou-Christou2, Sophia Rhizopoulou3 1Department of Botany, Faculty of Biology, National and Kapodistrian University of Athens, Athens 15781, Greece

WS1-P50	**Synthesis of new materials containing ZnO doped particles for purification of waste waters** Viorica-Elena Podasca1*, Mariana-Dana Damaceanu1 1 Petru Poni Institute of Macromolecular Chemistry, 41 A Grigore Ghica Voda Alley, 700487 Iasi, Romania
NOT CONFIRMED PARTICIPATION-PENDING	*The core of self-assembling peptide nanofibers will influence neurogenesis potential of its attached biological motif* *Behnaz Tavakol 1, Shima Tavakol 2* *1 School of Medicine, Kashan University of Medical sciences, Isfahan, Iran* *2 Cellular and Molecular Research Center, Iran University of Medical sciences, Tehran, Iran*
NOT CONFIRMED PARTICIPATION-PENDING	*Functionalised nano-graphene oxide for high efficiency gene delivery* *Nisha Yadav1, Naveen Kumar2, Seema Sehrawat2 and Bimlesh Lochab1* *1Department of Chemistry and 2Department of Life Sciences* *School of Natural Sciences, Shiv Nadar University, Gautam Buddha Nagar, Uttar Pradesh, 201314, India.*
NOT CONFIRMED PARTICIPATION-PENDING	*Smart Internal Stimuli-Responsive Nanocarriers for Gene Delivery/* *Magali Hernández 1, Enrique Lima2* *1 Facultad de Química, Universidad Nacional Autónoma de México. Circuito exterior s/n, Cd. Universitaria, Del. Coyoacán, CP 04510, México D. F., Mexico.Mail:q.magalihdez@hotmail.com* *2 Laboratorio de Fisicoquímica y Reactividad de Superficies (LaFReS), Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México, Circuito exterior s/n, Cd. Universitaria, Del. Coyoacán, CP 04510, Ciudad de México, Mexico*
NOT CONFIRMED PARTICIPATION-PENDING	*Fabrication of ultrathin poly(L-lactic acid) nanosheets by spin¬-coating suitable for tissue engineering* *I. Chyshankou*1, V. Kulikouskaya1, S. Pinchuk2, I. Volotovski2, V. Agabekov1* *1Institute of Chemistry of New Materials of NASB, Minsk, Belarus* *2 Institute of Biophysics and Cell Engineering of NASB, Minsk, Belarus*

NOT CONFIRMED PARTICIPATION-PENDING	*The two faces of titanium dioxide nanoparticles bio-camouflage in 3D bone spheroids* *W. Souza1,2, S. Gemini-Piperni2,3, R. Borojevic2,4, L. A. Rocha2,5, J. M. Granjeiro1,2,6, A. Ribeiro1,3,7** *1Postgraduate Program in Biotechnology, National Institute of Metrology Quality and Technology, Rio de Janeiro, Brazil;* *2Brazilian Branch of Institute of Biomaterials, Tribocorrosion and Nanomedicine (IBTN);* *3 Brazilian Center for Research in Physics, Rio de Janeiro,Brazil;* *4Center of Regenerative Medicine, Faculty of Medicine, Petrópolis, Brazil;* *5Physics Department, University Estadual Paulista, Brazil;* *6Dental School, Fluminense Federal University, Niterói, Brazil;* *7Pos-Graduation Program in Translacional Biomedicine, University of Grande Rio, Brazil*
NOT CONFIRMED PARTICIPATION-PENDING	*Stabilization of Bioinspired Non-spherical Cell Membrane-Coated Nanoparticles via Lyophilization* *Bernard Manuel Haryadi1*, Gerhard Winter1 and Julia Engert1* *1Ludwig-Maximilians-University Munich, Munich, Germany*
NOT CONFIRMED PARTICIPATION-PENDING	*Amplification-Free Multi-RNA Type Profiling for Cancer Risk Stratification via Alternating Current Electrohydrodynamic NanoMixing* *Kevin M. Koo, Shuvashis Dey, Matt Trau* *The University of Queensland Building 75 Cooper Road Australian Institute for Bioengineering and Nanotechnology Brisbane, QLD 4072, Australia*
NOT CONFIRMED PARTICIPATION-PENDING	*Fabrication and Antibacterial Activity of Pectin-Ag Hydrogel* *Kseniya Hileuskaya1, Alena Ladutska2, Galina Novik2, Vladimir Agabekov1* *1The Institute of Chemistry of New Materials, Minsk, Belarus* *2The Institute of Microbiology, Minsk, Belarus.*
NOT CONFIRMED PARTICIPATION-PENDING	*Assessment of the antibacterial effects of TiS3 nanoribbons on E. coli* *A. Gusev1,2,*, O. Zakharova1,2, D. Muratov2, A. Sinitskii2,3* *1 Derzhavin Tambov State University, 33, Internatsionalnaya str., Tambov, 392000, Russia* *2 National University of Science and Technology MISIS, 4, Leninsky pr., Moscow, 119991, Russia* *3 Department of Chemistry, University of Nebraska – Lincoln, Lincoln, NE 68588, USA*
NOT CONFIRMED PARTICIPATION-PENDING	*Efflux pump inhibition and Photodynamic therapy of MRSA via thiolated chitosan coated cobalt doped ZnO nanoparticles* *Akhtar Nadhman1, Gulrukh1, Sulaiman Faisal1* *1 Institute of Integrative Biosciences, CECOS University of IT and emerging sciences, Peshawar 25000, Pakistan*

NOT CONFIRMED PARTICIPATION-PENDING	*A new interfacial bio-sensing approach for detecting aberrant protein phosphorylation in cancer* *Mostak Ahmed1*, Laura G. Carrascosa1, Paul Mainwaring1 and Matt Trau1,2* *1 Centre for Personalized Nanomedicine, Australian Institute for Bioengineering and Nanotechnology (AIBN), The University of Queensland, Brisbane, QLD 4072, Australia* *2 School of Chemistry and Molecular Biosciences, The University of Queensland, Brisbane, QLD 4072, Australia*
NOT CONFIRMED PARTICIPATION-PENDING	*Inconel 718 Machining Performance Investigation for Using Nano Bio-Coolant* *Senthil kumaar J S1*, Selvarani P2 and Pramod V R3* *1Madanapalle Institute of Technology and Science, Madanapalle, India.* *2Government Polytechnic College, Dharmapuri, India.* *3NSS College of Engineering, Palakkad, India.*
NOT CONFIRMED PARTICIPATION-PENDING	*Surface Mechanical Coating of Al-Cu powder by Mechanical Alloying* *Iman Farahbakhsh*, Marzieh Abbasi* *University of Applied Science and Technology, Shirvan Center, Khorasan, Iran* *Department of Engineering, Quchan Branch, Islamic Azad University, Quchan, Iran*
NOT CONFIRMED PARTICIPATION-PENDING	*Coating of Fe, Cu and SiC Nano Particles Mixture on Fe plate by Mechanical Alloying* *Marzieh Abbasi*, Iman Farahbakhsh* *University of Applied Science and Technology, Shirvan Center, Khorasan, Iran* *Department of Engineering, Quchan Branch, Islamic Azad University, Quchan, Iran*
NOT CONFIRMED PARTICIPATION-PENDING	*Investigating the structure-activity relationship of amphiphilic nucleophiles to hydrolyze major classes of pesticides in micellar medium* *Subhashini Pandey1,2*, Sandeep Chandrashekarappa 1, Tanu Jain 1,2, Ketan Thorat1 and Praveen K. Vemula1,3 1Institute for Stem Cell Biology and Regenerative Medicine (inStem), GKVK Campus, Bellary Road, Bangalore 560065, Karnataka, India.* *2 The Institute of Trans-Disciplinary Health Sciences and Technology, Yelahanka, Bengaluru560064, Karnataka, India.* *3Ramalingaswami ReEntry Fellow, Department of Biotechnology, Government of India.*
NOT CONFIRMED PARTICIPATION-PENDING	*Multivalent Antibody-Nanoparticle Conjugates to Enhance the Sensitivity of SERS-based Immunoassays* *Taejoon Kang1** *1Korea Research Institute of Bioscience and Biotechnology, Daejeon 34141,Republic of Korea*
NOT CONFIRMED PARTICIPATION-PENDING	*Salt Rejection and Ion-Selectivity of Slit-Shaped Nanopores in Biomineral: Molecular Dynamics Study* *Alexey A. Tsukanov1*, Evgeny V. Shilko1 and Sergey G. Psakhie1* *1Institute of Strength Physics and Material Sciences, Siberian Branch of Russian Academy of Sciences, Tomsk, Russia*

NOT CONFIRMED PARTICIPATION-PENDING	*Theoretical study of water interaction with functionalized benzene molecules* *Rafaela-Maria Giappa1*, Emmanuel Klontzas 1 and George Froudakis1* *1 University of Crete, Department of Chemistry, Crete, Greece*
NOT CONFIRMED PARTICIPATION-PENDING	*Impact of Bioinspired Zinc Nanoparticles on Germination and Biochemical Profiling of Canola* *Zia-ur-Rehman Mashwani1*, and Sohail1* *1Department of Botany, PMAS Arid Agriculture University, Rawalpindi, 46300, Pakistan*
NOT CONFIRMED PARTICIPATION-PENDING	*Carbon Dots as a Trackable Drug Delivery System for Localized Cancer Therapy in vivo* *Qin Li a *, Qinghui Zeng,b Chongxin Shanb, Jing Lic* *a. Queensland Micro- and Nanotechnology Centre, & School of Engineering & Built Environment, Griffith University, Nathan, QLD 4111, Australia* *b. State Key Laboratory of Luminescence and Applications, Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, Dong_Nanhu Road 3888, Changchun 130033, China.* *c. Department of Pharmacology, College of Basic Medical Sciences, Jilin University, Changchun, P. R. China.*

WORKSHOP 2 **PEROVSKITE OPTOELECTRONICS & SOLAR CELLS**	
WS2-P1	**Online Monitoring the Crystallization Process of CH3NH3PbI3 Probed by Femtosecond Transient Absorption Spectroscopy** Efthymis Serpetzoglou1,3,*, Ioannis Konidakis1, Apostolos Panagiotopoulos2,4, Temur Maksudov2,4, Emmanuel Kymakis2, Emmanuel Stratakis1,4 1Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece 2Center of Materials Technology and Photonics, Electrical Engineering Dept, Technological Educational Institute (TEI) of Crete, Heraklion, Crete, Greece 3Physics Department, and 4Department of Materials Science and Technology, University of Crete, Greece, Heraklion, Crete, Greece
WS2-P2	**Photoluminescence Spectroscopy of Halide Perovskites** Stuart Thomson1*, Maria Tesa2 and Anna Gakamsky3 1Edinburgh Instruments, Livingston, UK 2Edinburgh Instruments, Livingston, UK 3Edinburgh Instruments, Livingston, UK

WS2-P3	**Analysis of spin-texture of electronic bands in metal halide perovskite single crystals via spin-resolved photoelectron spectroscopy** Maryam Sajedi1*, Maxim Krivenkov2 and Dmitry Marchenko3 1,2,3Helmholtz Zentrum Berlin für amatrialien und Energie, Berlin, Germany
WS2-P4	**Different Morphologies of All-Inorganic Perovskite Nano/Microparticles: Physical Properties and Anion Exchange** Konstantinos Brintakis1*, Maria Sygletou1, Athanasia Kostopoulou1 and Emmanuel Stratakis1 1Institute of Electronic Structure and Laser, Foundation for Research and Technology - Hellas, Heraklion, Greece
WS2-P5	**Magnetic Behaviour of Rutile-type CrMO4 (M = Nb, Ta) Materials Prepared from Single-molecular Precursors** Martina Vrankić1*, Marijana Jurić1, Lidija Androš Dubraja1, Jasminka Popović1, Damir Pajić2 and Jure Dragović2 1Ruđer Bošković Institute, Zagreb, Croatia 2Department of Physics, Faculty of Science, University of Zagreb, Zagreb, Croatia
NOT CONFIRMED PARTICIPATION-PENDING	*Size Tunable Cesium Antimony Chloride Perovskite Nanowires and Nanorods* *Bapi Pradhan1*, Gundam Sandeep Kumar1 Sumanta Sain2, Amit Dalui1,3, Uttam Kumar Ghorai4, Swapan Kumar Pradhan5, and Somobrata Acharya3 1Centre for Advanced Materials and 2Department of Materials Science, Indian Association for the Cultivation of Sciences, Jadavpur, Kolkata 700032, India 3Department of Chemistry, Jogamaya Devi College, Kolkata 700026, India* *4 Department of Industrial & Applied Chemistry, Swami Vivekananda Research Center, Ramakrishna Mission Vidyamandira, Belur Math, Howrah 711202, India 5Department of Physics, University of Burdwan, Burdwan, West Bengal 713104, India*

WORKSHOP 3
TISSUE ENGINEERING & REGENERATIVE MEDICINE

WS3-P1	**Biodegradable and bioactive scaffold for bone tissue engineering**. Malagón Escandón AM1*, Saniger Blesa JM2, Badillo Ramírez I2, Arenas Alatorre JA3, Chaires Rosas CP1, Vázquez Torres NA1, Piñón Zárate G1, Hernández Téllez B1, Herrera Enríquez M1, Castell Rodríguez AE1. 1 Department of Cell and Tissue Biology from the Faculty of Medicine, UNAM, Avenida Universidad 3000, C.P. 04510, Ciudad de México, CDMX. 2 Center for Applied Sciences and Technological Development (CCADET), UNAM Circuito exterior s/n C.P. 04510 Ciudad de México, CDMX. 3 Institute of Physics (IFUNAM), Sendero Bicipuma, Coyoacán, Ciudad de México, CDMX.
WS3-P2	**Analysis of the degree of crystallinity during laser cladding of bioactive glass coatings on ultrafine-grained metallic substrates** Szymon Bajda1*, Michal Krzyzanowski1, 2, Jakub Sroka1, 3, Szczepan Witek1 and Patryk Steczkowski1 1AGH University of Science and Technology, Krakow, Poland 2Birmingham City University, Birmingham, United Kingdom 3The University of Sheffield, Sheffield, United Kingdom
WS3-P3	**Calcium phosphate mineralization of poly (N, N-dimethylacrylamide) (PDMAM) hydrogels** Constantine Ioannides1*, Georgios Bokias2,3 and Nikolaos Bouropoulos1,3 1Department of Materials Science, University of Patras, Patras, Greece 2Department of Chemistry, University of Patras, Greece 3 Foundation for Research and Technology Hellas, Institute of Chemical Engineering and High Temperature Chemical Processes, Patras, Greece
WS3-P4	**Self-Assembling peptides with RGD motifs as scaffolds for tissue engineering** Graziano Deidda1,2,* Maria Farsari 1,2, Anna Mitraki 1,2 1Department of Materials Science & Technology, University of Crete, Heraklion, Greece; 2Institute of Electronic Structure and Laser, IESL-FORTH, Heraklion, Greece
WS3-P5	**Protein-based Hydrogel for laser-induced Fabrication of Microstructures** Amirbahador Zeynali1*, Giuseppe Chirico1 and Maddalena Collini1 1 Biophysics and Biophotonics group, Department of Physics “G. Occhialini”, Universita’ Milano-Bicocca, Milano, Italy
WS3-P6	**Biodegradable prosthesis created by electrospinning for the treatment of extrahepatic bile duct injuries** Alan Isaac Valderrama Treviño1*, Nadia Adriana Vázquez Torres1, Rodrigo Banegas Ruiz2, Andrés Eliú Castell Rodríguez1, Eduardo E. Montalvo-Javé3 1 Laboratory of experimental immunotherapy and tissue engineering, Faculty of Medicine, Universidad Nacional Autónoma de México, Mexico. 2 Service of Hand Surgery and Microsurgery. Rehabilitation Hospital “Luis Guillermo Ibarra Ibarra”. Mexico City, Mexico. 3 Department of HPB Surgery, General Hospital of Mexico, Mexico City, Mexico

WS3-P7	**Engineering cell adhesion and orientation via ultrafast laser fabricated microstructured substrates under static and dynamic conditions** Eleftheria Babaliari1,2*, Paraskevi Kavatzikidou1, Despoina Angelaki1,3, Anna Mitraki1,2, Anthi Ranella1, Emmanuel Stratakis1,2 1 Foundation for Research and Technology - Hellas (F.O.R.T.H.), Institute of Electronic Structure and Laser (I.E.S.L.), Heraklion, Crete, Greece 2 Department of Materials Science and Technology, University of Crete, Heraklion, Crete, Greece 3 Department of Physics, University of Crete, Heraklion, Crete, Greece
WS3-P8	**Co-flow microfluidic system for the production of tuneable elastic Gelatin methacrylate microparticles** Francesco Pappalardo1*, Jopeth Miranda Ramis1, Marta Alvarez Paino1, Kevin Shakesheff1, Morgan R Alexander2, Felicity RAJ Rose1 1Division of Regenerative Medicine and Cellular Therapies, School of Pharmacy, Centre for Biomolecular Sciences, University of Nottingham, University Park, Nottingham, NG7 2RD, United Kingdom 2Division of Advanced Materials and Healthcare Technologies, School of Pharmacy, University of Nottingham, Nottingham NG7 2RD, United Kingdom
WS3-P9	**Direct Laser Printing of Cells on Tissue Constructs based on Porous Collagen Scaffolds** C.V. Leva1, M. Chatzipetrou1, D. Zareifi2, A. Gravanis3, L. Alexopoulos2, D. S. Tzeranis3* and I. Zergioti1 1Department of Physics, National Technical University of Athens, Zografou, Greece 2Department of Mechanical Engineering, National Technical University of Athens, Zografou, Greece 3Institute of Molecular Biology and Biotechnology, Foundation for Research and TechnologyHellas, Herakleion, Greece
WS3-P10	**Octacalcium phosphate: Synthesis, characterization and stability studies in calcium alginate beads** Emmanouela Mystiridou1,2*, Eleni-Anna Oikonomou1 and Nikolaos Bouropoulos1,2 1Department of Materials Science, University of Patras, Patras, Greece 2Foundation for Research and Technology Hellas, Institute of Chemical Engineering and High Temperature Chemical Processes, Patras, Greece
WS3-P11	**Surface and morphological investigation of synthesized nanostructured ridges from electrospun Polyvinyl Alcohol – Egg Albumin blend using Atomic Force Microscopy** Jopeth Ramis1,2*, Bryan Pajarito3 1 Department of Chemical Engineering, Technological Institute of the Philippines, 363 P. Casal St. Quiapo, Manila, Philippines. 2 Division of Regenerative Medicine and Cellular Therapies, School of Pharmacy, University of Nottingham, University Park, Nottingham, United Kingdom 3 Polymer Research Laboratory, Department of Chemical Engineering, University of the Philippines, Diliman, Quezon City, Philippines
WS3-P12	**Polarization-resolved multi-photon microscope supporting live cell imaging** Sotiris Psilodimitrakopoulos1*, Andreas Lemonis1, Leonidas Mouchliadis1, Dionysios Xydias1,2 and Emmanuel Stratakis1,2 1 Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, Heraklion Crete 71110, Greece 2 Department of Materials Science and Technology, University of Crete, Heraklion Crete 71003, Greece

WS3-P13	**Applications of non-linear imaging microscopy in biology** Evangelia Gavgiotaki 1,2*, Vassilis Tsafas 1,3 , Meropi Mari1 and George Filippidis1 1 Institute of Electronic Structure and Laser, Foundation for Research and Technology, Heraklion, Greece 2 Medical School, University of Crete, Heraklion , Greece 3 Department of Physics, University of Crete, Heraklion, Greece
WS3-P14	**Electrospun Fibrous Matrices for the Treatment of Orthopedic Diseases** A. R. Tsiapla1*, V. Bakola1,2, V. Karagkiozaki1,2 and S. Logothetidis1 1Nanotechnology Lab LTFN (Lab for Thin Films – Nanobiomaterials –Nanosystems – Nanometrology) Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece 2BL Nanobiomed P.C. Thessaloniki, 54655, Greece
WS3-P15	**Drug-loaded Nanoparticles for the Therapy of Orthopedic Implant Infections** A. R. Tsiapla1*, V. Bakola1,2, V. Karagkiozaki1,2 and S. Logothetidis1 1Nanotechnology Lab LTFN (Lab for Thin Films – Nanobiomaterials –Nanosystems – Nanometrology) Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece 2BL Nanobiomed P.C. Thessaloniki, 54655, Greece
WS3-P16	**Composite hydrogel based biomaterials functionalized with calcium carbonate for biomedical application** Anatolii Abalymov1*, Maria Saveleva 2, Bogdan Parakhonskiy1 and Andre Skirtach1 1, Faculty of Bioscience Engineering Ghent University, Ghent, Belgium 2Saratov State University, Saratov, Russia
WS3-P17	**BIOCOMPATIBILITY AND ANTIMICROBIAL ACTIVITY OF THYMOL-FUNCTIONALIZED 3D SCAFFOLDS** K. Parkatze1,2*, M. Chatzinikolaidou1,3, E. Koufakis3, M. Farsari1 and M. Vamvakaki1,3 1Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, 700 13 Heraklion, Crete, Greece 2Department of Chemistry, University of Crete, 710 03Heraklion, Crete, Greece 3Department of Materials Science and Technology, University of Crete, 710 03 Heraklion, Crete, Greece
WS3-P18	**HIGHLY EFFICIENT AND BIOCOMPATIBLE PHOTOINITIATORS FOR MULTI-PHOTON POLYMERIZATION** K. Parkatze1,2*, G. Noirbent5, D. Ladika1,4*, M. Chatzinikolaidou1,3, D. Gray1, F. Dumur5, M. Farsari1 and M. Vamvakaki1,3 1Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, 700 13 Heraklion, Crete, Greece 2Department of Chemistry, University of Crete, 710 03Heraklion, Crete, Greece 3Department of Materials Science and Technology, University of Crete, 710 03 Heraklion, Crete, Greece 4Department of Physics, University of Crete, 710 03 Heraklion, Crete, Greece 5Aix Marseille University, CNRS, ICR, UMR 7273, F-13397 Marseille, France

WS3-P19	**Influence of micro/nano-patterned surfaces on neuronal cell response** Papadimitriou Lina1*, Karali Kanelina1, Angelaki Despoina1, 2, Lanara Christina 1, 2, Kapaj Gentjan1, Kavatzikidou Paraskevi1, Stratakis Emmanuel1, 2, Ranella Anthi1 1 Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, Greece 2 University of Crete, Greece
WS3-P20	**Biocompatibility and potential cytotoxicity of silicalite-1 and nanodiamond-BMP-7 coatings for orthopedic implants** Ivana Kopova1*, Ivan Jirka2, Stepan Potocky3,4, Bohuslav Rezek3,4, Lucie Bacakova1 1 Institute of Physiology of the Czech Academy of Sciences, Prague, Czech Republic 2 J. Heyrovsky Institute of Physical Chemistry of the Czech Academy of Sciences, Prague, Czech Republic 3 Institute of Physics of the Czech Academy of Sciences, Prague, Czech Republic 4 Faculty of Electrical Engineering, Czech Technical University, Prague, Czech Republic
NOT CONFIRMED PARTICIPATION-PENDING	*Porous poly(dimethylsiloxane) as substrate for mesenchymal stem cells adhesion* *Aliaksandr Kraskouski1*, Irina Paribok1, Sergei Pinchuk2, Irina Vasilevich2, Kirill Matievski2, Igor Volotovski2, Vladimir Agabekov1* *1 Institute of Chemistry of New Materials, NAS of Belarus, Minsk, Belarus* *2 Institute of Biophysics and Cell Engineering, NAS of Belarus, Minsk, Belarus*
NOT CONFIRMED PARTICIPATION-PENDING	*Skeletal Muscle Tissue Engineering Using Micro and Nano scale substrates* *Dr. Sahar Salehi1*, Prof. Thomas Scheibel1,2* *1 Department of Biomaterials, Faculty of Engineering Science, University of Bayreuth, Bayreuth 95440, Germany* *2 Bayreuth Center for Materials Science and Engineering (BayMAT), University of Bayreuth, Bayreuth 95440, Germany*
NOT CONFIRMED PARTICIPATION-PENDING	*Fabrication and properties of porous "sponge-like" films based on pectin-chitosan polyelectrolyte complexes* *Viktoryia Kulikouskaya*, Maryna Lazouskaya and Vladimir Agabekov* *Institute of Chemistry of New Materials of NAS of Belarus, Minsk, Belarus*
NOT CONFIRMED PARTICIPATION-PENDING	*Biocompatibility of artificial rod and cone photoreceptors with human-like spectral sensitivities* *Seok Hwan Kim1*, Byeongho Park2 , Heehong Yang3, Hyun Seok Song4, Tai Hyun Park3,and Jae Hun Kim2* *1Seoul National University Boramae Medical Center, Seoul, Korea* *2Korean Institute of Science and Technology, Seoul, Korea* *3 School of Chemical and Biological Engineering Seoul National University, Seoul, Korea* *4Korea Basic Science Institute, Daejeon, Korea*

WORKSHOP 4 GRAPHENE & RELATED 2D MATERIALS	
WS4-P1	**Reduced Graphene Oxide Ink/Conductive Polymeric Composites for Enhanced Field Emission Devices** Minas Stylianakis1*, George Viskadouros1,2,, Christos Polyzoidis1, George Veisakis1, Konstantinos Petridis1,3 and Emmanuel Kymakis1 1Center of Materials Technology and Photonics & Electrical Engineering Department, Technological Educational Institute (TEI) of Crete, Heraklion 71004 Crete, Greece 2Department of Mineral Resources Engineering, Technical University of Crete, Chania, 73100, Crete, Greece 3Department of Electronic Engineering Technological Educational Institute (TEI) of Crete, Chania 73132 Crete, Greece
WS4-P2	**Single-step Green synthesis of Biocompatible Graphene Quantum Dots and their Cell Uptake Studies** Arnab Halder*, Maria Godoy-Gallardo, Jon Ashley, Xiaotong Feng, Tongchang Zhou, Leticia Hosta-Rigau and Yi Sun Department of Micro- and Nanotechnology, Technical University of Denmark, DK-2800 Kgs Lyngby, Denmark
WS4-P3	**Optically induced absorption modulation in a graphene-based metasurface** Anna C. Tasolamprou1*, Charalampros Mavidis1,2, Anastasios D. Koulouklidis1, Cristina Daskalaki1, George Kenanakis1, George Deligeorgis1, Zacharias Viskadourakis1, Polina Kuzhir3, Stelios Tzortzakis1,4, Maria Kafesaki1,2, Eleftherios N. Economou1,4 and Costas M. Soukoulis1,5 1Institute of Electronic Structure and Laser, FORTH, 71110, Heraklion, Crete, Greece 2Department of Materials Science and Technology, University of Crete, 71003, Heraklion, Crete, Greece 3Institute for Nuclear Problems, Belarus State University, Bobruiskaya 11,220030 Minsk, Belarus 4Department of Physics, University of Crete, University of Crete, 71003, Heraklion, Crete, Greece 5Ames Laboratory and Department of Physics and Astronomy, Iowa State University, Ames, Iowa 50011, United States
WS4-P4	**Separation and recovery of heavy metal ions by graphene acid.** Jan Kolarik1*, Aristides Bakandritsos1 and Radek Zboril1 1Regional Centre of Advanced Technologies and Materials, Departments of Physical Chemistry and Experimental Physics, Faculty of Science, Palacký University, 17. Listopadu 1192/12, 771 46 Olomouc, Czech Republic
WS4-P5	**Spatially Selective Reversible Charge Carrier Density Tuning in WS2 Monolayers via Photochlorination** I. Demeridou1,2*, I. Paradisanos1,2, Yuanyue Liu3,6, N. Pliatsikas4, P. Patsalas4, S. Germanis1, N. Pelekanos1,5, W. A. Goddard III3, G. Kioseoglou1,5, E. Stratakis1,2 1 Institute of Electronic Structure and Laser, Foundation for Research and Technology - Hellas, Heraklion, Crete, Greece; 2 Department of Physics, University of Crete, Heraklion, Crete, Greece; 3 Materials and Process Simulation Center and The Resnick Sustainability Institute, California Institute of Technology, Pasadena, California, United States; 4 Physics Department, Aristotle University of Thessaloniki, Thessaloniki, Greece; 5 Department of Materials Science and Technology, University of Crete, Heraklion, Crete, Greece; 6 Department of Mechanical Engineering and Texas Materials Institute, University of Texas at Austin, Austin, Texas, United States

WS4-P6	**Theoretical investigation of water-soluble polyethylene glycol treated phosphorene system** Anikó Lábas1* and Tibor Höltzl1 1Furukawa Electric Institute of Technology, Budapest, Hungary
WS4-P7	**Laser fabrication of Transition-Metal Dichalcogenide Nanostructures based materials** Kyriaki Savva1, 2*, Bojana Višić3, Ronit Popovitz-Biro3, Athanasia Kostopoulou1, Christina Lanara1, Antonia Loufardaki1, Emmanuel Stratakis1 and Reshef Tenne3 1Institute of Electronic Structure and Laser, Foundation for Research and Technology Hellas, 71110 Heraklion, 2Physics Department, University of Crete, Heraklion, 71004 Crete, Greece 3Weizmann Institute of Science, 7610001 Rehovot, Israel
WS4-P8	**Characterization & Non-Linear Optical Imaging of 2D Transition Metal Dichalcogenides** I. Demeridou1,2*, I. Paradisanos1,2, A. Papadopoulos1,3, G. Kourmoulakis1,3, L. Mouchliadis1, S. Psilodimitrakopoulos1, G. Kioseoglou1,3, E. Stratakis1,2 1Foundation for Research and Technology – Hellas (F.O.R.T.H.), Institute of Electronic Structure and Laser (I.E.S.L.), Heraklion, Crete, Greece 2Department of Physics, University of Crete, Heraklion, Crete, Greece 3Department of Materials Science and Technology, University of Crete, Heraklion, Crete, Greece
NOT CONFIRMED PARTICIPATION-PENDING	*A novel electrochemiluminescence glucose biosensor based on polypyrrole/polyluminol/ C3N4-Ni(OH)2/glucose oxidase modified graphite electrode* *Lida Fotouhi[a],*,Morteza Hosseini[b],*,Maryam Hamtak[a]* *[a] Department of Chemistry, Alzahra university, Tehran, Iran* *[b] Center of Excellence in Electrochemistry, Faculty of Chemistry, University of Tehran, Tehran*
NOT CONFIRMED PARTICIPATION-PENDING	*STRUCTURAL PROPERTIES OF NANO POWDER SILICON CARBIDE "SiC" PRODUCED BY SOL-GEL METHOD* *Karima Benfadel1, 2*, Samira kaci1, Aissa Keffous1 and Abdelbaki Benmounah2* *1 thin layers, surfaces and interfaces, Research Center in Semiconductor Technology for Energy (C.R.T.S.E), Algiers, Algeria.* *2UR-MPE: Research Unit Materials, Processes and Environment, University of M'hamed Bougara, Boumerdes, Algeria.*

WORKSHOP 5 NANOELECTRONICS & BIOELECTRONICS	
WS5-P1	**Substrate-dependent triboelectric charging of graphene surface for enhanced electric potential generation by motion of ionic liquid droplets** Junghyo Nah1*, Pangun Park1, Daehoon Lee1 1Chungnam National University, Daejeon, Korea

WS5-P2	**Top down InAs nanowire field-effect transistors on a SiO2/Si via soft lithographic method** Junghyo Nah1*, Pangun Park1, Min Hyung Lee2 1Chungnam National University, Daejeon, Korea 2Kyung Hee University, Yongin, Korea
WS5-P3	**High-Performance Piezoelectric Nanogenerators Based on Chemically-Reinforced Composites** Youngmin Choi Korea Research Institute of Chemical Technology (KRICT), Daejeon, Republic of Korea.
WS5-P4	**Molecularly imprinted chiroptical sensor for detection of glucose** M. F. Frasco*1, R. Pereira-Cameselle2, S. Chiussi3, J. L. Alonso-Gómez2 and M. G. F. Sales1 1BioMark-CEB/ISEP, School of Engineering, Polytechnic Institute of Porto, Porto, Portugal 2Organic Chemistry Department, University of Vigo, Vigo, Spain 3New Materials Group, Applied Physics Department, University of Vigo, Vigo, Spain
WS5-P5	**Utilizing PLL-g-PEG substrates to detect DNA in complex samples: a combined Quartz Crystal Microbalance/Spectroscopic Ellipsometry study** Dimitra Chronaki1,2*, George Papadakis1, Pasquale Palladino1, Achilleas Tsortos1 and Electra Gizeli1,2 1Institute of Molecular Biology and Biotechnology-FORTH, Heraklion, Greece 2Department of Biology, University of Crete, Heraklion, Greece *
WS5-P6	**Salmonella detection in whole blood using an acoustic wave device combined with signal-monitoring smartphone** Gesthimani-Ioanna Theodosi1,2*, Konstantinos Parasyris,2 George Papadakis1, Electra Gizeli1,2 1Institute of Molecular Biology and Biotechnology-FORTH, Heraklion, Greece 2Department of Biology, University of Crete, Heraklion, Greece
WS5-P7	**Organic Based Transistors as biosensors for inflammatory biomarkers** Chiara Diaccia,b, Marcello Bertob, Carlo A. Bortolottib, Daniel T. Simona a Division of Physics and Electronics, University of Linköping, Sweden b Scienze della vita, University of Modena and Reggio Emilia, Italy
WS5-P8	**Epitaxial Vanadium Dioxide Films with Sharp Electrical and Optical Switch Properties** Olga Boytsova1,2*, Fariya Akbar2, Dmitrii Sharovarov2, Artem Makarevich1,2 and Andrey Kaul2 1Kurnakov Institute of General and Inorganic Chemistry, Moscow, Russia 2Lomonosov Moscow State University, Moscow, Russia
WS5-P9	**Bioresorbable wireless electrical stimulator for nerve regeneration** Sung-Geun Choi1, Gun-Hee Lee1, Jae-Young Bae1, Jae-Hwan Lee1, and Seung-Kyun Kang1,2,* 1 Department of Bio and Brain Engineering, Korea Advanced Institute of Science and Technology, Daejeon 34141, Republic of Korea 2 KI for Health Science and Technology (KIHST), Korea Advanced Institute of Science and Technology, Daejeon 34141, Republic of Korea
WS5-P10	**Fluorescent polymer-based nanocomposite electrospun fibers as optical sensors for ammonia and pH** Xenofon Karagiorgis1*, A. Petropoulou2, I. Savva1, C. Riziotis2, S. Kralj3,4 and T. Krasia-Christoforou1 1Department of Mechanical and Manufacturing Engineering, University of Cyprus, 75, Kallipoleos Avenue, P.O.Box 20537, 1678, Nicosia, Cyprus 2National Hellenic Research Foundation,Theoretical and Physical Chemistry Institute

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WS5-P11	**Au-Ag star shaped nanoparticles as highly efficient SERS nanoresonators.** Jan Krajczewski1, Andrzej Kudelski1 1 Laboratory of Molecular Interaction, Faculty of Chemistry, University of Warsaw, Warsaw, Poland
WS5-P12	**The new type of bipyramidal-Au@SiO2 nanoparticles – synthesis and Raman application**. Karol Kołątaj1, Andrzej Kudelski1 1University of Warsaw, Department of Chemistry, Warsaw, Poland
WS5-P13	**New type of highly efficient optical nanoresonators for SHINERS measurements.** Karol Kołątaj 1, Andrzej Kudelski 1 1 Department of Chemistry, University of Warsaw, Ludwika Pasteura 1, Warsaw, Poland,
WS5-P14	**A study of spectroscopic properties and morphological behavior of ZnO nanoparticles and globular protein bovine serum albumin in solution and in a layer-by-layer self-assembled film** Utsav Chakraborty*, Pabitra paul Dept of Physics, Jadvpur University, Kolkata, West Bengal, India – 700032
WS5-P15	**Carbon quantum dots as active layer for hybrid light emitting diode (HyLEDs)** Sofia Paulo,1,2* Eugenia Martinez-Ferrero 2, Emilio Palomares1,3 1Institute of Chemical Research of Catalonia (ICIQ). The Barcelona Institute of Science and Technology (BIST), Tarragona, Spain 2Fundació Eurecat, Mataró, Spain. 3Catalan Institution for Research and Advanced Studies (ICREA), Barcelona Spain
WS5-P16	**Laser-based multi-functional biomimetic surfaces** Skoulas E.1,2*, Mimidis A. 1,2, Papadopoulos A. 1,2, Livakas N. 1,2, Petrakakis E. 1,2, Tsibidis G.D. 1,, and Stratakis E 1,2 1ULMNP, Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology (FORTH), N. Plastira 100, Vassilika Vouton, 70013, Heraklion, Crete, Greece 2 Materials Science and Technology Department, University of Crete, 71003 Heraklion, Greece
NOT CONFIRMED PARTICIPATION-PENDING	*Label-free electrochemical DNA sensing on nanoscale interdigitated electrodes using gold nanoparticle amplification* *Dilu G. Mathew1*, A. Marti2, J. Huskens2, S.G. Lemay3 and W. G. van der Wiel1 1NanoElectronics group; 2MolecularNanofabrication group; 3BioElectronics group. MESA+ Institute of Nanotechnology, University of Twente, PO Box 217, 7500 AE Enschede, The Netherlands. **