

POSTER PRESENTATION PROGRAM

POSTER SESSIONS will take place from DAY 2 and DAY of the Conference

POSTER SESSION 1: 18:00 – 20:00 & POSTER SESSION 2: 18:00 – 20:00

(as shown in the main NANO BIO2018 Program)

**The codes next to each Poster is just for reference only! There will be some changes, so an updated version will be announced!*

WORKSHOP 1

* NANOBIMATERIALS AND NANOMEDICINE

WS1-P1	<p style="text-align: center;">Composite active surfaces for biosensing applications</p> <p style="text-align: center;">V. Dinca^{1*}, A. Palla Papavlu¹, A. Vasilescu², M. Filipescu¹, S. Brajnicov¹, A. Bonciu^{1,2} and M. Dinescu¹</p> <p style="text-align: center;">¹National Institute for Lasers, Plasma and radiation Physics, Bucharest, Romania</p> <p style="text-align: center;">²International Center of Byodinamics, Bucharest, Romania</p>
WS1-P2	<p style="text-align: center;">Effect of Myoglobin on Photoluminescence of ZnO-Gd₂O₃ Films</p> <p style="text-align: center;">I.A. Hayrullina¹, T.F. Sheshko¹, I.A. Nagovitsyn^{2,3}, G.K. Chudinova^{2,4}, A.G. Cherednichenko¹, E.A. Sarycheva¹</p> <p style="text-align: center;">¹RUDN University - Peoples' Friendship University of Russia, Moscow Miklukho-Maklaya str.6, Moscow, Russia,</p> <p style="text-align: center;">²Natural Science Center of General Physics Institute RAS, Moscow, Russia</p> <p style="text-align: center;">³Semenov Institute of Chemical Physics RAS, Moscow, Russia</p> <p style="text-align: center;">⁴National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow, Russia</p>
WS1-P3	<p style="text-align: center;">A Graphical Representation of DNA/RNA Sequences</p> <p style="text-align: center;">Dorota Bielińska-Wąż ^{1*} and Piotr Wąż ^{2 1} Department of Radiological Informatics and Statistics, Medical University of Gdańsk, Poland ² Department of Nuclear Medicine, Medical University of Gdańsk, Poland</p>
WS1-P4	<p style="text-align: center;">A New Graphical Bioinformatics Method</p> <p style="text-align: center;">Piotr Wąż ^{1*} and Dorota Bielińska-Wąż ^{2 1} Department of Nuclear Medicine, Medical University of Gdańsk, Poland ² Department of Radiological Informatics and Statistics, Medical University of Gdańsk, Poland</p>
WS1-P5	<p style="text-align: center;">In vivo Hepatotoxicity and its Molecular Mechanisms of Gd₂O₃:Eu³⁺ Dual-modal Nanoprobe</p> <p style="text-align: center;">Cunjing Zheng¹, Xiumei Tian, Fukang Xie, Li Li</p> <p style="text-align: center;">Department of Histology and Embryology, Zhongshan School of Medicine, Sun Yat-san University, Guangzhou 510080, China</p>

WS1-P6	<p style="text-align: center;">Poly(ethylene oxide) as Protective Barrier of Carbon Nanotubes against Protein Adsorption-Molecular Dynamics Study</p> <p style="text-align: center;">Z. Benková^{1,2*}, P. Čakánek^{1*}, M. N. Dias Soeiro Cordeiro²</p> <p style="text-align: center;">1Polymer Institute, Slovak Academy of Sciences, Dúbravská cesta 9, 845 41 Bratislava, Slovakia</p> <p style="text-align: center;">2LAQV@REQUIMTE, Department of Chemistry and Biochemistry, Faculty of Sciences, University of Porto, Rua do Campo Alegre 687, 4168-007 Porto, Portugal</p>
WS1-P7	<p style="text-align: center;">A novel characterization of silver nanoparticles using Artemisia Annua: green synthesis, characterization and anti-malarial activity</p> <p style="text-align: center;">Elisabetta Avitabile^{1*}, Cristina D'Avino¹, Ioannis Tsamesidis¹, Serenella Medici² and Antonella Pantaleo¹</p> <p style="text-align: center;">1Department of Biomedical Sciences, University of Sassari, Italy 2Department of Chemistry and Pharmacy, University of Sassari, Sassari, Italy</p>
WS1-P8	<p style="text-align: center;">Smart Internal Stimuli-Responsive Nanocarriers for Gene Delivery/</p> <p style="text-align: center;">Magali Hernández¹, Enrique Lima²</p> <p style="text-align: center;">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.magali@unam.mx</p> <p style="text-align: center;">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. Mail: lima@iim.unam.mx</p>
WS1-P9	<p style="text-align: center;">Effect of CNT with mechanical strain on cell differentiation</p> <p style="text-align: center;">Eliška Mázl Chánová^{1,2*}, Petr Knotek³, Jan Svoboda², Petr Kutálek⁴, Jana Kredatusová², Dana Kubies² and Ying Yang¹</p> <p style="text-align: center;">1Institute for Science&Technology in Medicine, Keele University, Stoke-on-Trent, UK</p> <p style="text-align: center;">2Institute of Macromolecular Chemistry AS CR, Prague, CR</p> <p style="text-align: center;">3Dpt. of General and Inorganic Chemistry, University of Pardubice, Pardubice, CR</p> <p style="text-align: center;">4 Joint Laboratory of Solid State Chemistry of IMC AS CR and University of Pardubice, Pardubice, CR</p>
WS1-P10	<p style="text-align: center;">Fe₃O₄ nanoparticles formation by ball milling of hematite</p> <p style="text-align: center;">Elena Lysenko[*], Anatoliy Surzhikov</p> <p style="text-align: center;">Tomsk Polytechnic University, Tomsk, Russia</p>
WS1-P11	<p style="text-align: center;">Multiplex analysis of tumor markers using surface enhanced Raman spectroscopy (SERS).</p> <p style="text-align: center;">Anna Balzerová¹, Václav Ránc¹, Radek Zbořil¹</p> <p style="text-align: center;">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.</p>
WS1-P12	<p style="text-align: center;">Antibacterial Layer-by-Layer assemblies based on Graphene</p> <p style="text-align: center;">Ella Gibbons¹, Antonios Kelarakis², Marta Krysmann¹</p> <p style="text-align: center;">University of Central Lancashire, Preston, England</p> <p style="text-align: center;">1School of Pharmacy and Biomedical Sciences, University of Central Lancashire,</p>

	Preston, United Kingdom 2School of Physical Sciences and Computing, University of Central Lancashire, Preston, United Kingdom
WS1-P13	Biomonitoring air pollution in leaves of carob tree Sophia Papadopoulou*, Maria-Sonia Meletiou-Christou ² , Sophia Rhizopoulou ³ 1Department of Botany, Faculty of Biology, National and Kapodistrian University of Athens, Athens 15781, Greece
WS1-P14	Preparation and characterization of Pistacia lentiscus var. Chia essential oil-loaded poly(lactic acid) nanoparticles as novel wound healing agent I. Vrouvaki ^{1*} , E. Koutra ² , M. Kornaros ² , K. Avgoustakis ¹ , F. N. Lamari ¹ , and S. Hatziantoniou ¹ 1University of Patras, Department of Pharmacy, Patras, Greece 2University of Patras, Department of Chemical Engineering, Patras, Greece
WS1-P15	Polysaccharides-based Capsules Loaded with Magnetic Nanoparticles Elżbieta Gumieniczek-Chłopek ^{1,2*} , Joanna Odrobińska ² , Czesław Kapusta ¹ , Szczepan Zapotoczny ² 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-P16	Characterization of magnetic nanoparticles coated with chitosan derivatives for tissue engineering application Adriana Gilarska ^{1,2*} , Sylwia Fiejdasz ¹ , Szczepan Zapotoczny ² , Maria Nowakowska ² and Czesław Kapusta ¹ 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-P17	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 Constantinescu ¹ , Elena-Valeria Fuior ¹ , Daniela Rebleanu ¹ , Geanina Voicu ¹ , Mariana Deleanu ¹ , Monica Tucureanu ¹ , Elena Butoi ¹ , Ileana Manduteanu ¹ , Virginie Escriou ^{2,3,4,5} , Maya Simionescu ¹ , Manuela Calin ¹ 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-P18	Studies on transfection efficiency and toxicity of different nanocarriers of shRNA-expressing plasmid on human valvular interstitial cells Daniela Rebleanu ¹ , Cristina Ana Constantinescu ¹ , Geanina Voicu ¹ , Agneta Simionescu ^{1,2} , Ileana Manduteanu ¹ , Manuela Calin ^{1*} 1Institute of Cellular Biology and Pathology "Nicolae Simionescu" of Romanian Academy, Bucharest, Romania 2Department of Bioengineering, Clemson University, United States of America

WS1-P19	<p style="text-align: center;">VCAM-1 TARGETED NARINGENIN-LOADED LIPID NANOEMULSIONS REDUCE MONOCYTE ADHESION TO ACTIVATED ENDOTHELIAL CELLS</p> <p>Elena-Valeria Fuior1*, Geanina Voicu1, Mariana Deleanu1,2, Daniela Rebleanu1, Cristina Ana Constantinescu1,3, Florentina Safciuc1, Maya Simionescu1, Manuela Calin1</p> <p style="text-align: center;">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</p>
WS1-P20	<p style="text-align: center;">Effects of Ag/TiO₂ and Ag/N-TiO₂ nanoparticles on human lung epithelial cells</p> <p>Daniela Rebleanu1, Cristina Ana Constantinescu1, Geanina Voicu1, Mariana Deleanu1, Carmen Gaidau2, Madalina Ignat2, Aurora Petica2, Manuela Calin1</p> <p style="text-align: center;">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</p>
WS1-P21	<p style="text-align: center;">Solvent Mediated Effects in Nanoassembly of Amyloidogenic Peptides</p> <p style="text-align: center;">Nikolay Blinov1* and Andriy Kovalenko1</p> <p style="text-align: center;">1University of Alberta and Nanotechnology Research Centre, Edmonton, Canada</p>
WS1-P22	<p style="text-align: center;">Electrospun Nanofibers as Controlled-Release Carriers of Echinchrome A</p> <p>Stefanos Kikionis1, Elena A. Vasileva2, Natalia P. Mishchenko2, Sergey A. Fedoreyev2, Vassilios Roussis1 and Efstathia Ioannou1*</p> <p style="text-align: center;">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</p>
WS1-P23	<p style="text-align: center;">Multivalent Antibody-Nanoparticle Conjugates to Enhance the Sensitivity of SERS-based Immunoassays</p> <p style="text-align: center;">Taejoon Kang1*</p> <p style="text-align: center;">1Korea Research Institute of Bioscience and Biotechnology, Daejeon 34141, Republic of Korea</p>
WS1-P24	<p style="text-align: center;">Gold Coated Cobalt Ferrite Nanoparticles via Methionine Inducted Reduction</p> <p style="text-align: center;">Agne Mikalauskaite1*, A. Jagminas 1</p> <p style="text-align: center;">1State research institute Center for Physical Sciences and Technology, Vilnius, Lithuania</p>
WS1-P25	<p style="text-align: center;">Effect of Carbon Nanotubes on Zirconium Ceramics Used for Biomedical Applications</p> <p style="text-align: center;">Sergei Ghyngazov1*, Sergei Shevelev1</p> <p style="text-align: center;">1National Research Tomsk Polytechnic University, Tomsk, Russia</p>

WS1-P26	<p>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.</p> <p>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)</p>
WS1-P27	<p>Gold Nanoparticles Against Clinically Isolated Pathogens Rokas Žalneravičius1, 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</p>
WS1-P28	<p>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.</p>
WS1-P29	<p>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</p>
WS1-P30	<p>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</p>
WS1-P31	<p>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.</p>

WS1-P32	<p>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</p>
WS1-P33	<p>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</p>
WS1-P34	<p>Interactions of mitoxantrone-modified superparamagnetic iron oxide nanoparticles with biomimetic membranes and cells. Dorota Nieciecka1*, Krystyna Kijewska1 and Paweł Kryszewski1 1Department of Chemistry, University of Warsaw, Pasteur 1, 02-093 Warsaw, Poland</p>
WS1-P35	<p>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</p>
WS1-P36	<p>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</p>
WS1-P37	<p>Immobilization and Electrochemical Behavior of Hemoglobin on Hybrid Graphite/TiO2 electrodes Efsthios Deskoulidis1*, Vasilios Georgakilas1 and Emmanuel Topoglidis1 1Department of Materials Science, University of Patras, Rion 26504, Greece</p>
WS1-P38	<p>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.</p>

WS1-P39	<p style="text-align: center;">Fabrication of ultrathin poly(L-lactic acid) nanosheets by spin--coating suitable for tissue engineering</p> <p style="text-align: center;">I. Chyshankou*¹, V. Kulikouskaya¹, S. Pinchuk², I. Volotovskiy², V. Agabekov¹</p> <p style="text-align: center;">¹Institute of Chemistry of New Materials of NASB, Minsk, Belarus</p> <p style="text-align: center;">² Institute of Biophysics and Cell Engineering of NASB, Minsk, Belarus</p>
WS1-P40	<p style="text-align: center;">Biocompatibility and potential cytotoxicity of silicalite-1 and nanodiamond-BMP-7 coatings for orthopedic implants</p> <p style="text-align: center;">Ivana Kopova^{1*}, Ivan Jirka², Stepan Potocky^{3,4}, Bohuslav Rezek^{3,4}, Lucie Bacakova¹</p> <p style="text-align: center;">¹ Institute of Physiology of the Czech Academy of Sciences, Prague, Czech Republic</p> <p style="text-align: center;">² J. Heyrovsky Institute of Physical Chemistry of the Czech Academy of Sciences, Prague, Czech Republic</p> <p style="text-align: center;">³ Institute of Physics of the Czech Academy of Sciences, Prague, Czech Republic</p> <p style="text-align: center;">⁴ Faculty of Electrical Engineering, Czech Technical University, Prague, Czech Republic</p>
WS1-P41	<p style="text-align: center;">Phage-based capture and concentrating system for single step detection of pathogens in liquid samples</p> <p style="text-align: center;">Domenico Franco^{1*}, Sebastiano Trusso², Laura M. De Plano³, Enza Fazio¹, Maria G. Rizzo³, , Santina Carnazza³, Fortunato Neri¹ and Salvatore P. P. Guglielmino³</p> <p style="text-align: center;">¹ Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences, University of Messina, Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy</p> <p style="text-align: center;">²IPCF-CNR Institute for Chemical-Physical Processes, Viale Ferdinando Stagno d'Alcontres 37, 98158, Messina, Italy</p> <p style="text-align: center;">³Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina,Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy</p>
WS1-P42	<p style="text-align: center;">Promiscuous phage-peptide as possible approach to a multiple drug targeted therapy</p> <p style="text-align: center;">Laura M. De Plano^{1*}, Domenico Franco², Maria G. Rizzo¹, Santina Carnazza¹, Marco S. Nicolò¹ and Salvatore P. P. Guglielmino¹</p> <p style="text-align: center;">¹ Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina,Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy</p> <p style="text-align: center;">²Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences, University of Messina, Viale F. Stagno d'Alcontres 31, 98166, Messina, Italy</p>
WS1-P43	<p style="text-align: center;">Addition of graphene nanoparticles to PDMS matrix significantly improve hemocompatibility of samples</p> <p style="text-align: center;">Nina Recek^{1*}, Karthika Prasad², Alenka Vesel¹</p> <p style="text-align: center;">¹Department of Surface Engineering and Optoelectronics, Jožef Stefan Institute, Ljubljana SI-1000, Slovenia</p> <p style="text-align: center;">²Science and Engineering Faculty, Queensland University of Technology, Brisbane QLD 4000, Australia</p>
WS1-P44	<p style="text-align: center;">Magnetic liposomes for image guided and remotely triggered drug delivery</p> <p style="text-align: center;">Nina Kostevšek,^{1*} Ilaria Monaco,² and Wafa Al-Jamal³</p> <p style="text-align: center;">¹ Department for Nanostructured Materials, Jozef Stefan Institute, Ljubljana, Slovenia</p> <p style="text-align: center;">² Department of Industrial Chemistry "Toso Montanari", University of Bologna, Italy</p> <p style="text-align: center;">³ Queen's University Belfast, School of Pharmacy, Belfast, United Kingdom</p>

WS1-P45	<p style="text-align: center;">Shell-dependent antimicrobial efficiency of cobalt ferrite nanoparticles</p> <p style="text-align: center;">Simonas Ramanavicius^{1*}, Rokas Zalneravicius¹ and Arunas Jagminas¹</p> <p style="text-align: center;">¹State research institute Center for Physical Sciences and Technology, Vilnius, Lithuania</p>
WS1-P46	<p style="text-align: center;">Theoretical study of water interaction with functionalized benzene molecules</p> <p style="text-align: center;">Rafaela-Maria Giappa^{1*}, Emmanuel Klontzas ¹ and George Froudakis¹</p> <p style="text-align: center;">¹ University of Crete, Department of Chemistry, Crete, Greece</p>
WS1-P47	<p style="text-align: center;">Surface Mechanical Coating of Al-Cu powder by Mechanical Alloying</p> <p style="text-align: center;">Iman Farahbakhsh*, Marzieh Abbasi</p> <p style="text-align: center;">University of Applied Science and Technology, Shirvan Center, Khorasan, Iran</p> <p style="text-align: center;">Department of Engineering, Quchan Branch, Islamic Azad University, Quchan, Iran</p>
WS1-P48	<p style="text-align: center;">Coating of Fe, Cu and SiC Nano Particles Mixture on Fe plate by Mechanical Alloying</p> <p style="text-align: center;">Marzieh Abbasi*, Iman Farahbakhsh</p> <p style="text-align: center;">University of Applied Science and Technology, Shirvan Center, Khorasan, Iran</p> <p style="text-align: center;">Department of Engineering, Quchan Branch, Islamic Azad University, Quchan, Iran</p>
WS1-P49	<p style="text-align: center;">A new interfacial bio-sensing approach for detecting aberrant protein phosphorylation in cancer</p> <p style="text-align: center;">Mostak Ahmed^{1*}, Laura G. Carrascosa¹, Paul Mainwaring¹ and Matt Trau^{1,2}</p> <p style="text-align: center;">¹ Centre for Personalized Nanomedicine, Australian Institute for Bioengineering and Nanotechnology (AIBN), The University of Queensland, Brisbane, QLD 4072, Australia</p> <p style="text-align: center;">² School of Chemistry and Molecular Biosciences, The University of Queensland, Brisbane, QLD 4072, Australia</p>
WS1-P50	<p style="text-align: center;">Ultrasound-responsive Smart Liposomes as Theranostic agents for Treatment of Glioblastoma multiforme</p> <p style="text-align: center;">Rishi Rajat Adhikary^{1*} and Rinti Banerjee¹</p> <p style="text-align: center;">¹Indian Institute of Technology Bombay, Mumbai, India</p>
WS1-P51	<p style="text-align: center;">The nanoscale mechanics of protein self-assembly at oil-water interfaces controls cell adhesion and stem cell fate decision</p> <p style="text-align: center;">J.E. Gautrot^{1,2*}, D. Kong^{1,2}, L. Peng^{1,2} and W. Megone^{1,2}</p> <p style="text-align: center;">¹Institute of Bioengineering and ²School of Engineering and Materials Science, Queen Mary, University of London, Mile End Road, London, E1 4NS, UK.</p>

WS1-P52	<p>The two faces of titanium dioxide nanoparticles bio-camouflage in 3D bone spheroids</p> <p>W. Souza^{1,2}, S. Gemini-Piperni^{2,3}, R. Borojevic^{2,4}, L. A. Rocha^{2,5}, J. M. Granjeiro^{1,2,6}, A. Ribeiro^{1,3,7}</p> <p>¹Postgraduate Program in Biotechnology, National Institute of Metrology Quality and Technology, Rio de Janeiro, Brazil;</p> <p>²Brazilian Branch of Institute of Biomaterials, Tribocorrosion and Nanomedicine (IBTN);</p> <p>³ Brazilian Center for Research in Physics, Rio de Janeiro, Brazil;</p> <p>⁴Center of Regenerative Medicine, Faculty of Medicine, Petrópolis, Brazil;</p> <p>⁵Physics Department, University Estadual Paulista, Brazil;</p> <p>⁶Dental School, Fluminense Federal University, Niterói, Brazil;</p> <p>⁷Pos-Graduation Program in Translacional Biomedicine, University of Grande Rio, Brazil</p>
WS1-P53	<p>Dynamic nuclear polarization enhanced solid-state NMR as a powerful tool for probing the surface of nanomaterials with sub-Ångström resolution</p> <p>Natalia Olejnik-Fehér^{1*}, Saumya Badoni², Maria Jędrzejewska³, Małgorzata Wolska-Pietkiewicz³, Daniel Lee², Gaël De Paëpe² and Janusz Lewiński^{1, 3}</p> <p>¹ Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, Poland</p> <p>² Université Grenoble Alpes, CEA, INAC-MEM, Grenoble, France</p> <p>³ Faculty of Chemistry, Warsaw University of Technology, Warsaw, Poland</p>
WS1-P54	<p>Investigating the structure-activity relationship of amphiphilic nucleophiles to hydrolyze major classes of pesticides in micellar medium</p> <p>Subhashini Pandey^{1,2*}, Sandeep Chandrashekarappa ¹, Tanu Jain ^{1,2}, Ketan Thorat¹ and Praveen K. Vemula^{1,3}</p> <p>¹Institute for Stem Cell Biology and Regenerative Medicine (inStem), GKV Campus, Bellary Road, Bangalore 560065, Karnataka, India.</p> <p>² The Institute of Trans-Disciplinary Health Sciences and Technology, Yelahanka, Bengaluru 560064, Karnataka, India.</p> <p>³ Ramalingaswami ReEntry Fellow, Department of Biotechnology, Government of India.</p>
WS1-P55	<p>In situ synthesis of silver nanoparticles on organic and inorganic colloidal particles for theranostic applications</p> <p>Bogdan Parakhonskiy^{1,2*}, Anatolii Abalymov¹, Ekaterina Lengert^{1,2}, Maria Saveleva^{1,2}, Alexey Yashchenok³, Yulia Svenskaya², Andre Skirtach¹</p> <p>¹ Ghent University, Ghent, 9000, Belgium</p> <p>² Saratov State University, Saratov, 410012, Russia</p> <p>³ Skoltech center of Photonics & Quantum Materials, Skolkovo Institute of Science and Technology, 143026 Moscow, Russia</p>
WS1-P56	<p>Amplification-Free Multi-RNA Type Profiling for Cancer Risk Stratification via Alternating Current Electrohydrodynamic NanoMixing</p> <p>Kevin M. Koo, Shuvashis Dey, Matt Trau</p> <p>The University of Queensland Building 75 Cooper Road Australian Institute for Bioengineering and Nanotechnology Brisbane, QLD 4072, Australia</p>
WS1-P57	<p>Impact of Bioinspired Zinc Nanoparticles on Germination and Biochemical Profiling of Canola</p> <p>Zia-ur-Rehman Mashwani^{1*}, and Sohail¹</p> <p>¹Department of Botany, PMAS Arid Agriculture University, Rawalpindi, 46300, Pakistan</p>

WS1-P58	<p style="text-align: center;">Synthesis of new materials containing ZnO doped particles for purification of waste waters</p> <p style="text-align: center;">Viorica-Elena Podasca^{1*}, Mariana-Dana Damaceanu¹</p> <p style="text-align: center;">1 Petru Poni Institute of Macromolecular Chemistry, 41 A Grigore Ghica Voda Alley, 700487 Iasi, Romania</p>
WS1-P59	<p style="text-align: center;">Silver Nanowire Endoscopy for Single-Cell Investigation</p> <p style="text-align: center;">Monica Ricci^{1*}, Beatrice Fortuni¹, Tomoko Inose², Susana Rocha¹ and Hiroshi Uji-i^{1,2}</p> <p style="text-align: center;">1KU Leuven, Celestijnenlaan 200F 3001 Leuven, Belgium</p> <p style="text-align: center;">2RIES, Hokkaido University, Sapporo, 001-0020, Japan</p>
WS1-P60	<p style="text-align: center;">Carbogenic nanoparticles for biomedical and forensic applications</p> <p style="text-align: center;">Antonios Kelarakis, University of Central Lancashire, Preston, PR12HE, U.K.</p>
WS1-P61	<p style="text-align: center;">Magnetic field sensible nanocomposites based on cross-linked sodium alginate and maghemite</p> <p style="text-align: center;">Vasiliy Spiridonov*, Andrey Sybachin, Irina Panova, Olga Novoskoltseva and Alexander Yaroslavov</p> <p style="text-align: center;">1Lomonosov Moscow State University, Chemistry Department Polymer Division, Russia</p>
WS1-P62	<p style="text-align: center;">Antimicrobial use of silver nanoparticles in biomaterials and their cytotoxicity</p> <p style="text-align: center;">G. Cotton*, C. Gee, A. Jude, W. Duncan, and D. Coates.</p> <p style="text-align: center;">Sir John Walsh Research Institute, University of Otago, New Zealand</p>
WS1-P63	<p style="text-align: center;">Injectable Dual release Nanoformulation based Hydrogel for Blood Borne Bacterial Infections</p> <p style="text-align: center;">Vimal Rohan K ^{1*}, Rohit Srivasatava^{2*}</p> <p style="text-align: center;">1Academy of Medical Sciences, Pariyaram, Kerala, India</p> <p style="text-align: center;">2Indian Institute of Technology, Bombay, India</p>
WS1-P64	<p style="text-align: center;">Nanoengineered Dual Release Graft for Pain and Inflammation Management in Osteoarthritis</p> <p style="text-align: center;">Bavya M C^{1*}, Rohit Srivasatava^{2*}</p> <p style="text-align: center;">1,2Indian Institute of Technology, Bombay, India</p>
WS1-P65	<p style="text-align: center;">Probing surface-driven interactions of fluorescently labeled hyaluronic acid with nanomaterials</p> <p style="text-align: center;">Liviana Mummolo*, Damiano Genovese, Francesco Palomba, Luca Prodi</p> <p style="text-align: center;">University of Bologna, Bologna, Italy</p>
WS1-P66	<p style="text-align: center;">Designing of Highly Programmable and Modular Nanorobotic Platform for Smart Drug Delivery</p> <p style="text-align: center;">Soumyananda Chakraborti^{1*} and Jonathan G Heddle¹</p> <p style="text-align: center;">1Malopolska Centre of Biotechnology, Jagiellonian University, Krakow, Poland</p>

WS1-P67	<p>Nanopatterns of Surface-bound ephrinB1 Ligands produce Multivalent Effects on EphB2 Receptor Clustering</p> <p>Verónica Hortigüela¹, Enara Larrañaga^{1*}, Francesco Cutrale², Anna Seriola³, María García-Díaz¹, Anna Lagunas^{4,1}, Jordi Andilla⁵, Pablo Loza-Alvarez⁵, Josep Samitier^{1,4,6}, Samuel Ojosnegros², Elena Martínez^{1,4,6}</p> <p>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 Ciències Fotoniques, Castelldefels, Spain ⁶Dep. of Electronics and Biomedical Engineering, University of Barcelona (UB), Barcelona, Spain</p>
WS1-P68	<p>Fluorescent Carbogenic Nanoparticles</p> <p>Dr Marta Krysmann^{1*}</p> <p>¹ University of Central Lancashire, School of Pharmacy and Biomedical Sciences, Preston, UK</p>
WS1-P69	<p>Stabilization of Bioinspired Non-spherical Cell Membrane-Coated Nanoparticles via Lyophilization</p> <p>Bernard Manuel Haryadi^{1*}, Gerhard Winter¹ and Julia Engert¹</p> <p>¹Ludwig-Maximilians-University Munich, Munich, Germany</p>
WS1-P70	<p>SERS-based microfluidic chips for sensitive label-free detection of miRNAs</p> <p>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</p> <p>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</p>
WS1-P71	<p>The core of self-assembling peptide nanofibers will influence neurogenesis potential of its attached biological motif</p> <p>Behnaz Tavakol ¹, Shima Tavakol ²</p> <p>¹ School of Medicine, Kashan University of Medical sciences, Isfahan, Iran ² Cellular and Molecular Research Center, Iran University of Medical sciences, Tehran, Iran</p>
WS1-P72	<p>Towards Water-Soluble Histidin-N-heterocyclic Carbene Stabilized Optically active Gold Nanoparticles</p> <p>Michael R. Reithofer^{1*}, Jia Min Chin^{1,2}, Adam J. Young² and Christopher J. Serpell³</p> <p>¹ Institute of Inorganic Chemistry, Faculty of Chemistry, University of Vienna, Vienna Austria ² School of Mathematics and Physical Sciences, University of Hull, Hull, United Kingdom ³ University of Kent, School of Physical Sciences, Canterbury, United Kingdom</p>

WS1-P73	<p style="text-align: center;">Carbon Dots as a Trackable Drug Delivery System for Localized Cancer Therapy in vivo</p> <p style="text-align: center;">Qin Li a *, Qinghui Zeng,b Chongxin Shanb, Jing Lic</p> <p style="text-align: center;">a. Queensland Micro- and Nanotechnology Centre, & School of Engineering & Built Environment, Griffith University, Nathan, QLD 4111, Australia</p> <p style="text-align: center;">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.</p> <p style="text-align: center;">c. Department of Pharmacology, College of Basic Medical Sciences, Jilin University, Changchun, P. R. China.</p>
WS1-P74	<p style="text-align: center;">Assessment of the antibacterial effects of TiS3 nanoribbons on E. coli</p> <p style="text-align: center;">A. Gusev^{1,2,*}, O. Zakharova^{1,2}, D. Muratov², A. Sinitskii^{2,3}</p> <p style="text-align: center;">1 Derzhavin Tambov State University, 33, Internatsionalnaya str., Tambov, 392000, Russia</p> <p style="text-align: center;">2 National University of Science and Technology MISIS, 4, Leninsky pr., Moscow, 119991, Russia</p> <p style="text-align: center;">3 Department of Chemistry, University of Nebraska – Lincoln, Lincoln, NE 68588, USA</p>
WS1-P75	<p style="text-align: center;">Self-assembly of anionic liposomes on cationic biodegradable polymer particles</p> <p style="text-align: center;">Andrey Sybachin*, Vasily Spiridonov, Olga Novoskoltseva, Nikolay Melik-Nubarov and Alexander Yaroslavov</p> <p style="text-align: center;">1Lomonosov Moscow State University, Chemistry Department Polymer Division, Russia</p>
WS1-P76	<p style="text-align: center;">Functionalised nano-graphene oxide for high efficiency gene delivery</p> <p style="text-align: center;">Nisha Yadav¹, Naveen Kumar², Seema Sehrawat² and Bimlesh Lochab¹</p> <p style="text-align: center;">1Department of Chemistry and 2Department of Life Sciences</p> <p style="text-align: center;">School of Natural Sciences, Shiv Nadar University, Gautam Buddha Nagar, Uttar Pradesh, 201314, India.</p>
WS1-P77	<p style="text-align: center;">Salt Rejection and Ion-Selectivity of Slit-Shaped Nanopores in Biomineral: Molecular Dynamics Study</p> <p style="text-align: center;">Alexey A. Tsukanov^{1*}, Evgeny V. Shilko¹ and Sergey G. Psakhie¹</p> <p style="text-align: center;">1Institute of Strength Physics and Material Sciences, Siberian Branch of Russian Academy of Sciences, Tomsk, Russia</p>
WS1-P78	<p style="text-align: center;">Combined Theoretical and Experimental Study of SiC/SiOx core/shell Nanowires for Photodynamic therapy applications</p> <p style="text-align: center;">T. Morresi^{1,2*}, M. Timpel³, A. Pedrielli^{1,2}, N. M. Pugno^{2,4,5}, M. V. Nardi³ and S. Taioli¹</p> <p style="text-align: center;">1European Centre for Theoretical Studies in Nuclear Physics and Related Areas (ECT*-FBK), Trento, Italy 2Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy 3Department of Industrial Engineering, University of Trento, Italy 4School of Engineering and Materials Science, Queen Mary University of London, United Kingdom 5Ket-Lab, Edoardo Amaldi Foundation, Italian Space Agency, Rome, Italy</p>
WS1-P79	<p style="text-align: center;">Efflux pump inhibition and Photodynamic therapy of MRSA via thiolated chitosan coated cobalt doped ZnO nanoparticles</p> <p style="text-align: center;">Akhtar Nadhman¹, Gulrukh¹, Sulaiman Faisal¹</p> <p style="text-align: center;">1 Institute of Integrative Biosciences, CECOS University of IT and emerging sciences, Peshawar 25000, Pakistan</p>

WORKSHOP 2

PEROVSKITE OPTOELECTRONICS & SOLAR CELLS

WS2-P1	<p style="text-align: center;">Size Tunable Cesium Antimony Chloride Perovskite Nanowires and Nanorods</p> <p style="text-align: center;">Bapi Pradhan^{1*}, Gundam Sandeep Kumar¹ Sumanta Sain², Amit Dalui^{1,3}, Uttam Kumar Ghorai⁴, Swapan Kumar Pradhan⁵, and Somobrata Acharya³</p> <p style="text-align: center;">1Centre for Advanced Materials and 2Department of Materials Science, Indian Association for the Cultivation of Sciences, Jadavpur, Kolkata 700032, India</p> <p style="text-align: center;">3Department of Chemistry, Jogamaya Devi College, Kolkata 700026, India</p> <p style="text-align: center;">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</p>
WS2-P2	<p style="text-align: center;">Photoluminescence Spectroscopy of Halide Perovskites</p> <p style="text-align: center;">Stuart Thomson^{1*}, Maria Tesa² and Anna Gakamsky³</p> <p style="text-align: center;">1Edinburgh Instruments, Livingston, UK</p> <p style="text-align: center;">2Edinburgh Instruments, Livingston, UK</p> <p style="text-align: center;">3Edinburgh Instruments, Livingston, UK</p>
WS2-P3	<p style="text-align: center;">Analysis of spin-texture of electronic bands in metal halide perovskite single crystals via spin-resolved photoelectron spectroscopy</p> <p style="text-align: center;">Maryam Sajedi^{1*}, Maxim Krivenkov² and Dmitry Marchenko³</p> <p style="text-align: center;">1,2,3Helmholtz Zentrum Berlin für amaterialien und Energie, Berlin, Germany</p>
WS2-P4	<p style="text-align: center;">Magnetic Behaviour of Rutile-type CrMO₄ (M = Nb, Ta) Materials Prepared from Single-molecular Precursors</p> <p style="text-align: center;">Martina Vrankić^{1*}, Marijana Jurić¹, Lidija Androš Dubraja¹, Jasminka Popović¹, Damir Pajić² and Jure Dragović²</p> <p style="text-align: center;">1Ruđer Bošković Institute, Zagreb, Croatia</p> <p style="text-align: center;">2Department of Physics, Faculty of Science, University of Zagreb, Zagreb, Croatia</p>

WORKSHOP 3

TISSUE ENGINEERING & REGENERATIVE MEDICINE

WS3-P1	<p style="text-align: center;">Biodegradable and bioactive scaffold for bone tissue engineering.</p> <p>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.</p> <p>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.</p>
WS3-P2	<p style="text-align: center;">Surface and morphological investigation of synthesized nanostructured ridges from electrospun Polyvinyl Alcohol – Egg Albumin blend using Atomic Force Microscopy</p> <p style="text-align: center;">Jopeth Ramis1,2, Bryan Pajarito3</p> <p>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</p>
WS3-P3	<p style="text-align: center;">Analysis of the degree of crystallinity during laser cladding of bioactive glass coatings on ultrafine-grained metallic substrates</p> <p style="text-align: center;">Szymon Bajda1*, Michal Krzyzanowski1, 2, Jakub Sroka1, 3, Szczepan Witek1 and Patryk Steczkowski1</p> <p>1AGH University of Science and Technology, Krakow, Poland 2Birmingham City University, Birmingham, United Kingdom 3The University of Sheffield, Sheffield, United Kingdom</p>
WS3-P4	<p style="text-align: center;">Calcium phosphate mineralization of poly (N, N-dimethylacrylamide) (PDMAA) hydrogels</p> <p>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</p>
WS3-P5	<p style="text-align: center;">Biocompatibility of artificial rod and cone photoreceptors with human-like spectral sensitivities</p> <p style="text-align: center;">Seok Hwan Kim1*, Byeongho Park2, Heehong Yang3, Hyun Seok Song4, Tai Hyun Park3, and Jae Hun Kim2</p> <p>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</p>

WS3-P6	<p style="text-align: center;">Protein-based Hydrogel for laser-induced Fabrication of Microstructures</p> <p style="text-align: center;">Amirbahador Zeynali^{1*}, Giuseppe Chirico¹ and Maddalena Collini¹</p> <p style="text-align: center;">¹ Biophysics and Biophotonics group, Department of Physics “G. Occhialini”, Università Milano-Bicocca, Milano, Italy</p>
WS3-P7	<p style="text-align: center;">Biodegradable prosthesis created by electrospinning for the treatment of extrahepatic bile duct injuries</p> <p>Alan Isaac Valderrama Treviño^{1*}, Nadia Adriana Vázquez Torres¹, Rodrigo Banegas Ruiz², Andrés Eliú Castell Rodríguez¹, Eduardo E. Montalvo-Javé³</p> <p>¹ Laboratory of experimental immunotherapy and tissue engineering, Faculty of Medicine, Universidad Nacional Autónoma de México, Mexico City, Mexico.</p> <p>² Service of Hand Surgery and Microsurgery. Rehabilitation Hospital “Luis Guillermo Ibarra Ibarra”. Mexico City, Mexico.</p> <p>³ Department of HPB Surgery, General Hospital of Mexico, Mexico City, Mexico</p>
WS3-P8	<p style="text-align: center;">Direct Laser Printing of Cells on Tissue Constructs based on Porous Collagen Scaffolds</p> <p>C.V. Leva¹, M. Chatzipetrou¹, D. Zareifi², A. Gravanis³, L. Alexopoulos², D. S. Tzeranis^{3*} and I. Zergioti¹</p> <p>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 Technology Hellas, Herakleion, Greece</p>
WS3-P9	<p style="text-align: center;">Artificial 3D culture systems for T cell expansion</p> <p>Eduardo Pérez del Río,^{1,2} Marc Martínez Miguel, ^{1,2,3} Jaume Veciana, ^{1,2} Imma Ratera,^{1,2,*} Judith Guasch ^{1,2,3,*}</p> <p>¹ Institute of Materials Science of Barcelona (ICMAB-CSIC), Campus UAB, 08193, Bellaterra, Spain</p> <p>² Networking Research Center on Bioengineering, Biomaterials and Nanomedicine (CIBERBBN), Campus UAB, 08193, Bellaterra, Spain</p> <p>³ Dynamic Biomaterials for Cancer Immunotherapy, Max Planck Partner Group, ICMABCSIC, Campus UAB, 08193, Bellaterra, Spain *</p>
WS3-P10	<p style="text-align: center;">Co-flow microfluidic system for the production of tuneable elastic Gelatin methacrylate microparticles</p> <p>Francesco Pappalardo¹, Jopeth Miranda Ramis¹, Marta Alvarez Paino¹, Kevin Shakesheff¹, Morgan R Alexander², Felicity RAJ Rose¹</p> <p>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</p>
WS3-P11	<p style="text-align: center;">Self-Assembling peptides with RGD motifs as scaffolds for tissue engineering</p> <p>Graziano Deidda^{1,2,*} Maria Farsari ^{1,2}, Anna Mitraki ^{1,2}</p> <p>¹Department of Materials Science & Technology, University of Crete, Heraklion, Greece; ²Institute of Electronic Structure and Laser, IESL-FORTH, Heraklion, Greece</p>
WS3-P12	<p style="text-align: center;">Skeletal Muscle Tissue Engineering Using Micro and Nano scale substrates</p> <p style="text-align: center;">Dr. Sahar Salehi^{1*}, Prof. Thomas Scheibel^{1,2}</p> <p>¹ Department of Biomaterials, Faculty of Engineering Science, University of Bayreuth, Bayreuth 95440, Germany</p> <p>² Bayreuth Center for Materials Science and Engineering (BayMAT), University of Bayreuth, Bayreuth 95440, Germany</p>

WS3-P13	<p style="text-align: center;">Porous poly(dimethylsiloxane) as substrate for mesenchymal stem cells adhesion</p> <p style="text-align: center;">Aliaksandr Kraskouski¹, Irina Paribok¹, Sergei Pinchuk², Irina Vasilevich², Kirill Matievski², Igor Volotovski², Vladimir Agabekov¹</p> <p style="text-align: center;">1 Institute of Chemistry of New Materials, NAS of Belarus, Minsk, Belarus</p> <p style="text-align: center;">2 Institute of Biophysics and Cell Engineering, NAS of Belarus, Minsk, Belarus</p>
WS3-P14	<p style="text-align: center;">Applications of non-linear imaging microscopy in biology</p> <p style="text-align: center;">Evangelia Gavgiotaki^{1,2*}, Vassilis Tsafas^{1,3}, Meropi Mari¹ and George Filippidis¹</p> <p style="text-align: center;">1 Institute of Electronic Structure and Laser, Foundation for Research and Technology, Heraklion, Greece</p> <p style="text-align: center;">2 Medical School, University of Crete, Heraklion, Greece</p> <p style="text-align: center;">3 Department of Physics, University of Crete, Heraklion, Greece</p>
WS3-P15	<p style="text-align: center;">Fabrication and properties of porous “sponge-like” films based on pectin-chitosan polyelectrolyte complexes</p> <p style="text-align: center;">Viktoryia Kulikouskaya*, Maryna Lazouskaya and Vladimir Agabekov</p> <p style="text-align: center;">Institute of Chemistry of New Materials of NAS of Belarus, Minsk, Belarus</p>
WS3-P16	<p style="text-align: center;">Electrospun Fibrous Matrices for the Treatment of Orthopedic Diseases</p> <p style="text-align: center;">A. R. Tsiapla^{1*}, V. Bakola^{1,2}, V. Karagkiozaki^{1,2} and S. Logothetidis¹</p> <p style="text-align: center;">1Nanotechnology Lab LTFN (Lab for Thin Films – Nanobiomaterials –Nanosystems – Nanometrology) Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece</p> <p style="text-align: center;">2BL Nanobiomed P.C. Thessaloniki, 54655, Greece</p>
WS3-P17	<p style="text-align: center;">PHOTOINITIATOR-FREE TWO-PHOTON POLYMERIZATION OF GELATIN METHACRYLAMIDE</p> <p style="text-align: center;">Kostas Parkatze^{1,2}, Alexandros Selimis¹, Elmina Kabouraki^{1,3}, Maria Kaliva^{1,3}, Anthi Ranella¹, Maria Farsari¹ and Maria Vavmakaki^{1,3}</p> <p style="text-align: center;">1Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, 700 13 Heraklion, Crete, Greece</p> <p style="text-align: center;">2Department of Chemistry, University of Crete, 710 03Heraklion, Crete, Greece</p> <p style="text-align: center;">3Department of Materials Science and Technology, University of Crete, 710 03 Heraklion, Crete, Greece</p>
WS3-P18	<p style="text-align: center;">Composite hydrogel based biomaterials functionalized with calcium carbonate for biomedical application</p> <p style="text-align: center;">Anatolii Abalymov^{1*}, Maria Saveleva², Bogdan Parakhonskiy¹ and Andre Skirtach¹</p> <p style="text-align: center;">1, Faculty of Bioscience Engineering Ghent University, Ghent, Belgium</p> <p style="text-align: center;">2Saratov State University, Saratov, Russia</p>
WS3-P19	<p style="text-align: center;">Octacalcium phosphate: Synthesis, characterization and stability studies in calcium alginate beads</p> <p style="text-align: center;">Emmanouela Mystiridou^{1,2*}, Eleni-Anna Oikonomou¹ and Nikolaos Bouropoulos^{1,2}</p> <p style="text-align: center;">1Department of Materials Science, University of Patras, Patras, Greece</p> <p style="text-align: center;">2Foundation for Research and Technology Hellas, Institute of Chemical Engineering and High Temperature Chemical Processes, Patras, Greece</p>

WS3-P20	Mimicking biological mechanical behavior by a bioactive lactose-modified chitosan Franco Furlani ^{1*} , Pasquale Sacco ¹ , Fioretta Asaro ² , Michela Cok ¹ , Eleonora Marsich ³ , Dan Cojoc ⁴ , Sergio Paoletti ¹ , Ivan Donati ¹ 1Department of Life Sciences, University of Trieste, Trieste, Italy 2Department of Chemical and Pharmaceutical Sciences, University of Trieste, Trieste, Italy 3Department of Medicine, Surgery and Health Sciences, University of Trieste, Trieste, Italy 4CNR-IOM National Research Council - Institute of Materials, Basovizza, Trieste, Italy
WS3-P21	A new Nano technique tool in medical studies, diagnostic assays, a literature review Vahabi S.

WORKSHOP 4 GRAPHENE & RELATED 2D MATERIALS	
WS4-P1	STRUCTURAL PROPERTIES OF NANO POWDER SILICON CARBIDE "SiC" PRODUCED BY SOL-GEL METHOD Karima Benfadel ^{1, 2*} , Samira kaci ¹ , Aissa Keffous ¹ and Abdelbaki Benmounah ² 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.
WS4-P2	Microstructural investigation of nickel deposits obtained by pulsed current Amel boukhouiete ^{1*} , Juan Creus ² and Farida Mazoni ¹ 1Laboratoire LM2PM Université Badji-Mokhtar, 23 000 Annaba, Algeria 2 Laboratoire La SIE Université de La Rochelle, , 17042 La Rochelle, France
WS4-P3	Theoretical investigation of water-soluble polyethylene glycol treated phosphorene system Anikó Lábas ^{1*} and Tibor Höltzl ¹ 1Furukawa Electric Institute of Technology, Budapest, Hungary
WS4-P4	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-P5	<p style="text-align: center;">Optically induced absorption modulation in a graphene-based metasurface</p> <p>Anna C. Tasolamprou^{1*}, Charalampros Mavidis^{1,2}, Anastasios D. Koulouklidis¹, Cristina Daskalaki¹, George Kenanakis¹, George Deligeorgis¹, Zacharias Viskadourakis¹, Polina Kuzhir³, Stelios Tzortzakis^{1,4}, Maria Kafesaki^{1,2}, Eleftherios N. Economou^{1,4} and Costas M. Soukoulis^{1,5}</p> <p style="text-align: center;"> 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 </p>
WS4-P6	<p style="text-align: center;">Separation and recovery of heavy metal ions by graphene acid.</p> <p>Jan Kolarik^{1*}, Aristides Bakandritsos¹ and Radek Zboril¹</p> <p style="text-align: center;">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</p>
WS4-P7	<p style="text-align: center;">A novel electrochemiluminescence glucose biosensor based on polypyrrole/polyluminal/ C₃N₄-Ni(OH)₂/glucose oxidase modified graphite electrode</p> <p>Lida Fotouhia,[*], Morteza Hosseinib,[*], Maryam Hamtaka</p> <p style="text-align: center;"> ^aDepartment of Chemistry, Alzahra university, Tehran, Iran ^bCenter of Excellence in Electrochemistry, Faculty of Chemistry, University of Tehran, Tehran </p>

WORKSHOP 5 NANOELECTRONICS & BIOELECTRONICS	
WS5-P1	<p style="text-align: center;">Substrate-dependent triboelectric charging of graphene surface for enhanced electric potential generation by motion of ionic liquid droplets</p> <p>Junghyo Nah^{1*}, Pangun Park¹, Daehoon Lee¹</p> <p style="text-align: center;">1Chungnam National University, Daejeon, Korea</p>
WS5-P2	<p style="text-align: center;">Top down InAs nanowire field-effect transistors on a SiO₂/Si via soft lithographic method</p> <p>Junghyo Nah^{1*}, Pangun Park¹, Min Hyung Lee²</p> <p style="text-align: center;"> ¹Chungnam National University, Daejeon, Korea ²Kyung Hee University, Yongin, Korea </p>
WS5-P3	<p style="text-align: center;">High-Performance Piezoelectric Nanogenerators Based on Chemically-Reinforced Composites</p> <p style="text-align: center;">Youngmin Choi</p> <p style="text-align: center;">Korea Research Institute of Chemical Technology (KRICT), Daejeon, Republic of Korea.</p>

WS5-P4	Molecularly imprinted chiroptical sensor for detection of glucose M. F. Frasco* ¹ , R. Pereira-Cameselle ² , S. Chiussi ³ , J. L. Alonso-Gómez ² and M. G. F. Sales ¹ ¹ BioMark-CEB/ISEP, School of Engineering, Polytechnic Institute of Porto, Porto, Portugal ² Organic Chemistry Department, University of Vigo, Vigo, Spain ³ New 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 Chronaki ^{1,2*} , George Papadakis ¹ , Pasquale Palladino ¹ , Achilleas Tsortos ¹ and Electra Gizeli ^{1,2} ¹ Institute of Molecular Biology and Biotechnology-FORTH, Heraklion, Greece ² Department 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 Theodosi ^{1,2*} , Konstantinos Parasyris, ² George Papadakis ¹ , Electra Gizeli ^{1,2} ¹ Institute of Molecular Biology and Biotechnology-FORTH, Heraklion, Greece ² Department of Biology, University of Crete, Heraklion, Greece
WS5-P7	Label-free electrochemical DNA sensing on nanoscale interdigitated electrodes using gold nanoparticle amplification Dilu G. Mathew ^{1*} , A. Marti ² , J. Huskens ² , S.G. Lemay ³ and W. G. van der Wiel ¹ ¹ NanoElectronics group; ² Molecular Nanofabrication group; ³ BioElectronics group. MESA+ Institute of Nanotechnology, University of Twente, PO Box 217, 7500 AE Enschede, The Netherlands. *
WS5-P8	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-P9	Epitaxial Vanadium Dioxide Films with Sharp Electrical and Optical Switch Properties Olga Boytsova ^{1,2*} , Fariya Akbar ² , Dmitrii Sharovarov ² , Artem Makarevich ^{1,2} and Andrey Kaul ² ¹ Kurnakov Institute of General and Inorganic Chemistry, Moscow, Russia ² Lomonosov Moscow State University, Moscow, Russia
WS5-P10	Bioresorbable wireless electrical stimulator for nerve regeneration Sung-Geun Choi ¹ , Gun-Hee Lee ¹ , Jae-Young Bae ¹ , Jae-Hwan Lee ¹ , and Seung-Kyun Kang ^{1,2,*} 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-P11	Fluorescent polymer-based nanocomposite electrospun fibers as optical sensors for ammonia and pH Xenofon Karagiorgis ^{1*} , A. Petropoulou ² , I. Savva ¹ , C. Riziotis ² , S. Kralj ^{3,4} and T. Krasia-Christoforou ¹ ¹ Department of Mechanical and Manufacturing Engineering, University of Cyprus, 75, Kallipoleos Avenue, P.O.Box 20537, 1678, Nicosia, Cyprus ² National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute Photonics for Nanoapplications Laboratory, Athens 11635, Greece ³ Nanos Scientifica d.o.o. (Nanos SCI), Teslova ul. 30, SI-1000 Ljubljana, Slovenia ⁴ Jozef Stefan Institute, Department for Materials Synthesis, Jamova 39, Ljubljana, Slovenia

WS5-P12	<p style="text-align: center;">Au-Ag star shaped nanoparticles as highly efficient SERS nanoresonators.</p> <p style="text-align: center;">Jan Krajczewski¹, Andrzej Kudelski¹</p> <p style="text-align: center;">¹ Laboratory of Molecular Interaction, Faculty of Chemistry, University of Warsaw, Warsaw, Poland</p>
WS5-P13	<p style="text-align: center;">Upscaling of solution processed hybrid light emitting diodes</p> <p style="text-align: center;">Eugenia Martinez-Ferrero^{1*}, Nikola Perinka¹ and Marta Sanz-Lleo¹</p> <p style="text-align: center;">¹Fundacio EURECAT, Mataró, Spain</p>
WS5-P14	<p style="text-align: center;">The new type of bipyramidal-Au@SiO₂ nanoparticles – synthesis and Raman application.</p> <p style="text-align: center;">Karol Kołataj¹, Andrzej Kudelski¹</p> <p style="text-align: center;">¹University of Warsaw, Department of Chemistry, Warsaw, Poland</p>
WS5-P15	<p style="text-align: center;">New type of highly efficient optical nanoresonators for SHINERS measurements.</p> <p style="text-align: center;">Karol Kołataj ¹, Andrzej Kudelski ¹</p> <p style="text-align: center;">¹ Department of Chemistry, University of Warsaw, Ludwika Pasteura 1, Warsaw, Poland,</p>
WS5-P16	<p style="text-align: center;">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</p> <p style="text-align: center;">Utsav Chakraborty*, Pabitra paul</p> <p style="text-align: center;">Dept of Physics, Jadvpur University, Kolkata, West Bengal, India – 700032</p>
WS5-P17	<p style="text-align: center;">Cinnamate-based cross-linked structures for organic semiconductor applications</p> <p style="text-align: center;">Joseph Cameron*, Peter J. Skabara</p> <p style="text-align: center;">University of Glasgow, School of Chemistry, Joseph Black Building, University Place, Glasgow, G12 8QQ, UK</p>
WS5-P18	<p style="text-align: center;">Carbon quantum dots as active layer for hybrid light emitting diode (HyLEDs)</p> <p style="text-align: center;">Sofia Paulo,^{1,2*} Eugenia Martinez-Ferrero ², Emilio Palomares^{1,3}</p> <p style="text-align: center;">¹Institute of Chemical Research of Catalonia (ICIQ). The Barcelona Institute of Science and Technology (BIST), Tarragona, Spain</p> <p style="text-align: center;">²Fundació Eurecat, Mataró, Spain.</p> <p style="text-align: center;">³Catalan Institution for Research and Advanced Studies (ICREA), Barcelona Spain</p>