Nanotech France 2018, NanoMetrology 2018 and NanoMatEn 2018 Conference Program

June 26, 2018		
15:00 - 17:00	**Registration**	**Registration Area**

June 27, 2018 Nanotech Plenary session I		
Amphitheatre H		
Session's Chairs: **Prof. Jacques Jupille, Institut des Nanosciences de Paris, France** **Prof. James M Hill, University of South Australia, Australia**		
08:30 - 12:00	**Registration**	**Registration Area**
09:30 - 10:00	Hybrid Nanomaterials: Structural and Local Spectroscopic Studies via Advanced TEM R. Arenal	**Dr. Raul Arenal**, Zaragoza University, **Spain**
10:00 - 10:30	Nanocrystalline Alloy Structure for Remarkable Oxidation Resistance **R. Singh**	**Prof. Raman Singh**, Monash University, **Australia**
10:30 - 11:00	**Coffee Break / Posters Session I**	**Coffee Break Area**
11:00 - 11:30	Continuous approximation for interaction energy of adamantane encapsulated inside carbon nanotubes D. Baowan, **J.M. Hill** and W. Bacsa	**Prof. James M Hill**, University of South Australia, **Australia**
11:30 - 12:00	Disorder in graphene - from meter to atomic scale **P. Bøggild**	**Prof. Peter Bøggild**, Technical University of Denmark**, Denmark**
12:00 - 12:15	AFM PinPoint Nanomechanical Mode Using Probes with Different Stiffness W.Shi, G.Pascual, B.Kim, and **K. Lee**	**Mr. Keibock Lee**, Park Systems, **USA**
12:15 - 12:30	NFFA-EUROPE An open access resource for experimental & theoretical science **E. Travaglia**	**Dr. Elisabetta Travaglia**, CNR-IOM-Trieste, **Italy**
12:30 - 12:45	Research and innovation Dilemma on Nanotechnology **M.Bersani** and G. Casse	**Dr. Massimo Bersani**, Bruno Kessler foundation, **Italy**
12:00 - 14:00	**Lunch Break**	**Restaurant (Rue Basse)**

June 27, 2018 Session I.A: Nanomaterials Fabrication / Synthesis		
Conference Room 561		
Session's Chairs: **Prof. Jacques Jupille, Institut des Nanosciences de Paris, France** **Prof. Peter Bøggild, Technical University of Denmark, Denmark** **Prof. MariaPia Pedeferri, Milano Polytechnic Institute, Italy**		
14:00 - 14:30	Particle and Product Design by Top-down Processes **S. Mende**	**Dr. Stefan Mende**, NETZSCH Feinmahltechnik GmbH, **Germany**
14:30 - 14:45	Metallic Bismuth Nanoparticles : a Reproducible, Robust and Repeatable Synthesis via a Green and Safe Process **C. Gomez**, A. Pastor, A. Hassoun, G. Hallot, E. Brun, C. Sicard-Roselli, S. Laurent and M. Port	**Dr. Catherine Gomez**, Conservatoire National des Arts et Métiers, **France**
14:45 - 15:00	Functional Noncovalently Modifed Boron Nitride Nanotubes **Y. Martinez-Rubi**, Z. Jakubek, S. Zou, B. Ashrafi, M.B. Jakubinek, S. Denommee, K. Kim and B. Simard	**Dr. Yadienka Martinez Rubi**, National Research Council Canada, **Canada**

15:00 - 15:15	Facile Fabrication of Superhydrophobic Surfaces with Hierarchical Structures E. Lee and **K-H. Lee**	**Prof. Kun-Hong Lee** Pohang Univ. of Science & Technology, **Rep of Korea**
15:15 - 15:30	Solution-based synthesis of amorphous germanium nanopar-ticles from organogermanium halide precursors **B. Pescara**, K. A. Mazzio, K. Lips and S. Raoux	**Dr. Bruno Pescara**, Helmholtz-Zentrum Berlin for Materials and Energy, **Germany**
15:30 - 15:45	Synthesis of aqueous slurries with high concentration in polystyrene nanoparticles **D. Lopez-Pedrajas**, A. M. Borreguero, J. F. Rodríguez and M. Carmona	**Mr. Daniel López Pedrajas**, University of Castilla-La Mancha, **Spain**
15:45 - 16:00	Fabrication of nanocomposite thin films assisted by plasma polymerization, towards smart coatings **S. Wolak**, S. Jebali, K. Mougin, V. Roucoules and F. Bally-Le Gall	**Ms. Séverine Wolak**, Institut de Science des Matériaux de Mulhouse (IS2M) - CNRS/UHA, **France**
16:00 - 16:30	**Coffee Break / Posters Session I**	**Coffee Break Area**
16:30 - 17:00	Nanostructured anodic titanium oxides: production and engi-neered applications M.V. Diamanti, A. Brenna, M. Ormellese, B. Del Curto and **MP. Pedeferri**	**Prof. MariaPia Pedeferri, Milano Polytechnic Institute, Italy**
17:00 - 17:15	Synthesized In2-xSnxOy on ITO coated PET using Sol-Gel Method for Extended Gate FET-pH Sensor device. **S. Palit**, S. P. Bag, P. Garu, K. Singh, B. S. Lou, J. L. Her and T. M. Pan	**Ms. Sayani Palit**, Chang Gung University, **Taiwan**
17:15 - 17:30	Nanocrystals as high temperature local probes **G. Muraille**, E.A. Baquero, R.A. Swain, B. Chaudret, C. Nayral and F. Delpech	**Dr. Gaëlle Muraille**, University of Toulouse, **France**
17:30 - 17:45	Laser Nanopatterning of Colored Ink Thin Films for Photonic Devices **B. AlQattan**, D. Benton, A.K. Yetisen and H. Butt	**Mr. Bader AlQattan**, Unveristy of Birmingham, **UK**
17:45 - 18:00	Physical hybrid hydrogels with colloid-Cubosomes as crosslinker. F. Ferdeghini, Z. Guennouni, C. Le Cœur and **F. Muller**	**Dr. François Muller**, ECE-Paris Engineering School, **France**
18:00 - 18:15	Nonaqueous sol-gel synthesis and structural characterization of very small ZnO nanoparticles **A. Lemarchand**, F. Rémondière, J. Jouin, J. Manaud, P. Thomas and O. Masson	**Mr. Alex Lemarchand**, Limoges University, **France**
18:15 - 18:30	Surface Modification at Solid-Solid Interface to Enable Selective Adhesion **R. P. Jaiswal** and S. P.Beaudoin	**Dr. Ravi Jaiswal**, Indian Institutes of Technology-BHU, **India**

June 27, 2018

NanoMetrology 2018 - Session I.B: Nanomaterials characterization and properties

Conference Room 558

Session's Chairs:
Dr. Raul Arenal, Zaragoza University, Spain
Prof. Raman Singh, Monash University, Australia

14:00 - 14:15	Electrochemical Atomic Force Microscopy: In Situ Monitoring of Copper Electrodeposition on Gold Surface J.P. Pineda, M. Leal, G. Pascual, B. Kim and **K, Lee**	**Mr. Keibock Lee**, Park Systems, **USA**
14:15 - 14:30	Sub-Nanoscale topography standards for microscopy calibration: Manufacture, features and application **I. Busch**, O. Lenck , L. Daul, T. Dziomba, A. Felgner and L. Koenders	**Dr. Ingo Busch**, National Metrology Institute of Germany (PTB), **Germany**
14:30 - 14:45	Multi-scale assessment of soot using electron microscopy: applications on soot from bench-scale fire of polymers **G. Okyay**, S. Bellayer, F. Samyn, M. Jimenez and S. Bourbigot	**Dr. Gizem Okyay**, University of Lille, **France**

14:45 - 15:00	Investigation of the spin-orbit coupling effect of intrinsic and p-type 2D MoS2 by spectroscopic ellipsometry **B. Song**, H. Gu, Y-T. Ho, M. Fang and S. Liu	**Mr. Baokun Song**, Huazhong University of Science & Tech., **China**
15:00 - 15:15	Optical properties of Pb0.865La0.09(Zr0.65Ti0.35)O3 thin films studied by spectroscopic ellipsometry **H.Gu**, M.Li, C. Huang and S. Liu	**Dr. Honggang Gu**, Huazhong University of Science & Tech., **China**
15:15 - 15:30	Determination of the monolayer coverage of silica particles **A. La Rosa**, G. Durand, M. Alvarez, T. Justet and Alan Taylor	**Mr. Angelo La Rosa**, London South Bank University, **UK**
15:30 - 15:45	Friction Reduction on Anodized Alumina by Deposition of Ti Nanolayers **T. Matijošius**, L. Staišiūnas and S. Asadauskas	**Mr. Tadas Matijošius**, Center for Physical Sciences and Technology, **Lithuania**
15:45 - 16:00	Porous PDMS / CNF Nanocomposites for Sensing Applications W. Luo, **M.C. Saha** and Y. Liu	**Prof. Mrinal Saha**, University of Oklahoma, **USA**
16:00 - 16:30	**Coffee Break / Posters Session I**	**Coffee Break Area**
16:30 - 16:45	Tuning the electronic response of MoS2 by pressure induction **R. Torres-Cavanillas**, M. Morant-Giner, G. Escorcia, J. Dugay, M. Galbiati, S. Tatay, M. Giménez-Márquez, A. Forment-Aliaga, E. Coronado.	**Mr. Ramón Torres-Cavanillas**, Univesity of Valencia, **Spain**
16:45 - 17:00	Solution-processable inorganic hole injection layer to improve the performance of quantum-dot light-emitting diodes **S.J. Kang**	**Prof. Seong Jun Kang**, Kyung Hee University, **Rep. of Korea**
17:00 - 17:15	Highly Conductive, Mechanically Robust Ion Gels Based on Co-polymers and their Electrochemical Applications **H.C. Moon**	**Prof. Hong Chul Moon**, University of Seoul, **Rep. of Korea**
17:15 - 17:30	Enhancement in thermoelectric properties of Te-embedded Bi2Te3 by stong phonon scattering at interface **K. Jeong**, H. Choi, J. Chae, H. Park, J. Baeck, T. Hyeon Kim, J.Y. Song, J. Park, K-H. Jeong and M-H. Cho	**Dr. Kwangsik Jeong**, Yonsei University, **Rep. of Korea**
17:30 - 17:45	Multi-functional copolymer for coating on magnetite nanoparticle for use in bioconjugation **S. Paenkaew** and M. Rutnakornpituk	**Ms. Sujittra Paenkaew**, Naresuan University, **Thailand**
17:45 - 18:00	Poly(N-acryloyl glycine)-grafted magnetite nanoparticle conjugated with pyrrolidinyl peptide nucleic acid for selective enrichment of trace DNA samples **S. Khadsai**, N. Seeja, M. Rutnakornpituk, T. Vilaivan, M. Nakkuntod, W. Suwankitti and B. Rutnakornpituk	**Ms. Sudarat Khadsai**, Naresuan University, **Thailand**
18:00 - 18:15	Antibacterial activity of high-k oxides deposited by the ALD method- applications in biology and medicine **A. Słońska-Zielonka**, J. Cymerys-Bulenda, S. Gierałtowska, R. Pietuszka, B.S. Witkowski, K. Amaro, H. Buksiński, Z. Gajewski, M. M. Godlewski and M. Godlewski	**Dr. Anna Słońska-Zielonka**, Warsaw Univerity of Life Sciences, SGGW, **Poland**
18:15 - 18:30	Nanoparticles and Nanofibers/Polymer Conjugates for Antibacterial, Anti-corrosion and Drug Delivery Applications **W. Mamdouh**, J. Kegere, N. M. Elbaz, L. Ziko and R. Siam	**Prof. Wael Mamdouh**, The American University in Cairo, **Egypt**

June 27, 2018 **NanoMetrology 2018 - Session on Mathematical Modelling in Nanoscience and Nanotechnology**		
Session's Chairs: **Prof.Natalie Thamwattana, University of Newcastle, Australia** **Prof. Duangkamon Baowan, Mahidol University, Thailand** **Prof. James M Hill, University of South Australia, Australia**		
Conference Room 458		
14:00 - 14:30	Intercalating carbon nanotubes into graphene folds T. Dyer, **N. Thamwattana** and B. J. Cox	**Prof. Ngamta Thamwattana**, University of Wollongong, **Australia**
14:30 - 15:00	Energy behaviour of atomic force microscope cantilever system **D. Baowan**, K. Sumetpipat, B.J. Cox and J.M. Hill	**Dr Duangkamon Baowan**, Mahidol Univerisity, **Thailand**
15:00 - 15:15	Modeling of Polyoxometalates for Surface Fuctionalization: Nano-scale Interactions Controlling Macroscopic Features **G. De Luca**, M.Carraro, R. Amuso, R. Mancuso, J. Hoinkis, B. Gabriele, M. Bonchio and A. Figoli	**Dr. Giorgio De Luca**, University of Calabria, **Italy**
15:15 - 15:30	Modeling Realistic TiO2 Nanoparticles and Their Interaction with Water **D. Selli,** G. Fazio, G. Seifert and C. Di Valentin	**Dr. Daniele Selli**, University of Milano-Bicocca, **Italy**
15:30 - 15:45	Molecular Dynamics Simulation of Water-Graphene Nanofluid M. Mohammadi, M. Al-Wadhahi, A. M. Gujarathi, R. Al-Maamari and **G. R. Vakili-Nezhaad**	**Prof. G. Reza Vakili-Nezhaad**, Sultan Qaboos University, **Oman**
15:45 - 16:00	Dyadic Green Function based Model for Organic Light Emitting Diodes with Stratified Anisotropic Materials **X.H. Ke**, H.G. Gu, H.Jiang and S.Yuan Liu	**Mr. Xianhua Ke**, Huazhong University of Science and Technology, **China**
16:00 - 16:30	**Coffee Break / Posters Session I**	**Coffee Break Area**
16:30 - 16:45	Universality of Steric Effects of Electrolyte in Nano-confinement Rajni, I. S. Kang and **J. M. Oh**	**Dr. Jung Min Oh**, Institute for Basic Science, Center for Soft and Living Matter-Ulsan, **Rep. of Korea**
16:45 - 17:00	Solubilization of slovophobic polymer chains in interpolyelectrolyte complex cores of non-stoichiomeric co-assembled nanoparticles. Dissipative particle dynamics with explicit electrostatics **K. Procházka**, K. Šindelka, Z. Limpouchová and M. Lísal	**Prof. Karel Prochazka**, Charles University in Prague, **Czech Republic**
17:00 - 17:15	Determining the Schottky barrier in a metal/semiconductor interface by ab initio Ballistic Electron Emission Microscopy simulations **C. González**, P. de Andrés and F. Flores	**Dr. César González**, Autonoma University of Madrid, **Spain**
17:15 - 17:30	Molecular applications of nanomaterials: The case of ZnO and laser cooling **N.El-Kork**, C.Bradley, S. Mahmoud, M. Bechelany, P. Miele and M. Korek	**Dr. Nayla El-Kork**, Khalifa Univeresity of Science and Technology, **United Arab Emirates**
17:30 - 17:45	Properties of Ionic Liquid Mixtures **A.Vakilinejad**, Kh. Mahrami, M. Humaid and G. R. Vakili-Nezhaad	**Ms. Khansaa AlMahrami**, Sultan Qaboos University, **Oman**

June 28, 2018 Nanotech / Biotech Joint Plenary session II		
Amphitheatre H		
Session's Chairs: **Prof. Francesco Mutti, University of Amsterdam, The Netherlands** **Dr. Olivier Sandre, Institut Polytechnique de Bordeaux, France** **Dr. Jean-Olivier Durand, Institut Charles Gerhardt Montpellier, France** **Dr. Winnie Edith Svendsen, Technical University of Denmark, Denmark**		
08:30 - 09:00	From antibodies to Metal Organic Frameworks: a Full Set of Enveloppes for metal cofactors in order to build up new artificial metalloenzymes **J-P.Mahy**, W. Ghattas, F. Avenier and R. Ricoux	**Prof. Jean-Pierre Mahy**, Paris-Sud University, **France**
09:00 - 09:30	Expanding and exploring natural sequence space – from protein engineering to chemo-enzymatic cascade reactions C. Mügge, Á. Gomez-Baraibar and **R. Kourist**	**Prof. Robert Kourist,** Ruhr University Bochum, Germany/ Graz University of Techology, **Austria**
09:30 - 10:00	Design and Evolution of New Biocatalysts for Organic Synthesis **N. J. Turner**	**Prof. Nicholas Turner,** The University of Manchester**, UK**
10:00 - 10:30	Practical biocatalytic solutions for the design of chemoenzymatic and multienzymatic concurrent processes **V. Gotor-Fernández**	**Prof. Vicente Gotor-Fernandez**, University of Oviedo, **Spain**
10:30 - 11:00	**Coffee Break / Posters Session II**	**Coffee Break Area**
11:00 - 11:30	Nanomedicines for the treatment of cancer and neurological diseases **P. Couvreur**	**Prof. Patrick Couvreur,** UMR CNRS 8612, **France**
11:30 - 12:00	Nanotechnology against viral deseases **F. Stellacci**	**Prof. Francesco Stellacci,** Ecole Polytechnique de Lausanne, **Swizterland**
12:00 - 12:45	Applications of Artificial Intelligence in Biotech and Nanotech research **M. Cristovao**	**Dr. Michele Cristovao**, Springer Nature, **Germany**
12:30 - 14:00	**Lunch Break**	**Restaurant (Rue Basse)**

June 28, 2018, 13:45 - 13:55

Conference Group Photo

At the conference registration desk (located at Rue Haute)

All conference participants are requested to be present for the Conference Group Photo

June 28, 2018 Session II.A: Nanotechnology for life science		
Conference Room 109/110		
Session's Chairs: **Dr. Stéphane Mornet, Bordeaux University, France** **Prof. Rui Silva, University of Aveiro, Portugal** **Prof. Giulio Caracciolo, Sapienza University of Rome, Italy**		
14:00 - 14:30	Brain Structure and Function Combine to Create the Characteristics of a Bio-Metamaterial **S.D.Morgera**	**Prof. Salvatore Domenic Morgera**, University of South Florida, **USA**
14:30 - 15:00	Nanostructures for biological and environmental applications **W.E. Svendsen**	**Dr. Winnie Edith Svendsen,** Technical University of Denmark, **Denmark**
15:00 - 15:30	Clickable' Recombinant Spider Silk and its Healthcare Applications **N.R. Thomas**, D. Harvey, R. Earlam, P. Bardelang, S.L. Goodacre and A. Cockayne	**Prof Neil R. Thomas,** University of Nottingham, **UK**

15:30 - 16:00	Surface nanoengineering of intravenously administered inorganic nanoparticles L. Adumeau, C. Vecco-Garda, G. Clofent-Sanchez, C. Genevois, F. Couillaud and **S.Mornet**	**Dr. Stéphane Mornet,** ICMCB (UMR 5026 CNRS - Bordeaux University - Bordeaux INP), **France**
16:00 - 16:30	**Coffee Break / Posters Session II**	**Coffee Break Area**
16:30 - 16:45	Vitamin A palmitate-loaded NLC for cosmetic application **S. AlZahabi** and A.R. Ramadan	**Ms. Sham AlZahabi,** American Uni. Cairo, **Egypt**
16 :45-17 :00	Improving the Sensitivity of Buckypaper Strain Gauges through Tailoring their Porosity **R. Hassan**, N. El-Mansoury, M. Ismail, K. El-Shamsy, O. El-Said, M. Arafa and A. Esawi	**Mrs. Rufaydah Hassan**, American University in Cairo, **Egypt**

June 28, 2018

Session II.B: Nanomedecine- Bioimaging

Conference Room 111/112

Session's Chairs:
Dr. Valeria Grazú, University de Zaragoza, Spain
Prof. Wolfgang Ensinger, Technische Universitaet Darmstadt, Germany
Prof. Neil R. Thomas, University of Nottingham, UK
Prof. Jaebeom Lee, Pusan National University, Rep. of Korea

14:00 - 14:30	The iNAPO project: Biomimetic ion conducting polymer nanopores for bio-molecular and chemical sensing **W. Ensinger**, M. Biesalski, G. Buntkowsky, K. Hamacher, B. Laube, H. F. Schlaak, G. Thiel, Ch. Trautmann, N. van der Vegt and M. Vogel	**Prof. Wolfgang Ensinger**, Technische Universitaet Darmstadt, **Germany**
14:30 - 14:45	Confocal Laser Endomicroscopy Guided Photothermal/Photodynamic Therapy of Pancreatic Cancer **H. Li**, K. Yang and Y. Cheng	**Dr. Hui Li**, Shanghai Jiaotong University, **China**
14:45 - 15:00	Dual Metallofluorescent Nanoparticles for live cells assays **A. Delgado-Gonzalez**, E. Garcia-Fernandez, T. Valero, M.V. Cano-Cortes, M.J. Ruedas-Rama, A. Unciti-Broceta, A. Orte, R.M. Sanchez-Martin and J.J. Diaz-Mochon	**Mr. Antonio Delgado-Gonzalez**, University of Granada, **Spain**
15:00 - 15:15	Design of Polyelectrolyte Microcapsules Encoded with Excitonic Nanoparticles and Prospects of their Applications as Novel Bio-imaging and Theranostic Tools **G. Nifontova**, M. Zvaigzne, M. Baryshnikova, E. Korostylev, F. Ramos-Gomes, F. Alves, I. Nabiev and A. Sukhanova	**Dr. Galina Nifontova**, National Research Nuclear University MEPhI-Moscow, **Russia**
15:15 - 15:30	Development of new theranostic platforms based on carbon dots **M. Claudel**, J. Fan, F. Pons and L. Lebeau.	**Mr. Mickaël Claudel**, University of Strasbourg, **France**
15:30 - 15:45	Reduction of methemoglobin to oxyhemoglobin under influence of nanoparticles of perfluorocarbon emulsion and cytoflavin. **E.A. Manchenko**, E.K. Kozlova, A.M. Chernysh and V.A. Sergunova	**Mrs. Ekaterina Manchenko** V.A.Negovsky Scientific Research Institute of General Reanimatology- Moscow, **Russia**
15:45 - 16:00	Nanostructure as biomarkers for the diagnosis of donor blood during long-term storage. **V.A. Sergunova,** E.K. Kozlova, A.M. Chernysh and E.A. Manchenko	**Mrs. Victoria Sergunova**, V.A.Negovsky Scientific Research Institute of General Reanimatology- Moscow, **Russia**
16:00 - 16:30	**Coffee Break / Posters Session II**	**Coffee Break Area**
16:30 - 16:45	Novel Approach to Flow Label-Free Multiplex Biosensing via Photonic Crystal Surface Wave Detection Technique **I.O. Petrova**, V.N. Konopsky, Nabiev and A. Sukhanova	**Dr. Irina Petrova**, National Research Nuclear University MEPhI-Moscow, **Russia**
16:45 - 17:00	Feasibility of magnetic nanoparticles encapsulated inside carbon nanotubes for hyperthermia **R. Ghunaim**, S. Hampel, R. Klingeler and B. Büchner	**Ms. Rasha Ghunaim**, Leibniz Institute for Solid State and Material Research Dresden, **Germany**

17:00 - 17:15	Magnetic Nanozyme-Linked Immunosorbent Assay for Ultrasensitive Influenza A Virus Detection S. Oh, J. Kim, V.Tan Tran, D. Kyu Lee and **J. Lee**	**Prof. Jaebeom Lee**, Pusan National University, **Rep. of Korea**
17:15 - 17:30	Targeting and Killing of Leukemic Cells with Magnetic Nanowires **N. Alsharif**, J. Merzaban, T. Ravasi and J. Kosel	**Ms. Nouf Alsharif**, KAUST, **Saudi Arabia**
17:30 - 17:45	Bare Magnetic Nanoparticles for Protein Recognition **S. Schwaminger**, S. Blank-Shim, P. Anand, M. Borkowska-Panek, K. Fink, P. Fraga-García, W. Wenzel and S. Berensmeier	**Mr. Sebastian Schwaminger**, Technical Univ. of Munich, **Germany**

June 28, 2018 **Focused Session on Nanotechnology for drug and gene delivery**		
Conference Room 561		
Session's Chairs: **Dr. Olivier Sandre, Institut Polytechnique de Bordeaux, LCPO, France** **Dr. Sonia Trigueros, University of Oxford, UK**		
14:00 - 14:30	Magnetic Iron Oxide Nanoparticles Grafted by a Thermosensitive Peptide Brush: Uptake by Tumor Cells and Cytotoxicity by Magnetic Hyperthermia **O. Sandre**	**Dr. Olivier Sandre,** Institut Polytechnique de Bordeaux – LCPO, **France**
14:30 - 15:00	Nano-Delivery Overcoming the major challenges in Drug and Gene delivey **S. Trigueros**	**Dr. Sonia Trigueros,** University of Oxford, **UK**
15:00 - 15:30	Mesoporous silica, periodic mesoporous organosilica, and mesoporous silicon nanoparticles for drug delivery and two-photon Photodynamic Therapy **J-O. Durand**	**Dr. Jean-Olivier Durand** Institut Charles Gerhardt Montpellier, **France**
15:30 - 16:00	Nanotherapeutics for Targeted Elastic Matrix Regenerative Repair in Vascular Disorders A. Camardo, S.Carney, N. Sharma and **A.Ramamurthi**	**Dr. Anand Ramamurthi**, Cleveland Clinic, **USA**
16:00 - 16:30	**Coffee Break / Posters Session II**	**Coffee Break Area**
16:30 - 16:45	Challenges on the development of nanotherapeutics: biophysical studies to guide formulation development E.Fernandes, T.B. Soares, H.Gonçalves and **M. Lúcio**	**Dr. Marlene Lúcio** University of Minho, **Portugal**
16:45 - 17:00	Biophysical characterization based on biomimetic nanosystems/drug interactions: a new strategy for a rational drug design process **E. Fernandes**, S. Bernstorff and M. Lúcio	**Mrs. Eduarda Fernandes,** University of Minho, **Portugal**
17:00 - 17:15	Diclofenac interaction with lipid nanosystems as membrane models: a bio-physical assessment of in vitro profiling **T.B Soares**, E. Fernandes, S. Bernstorff and M. Lúcio	**Ms. Telma Bezerra Soares**, University of Minho, **Portugal**
17:15 - 17:30	Novel oxide nanomaterials for drug delivery through the blood-brain-barrier **W. Lipinski,** M.M. Godlewski, J. Kaszewski, Z. Gajewski and M. Godlewski	**Mr. Waldemar Lipinski**, Faculty of Veterinary Medicine- Warsaw, **Poland**
17:30 - 17:45	SiO2 nanoparticles as a vehicle for delivery of nucleoside triphos-phate analogues into cells **S. Vasilyeva**, A. Shtil, I. Grin and D. Stetsenko	**Dr. Svetlana Vasilyeva**, Siberian Branch of the Russian Academy of Sciences, **Russia**
17:45 - 18:00	Synthesis of PHA nanoparticles for drug delivery: optimizing the size distribution via the effect of the surfactant **V. Amstutz**, N. Hanik and M. Zinn	**Dr. Véronique Amstutz**, University of Applied Sciences and Arts Western Switzerland, **Switzerland**
18:00 - 18:15	A report on synthesis of NIR light responsive nanoparticles-in-microparticles by a double emulsion method: Photothermal and drug delivery use in future **M. Dhanka**, D. S Chauhan and R. Srivastava	**Mr. Mukesh Dhanka**, Indian Institute of Technology Bombay, **India**

June 28, 2018 Focused session on Nanomagnetism - Part I		
Conference Room 461		
Session's Chairs: **Dr. Claude Fermon, Institut Rayonnement-Matière de Saclay (Iramis), CEA, France** **Dr. Vincent Cros, Paris-Saclay University, France**		
09:00 - 09:30	Spin electronics based sensors for nanoparticle detection. **C. Fermon**, M. Giraud, F.D. Delapierre, G. Jasmin-Lebras, M. Roig, L. Fermon, J. Moulin, A. Solignac and M.Pannetier-Lecoeur.	**Dr. Claude Fermon**, Institut Rayonnement-Matière de Saclay (Iramis), **France**
09:30 - 10:00	The magnetic skyrmions: newcomers in spintronics **V. Cros**, W. Legrand, D. Maccarriello, J. Y. Chauleau, K. Garcia, S. Collin, K. Bouzehouane, N. Jaouen, N. Reyren and A. Fert	**Dr. Vincent Cros**, Paris-Saclay University, **France**
10:00 - 10:30	d-zero Magnetism in Nanostructures **J. M. D. Coey**	**Prof Michael Coey**, Trinity College Dublin, **Ireland**
10:30 - 11:00	**Coffee Break / Posters Session II**	**Coffee Break Area**
11:00 - 11:30	Coherence in electron spin chain: A potentential new kind of qubits C-E. Dutoit, J. Van Tol, M. Dressel, B. Barbara, A. Stepanov and **S. Bertaina**	**Dr. Sylvain Bertaina**, IM2NP - UMR 7334 CNRS, Faculté des Sciences et Techniques-Marseille, **France**
11:30 - 12:00	Magnon-based computing on the nano-scale **T. Brächer**	**Dr. Thomas Brächer**, Technical University Kaiserslautern, **Germany**
12:00 - 12:30	Ultrafast Lorentz Microscopy: A tool to study laser- and current-driven magnetization dynamics **M. Möller**, N.Rubian da Silva, J.H. Gaida, A.Feist, S. Schäfer, and C.Ropers	**Mr. Marcel Möller,** Göttingen University**, Germany**
12:30 - 14:00	**Lunch Break**	**Restaurant (Rue Basse)**

Workshop: SIESTA-PRO: Professional Software Ready for Industry		
Conference Room 461		
Session's Chairs: **Dr Monica Garcia Mota, Simune Atomistic Simulations, Spain** **Prof. Pablo Ordejón, ICN2 (CSIC and BIST), Spain**		
14:00 - 15:30	**M. García-Mota and P. Ordejon** The workshop covers the following topics: - Introduction to SIMUNE and SIESTA - SIESTA-PRO: SIESTA code ready for the industry - SIESTA code: main technical features - hints to perform and accurate and well-converged siesta calculation - input file. Principal siesta input parameter - pseudopotential - basis set. The delta-test - analyzing the results. Post-processing siesta output - round table discussion and closing remarks	**Dr Monica Garcia Mota**, Simune Atomistic Simulations, **Spain** **Prof. Pablo Ordejón,** ICN2 (CSIC and BIST), **Spain**

Focused session on Nanomagnetism - Part II		
Conference Room 461		
Session's Chairs: **Dr. Claude Fermon, Institut Rayonnement-Matière de Saclay (Iramis), France** **Dr. Vincent Cros, Paris-Saclay University, France**		
16:30 - 17:00	Magnetic Oxides-based Hetero-Nanostructured Ceramics: From Nanomaterial Engineering to Exchange-bias Coupling **S. Ammar**	**Prof. Souad Ammar**, Paris Diderot University, **France**
17:00 - 17:15	Strain-mediated all-magnetoelectric memory cell V.Preobrazhensky, L.Krutyansky, N.Tiercelin, **Y. Dusch**, P.Pernod and S.Giordano	**Dr. Yannick Dusch,** University of Lille, **France**
17:15 - 17:30	Probing Nanoscale Magnetic Properties Using a Pt-based Hall Device T.K. Hang Hang, M. Ribeiro, J. Hong Park and **T. Hee Kim**	**Prof. Tae Hee Kim**, Ewha Womans University, **Rep. of Korea**
17:30 - 17:45	Best of Two Worlds: Combination of Magnetic and Semiconducting Properties in (Ga,Mn)(Bi,As) Nanostructured Thin Films **K. Levchenko**, T. Andrearczyk, J. Sadowski, E. Lusakowska, J.Z. Domagala, M. Trzyna, R. Jakiela, I. Radelytskyi, J. Wrobel, T. Figielski and T. Wosinski	**Mrs. Khrystyna Levchenko**, Institute of Physics Polish Academy of Sciences, **Poland**

June 28, 2018 NanoMatEn 2018 - Session II.C: Nanomaterials for Energy / Nanoelectronics		
Conference Room 508		
Session's Chairs: **Prof Keon Jae Lee, KAIST, Rep. of Korea** **Prof. Sankara Sarma Tatipari, Indian Institute of Technology Bombay, India**		
09:00 - 09:30	Layered and 2D materials: electronic properties and structural instabilities from first principles **P. Ordejón**, B. Guster, M. Pruneda, R. Robles and E. Canadell	**Prof. Pablo Ordejón**, ICN2 (CSIC and BIST), **Spain**
09:30 - 10:00	Development of nanogenerators for mechanical energy harvesting and self-powrered electronics X. Yang, L. Wang and **W.A. Daoud**	**Prof. Walid Daoud,** City University of Hong Kong, **Hong Kong**
10:00 - 10:30	Self-powered flexible electronic systems **K. Jae Lee**	**Prof Keon Jae Lee**, KAIST, **Rep. of Korea**
10:30 - 11:00	**Coffee Break / Posters Session II**	**Coffee Break Area**
11:00 - 11:30	Circularly Polarized Luminescent Polymer Film Fabricated with Chiral Nano-fibrils **H. Ihara**, M. Takafuji, Y. Kuwahara, K. Yoshida, H. Oishi, Y. Okazaki and R. Oda	**Prof. Hirotaka Ihara**, Kumamoto University, **Japan**
11:30 - 12:00	Nanomaterials for High Temperature Photonics P. Dyachenko, S. Lang, G. Shang, Q.Y. Nguyen, M. Chirumamilla, K. Knopp, G. Vaidhyanathan, S. Molesky, H. Renner, A. Yu Petrov, Z. Jacob, M. Störmer, T. Krekeler , M. Ritter, G. Schneider, and **M. Eich**	**Prof. Manfred Eich**, Hamburg University of Technology, **Germany**
12:00 - 12:30	Metal Selenides as Efficient Cathodes for Dye-Sensitized Solar Cells **Z-S. Wang**	**Prof. Zhong-Sheng Wang**, Fudan University, **China**
12:30 - 14:00	**Lunch Break**	**Restaurant (Rue Basse)**
Session's Chairs: **Prof Keon Jae Lee, KAIST, Rep. of Korea** **Prof. Walid Daoud, City University of Hong Kong, Hong Kong** **Prof. Sankara Sarma Tatipari, Indian Institute of Technology Bombay, India**		
14:00 - 14:15	Efficient and Stable Flexible Perovskite Solar Cells with Nano-Engineered Solution-Processed NiO Hole-Transporting Layers C.-H. Hou, J.-J. Shyue, W.-F. Su and **F.-Y. Tsai**	**Prof. Feng-Yu Tsai**, National Taiwan University, **Taiwan**

14:15 - 14:30	Back-Contact Perovskite Solar Cells **U. Bach** and X. Lin	**Prof. Udo Bach**, Monash University, **Australia**
14;30 - 14:45	Control of Structural Ordering of InGaAs/AlGaAs Quantum Dots in MBE and Application to Intermediate Band Photovoltaics **Y. Okada**, A. Matsuoka, Y. Shoji and R. Tamaki	**Prof. Yoshitaka Okada**, University of Tokyo, **Japan**
14:45 - 15:00	Photochemical deposition of ZnS buffer layers for Cu(In,Ga)Se2 thin films solar cells via reusable solutions **S. Gallanti**, N. Loones, M. Bouttemy, A. Etcheberry, D. Lincot and N. Naghavi	**Dr. Serena Gallanti**, ECE Paris Engineering school, **France**
15:00 - 15:15	Optical up-conversion erbium-doped nanoparticles as coaters for solar cells efficiency improvement A. Hajjiah and **N. Shehata**	**Dr. Nader Shehata**, Alexandria University, **Egypt**
15:15 - 15:30	Ionic liquids confined in carbon nanotubes membranes: a route for a better electrolyte? **F. Ferdeghini**, Q. Berrod, P. Judeinstein and J.M. Zanotti	**Dr. Filippo Ferdeghini**, ECE-Paris Engineering School, **France**
14:30 - 14:45	Design of Different Polymer Electrolytes for Lithium Battery Application **A. Bozkurt**	**Prof. Ayhan Bozkurt**, Dammam University, **Saudi Arabia**
15:45 - 16:00	Size-dependent charge storage of graphene flakes **K F. Chong** and G. A. M. Ali	**Dr. Kwok Feng Chong**, Pahang Malaysia University, **Malaysia**
16:00 - 16:30	**Coffee Break / Posters Session II**	**Coffee Break Area**
Session's Chairs: **Dr. Olivier Schneegans, Paris Saclay University, CentraleSupélec, France** **Prof. Walid Daoud, City University of Hong Kong, Hong Kong**		
16:30 - 16:45	On the mechanism of dehydrogenation of MgH2 **S.S.V. Tatiparti** and S. Shriniwasan	**Prof. Sankara Sarma Tatipari**, Indian Institute of Technology Bombay, **India**
16:45 - 17:00	Tunnel Barrier Optimization for Room Temperature Operation of Single Electron Transistor R. Shah and **R. Dhavse**	**Dr. Rasika Dhavse**, SVNIT Surat, **India**
17:00 - 17:15	Storage Memory and Selector Functions in Silicon nitride Memristor **S.Kim**, M-H. Kim, T-H. Kim, S. Bang, D. Keun Lee,2 Y-J. Choi and B-G. Park	**Prof. Sungjun Kim**, Chungbuk National University, **Rep. of Korea**
17:15 - 17:30	Reduced Thermal Conductivity of Nanotwin Random Layer Structures: Effect of twin boundary for phonon localization **N. P. Samaraweera**, K. L. Chan and K. Mithraratne	**Mr. Nalaka Samaraweera**, The University of Auckland, **New Zealand**
17:30 - 17:45	Piezo-phototronic effect in III-Nitrides semiconductors and applications **W. Hu**	**Prof. Weiguo Hu,** Beijing Institute of Nanoenergy and Nanosystems- Chinese Academy of Science, **China**
17:45 - 18:00	Piezopotential Modulated Graphene Semiconductor Devices **Q. Sun**, Z.L.Wang and J. H. Cho	**Prof. Qijun Sun**, Beijing Institute of Nanoenergy and Nanosystems- Chinese Academy of Sciences, **China**
18:00 - 18:15	Environmental Impact Assessment of Triboelectric Nanogenerator Materials for Energy Harvesting M. A. Parvez Mahmud, **N. Huda**, S.H. Farjana and C. Lang	**Dr. Nazmul Huda**, Macquarie University, **Australia**
18:15-18:30	Piezophototronic Based Sensors and Applications **J. Zhai**	**Prof. Junyi Zhai,** Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Science, **China**

June 28, 2018 NanoMetrology France 2018 - Focused Session: Metrology of nanoparticles (NP) in Complex Media		
Conference Room 558		
Session's Chairs: **Dr. Carine Chivas-Joly, National Metrology and Testing Laboratory (LNE), France**		
09:15 - 09:30	**Opening session** - Introduction and presentation of the activities of the nanoMetrology Club by Presidents **Brice Gautier** and **Georges Favre** - New items "Metrological Characterization of Nanomaterials in Complex Media" by **Doru Constantin**, **Etienne Dague** and **Carine Chivas-Joly**	
09:30 - 10:00	Detection and quantification of engineered and natural nanoparticles in small sub-watersheds of Seine River **J. Wang**, E .Alasonati, P. Fisicaro and M. Benedetti	**Ms Jialan Wang**, National Metrology and Testing Laboratory (LNE), **France**
10:00 - 10:30	Following nanoparticles in complex turbid media **A.Mikhailovskaia**, J. Crassous, A. Salonen and D. Langevin	**Dr. Alesya Mikhailovskaia**, L'École supérieure de physique et de chimie industrielles, **France**
10:30 - 11:00	**Coffee Break / Posters Session II**	
11:00 - 11:30	Investigations of the hazard assessment of selected nano-objects used as additives for EVA-matrix nanocomposites **C. Chivas-Joly**, J. Pourchez, G. Sarry, L. Leclerc, C. Longuet, S. Delcour and J-M. Lopez-Cuesta	**Dr Carine Chivas-Joly**, National Metrology and Testing Laboratory (LNE), **France**
11:30 - 12:00	Designing plasmonic hard shells to control the self-assembly of gold nanorods into supercrystals **C. Hamon,** C.Goldmann and D. Constantin	**Dr. Cyrille Hamon**, Paris Sud University, **France**
12:00 - 12:30	Metrology of Nanoparticles with Small Angles X-Ray Scattering (SAXS) : from simple cases to nanoparticles in complex media **O. Taché**, V. Geersten, E. Barruet, O. Spalla and A. Thill	**Mr. Olivier Taché**,Univ Paris Saclay / LIONS NIMBE CEA, **France**
12:30 - 13:00	Infrared nano-imaging for intra-cellular cancer research and analysis of drug delivery **W. S. Hart**, A. Beckley, J. R. Brandt, S. Sundriyal, A. Zubiaurre, H. Amrania, M. J. Fuchter, E. O. Aboagye and C. C. Phillips	**Mr. William Hart**, Imperial College London, **UK**
12:30 - 14:00	**Lunch Break**	**Restaurant (Rue Basse)**
14:00 - 14:30	Probing lipid membrane nano-mechanics F. Bories, **D. Constantin**, P. Galatola and J.-B. Fournier	**Dr. Doru Constantin**, LPS, CNRS, Univ. Paris-Sud, Paris Saclay Univ., **France**
14:30 - 15:00	Nanoparticle concentration measurement is essential and, fortunately, quite easy to achieve **C. Roesch**	**Dr. Camille Roesch**, Izon Science Europe Ltd, **France**
15:00 - 15:30	Physicochemical characterization of nanomedicines and metrology: Evaluation of size and zeta potential **F. Varenne**, J. Botton, J.-B. Coty and C. Vauthier	**Dr. Fanny Varenne**, University Clermont Auvergne, **France**
15:30 - 16:00	Assessing the interactions between a single dendrimer and (bio)surfaces using atomic force microscopy **A. Beaussart**, C. Caillet, I. Bihannic and J.F.L. Duval	**Dr. Audrey Beaussart**, CNRS, University of Lorraine, **France**
16:00 - 16:30	**Coffee Break / Posters Session II**	**Coffee Break Area**

June 29, 2018 NanoMatEn2018 - Session III.A: Nanotechnology for Environmental Application / Water Treatment		
Conference Room 508		
Session's Chairs: **Prof. Marco Stoller, Sapienza University, Italy** **Prof. Marie-Odile Simonnot, University of Lorraine, France**		
08:30 - 09:00	Free-standing nanostructures at atomic scale: from growth mechanisms to local properties at the nanoscale **J. Arbiol**	**Prof. Jordi Arbiol**, ICREA and ICN2 (CSIC and BIST), **Spain**
09:00 - 09:30	TreAting contamination through NanoremedIAtion: the TANIA project **M.O. Simonnot**, N. Enjelvin, C. Vuidel, C. Chêne and J.L. Morel	**Prof. Marie-Odile Simonnot**, University of Lorraine, **France**
09:30 - 09:45	Physicochemical characterization of nanoparticles-containing spray coating generated by atomization process O.Fichera, **J. Mejia**, J. Laloy , L. Alpan , S. Lucas and J-M. Dogné	**Dr. Jorge Mejia**, University of Namur, **Belgium**
09:45-10:00	Bridging homogeneous and heterogeneous catalysis through MOF support platforms and other efforts to obtain new class of highly active recyclable catalysts. **S.T. Madrahimov**	**Dr. Sherzod T. Madrahimov**, Texas A&M University Qatar, **Qatar**
10:00 - 10:30	**Coffee Break**	**Coffee Break Area**
10:30 - 10:45	Carbide core-shell nanostructures for oxygen reduction reaction **Z. Zhang**, A. Sadeghi, N. Brodusch, R. Gauvin, S. Ye, J. Gostick, J. E Barralet and G. Merle	**Mr. Zishuai Zhang,** McGill University, **Canada**
10:45 - 11:15	Case studies of different wastewater treatment processes by means of nanotechnologies **M. Stoller**	**Prof. Marco Stoller**, Sapienza University, **Italy**
11:15 - 11:45	Nanotubular and nanoporous titanium dioxide films for photocatalytic applications B.E. Sanabria, A. Strini, L. Schiavi, **M.V. Diamanti** and MP. Pedeferri	**Prof. Maria Vittoria Diamanti**, Milano Poltechnic Institute, **Italy**
11:45 - 12:00	Nanocomposites for the Removal of Radioactive Cesium from Water and their Applications **C. Roh**	**Prof. Changhyun Roh,** Korea Atomic Energy Research Institute (KAERI), **Rep. of Korea**
12:00 - 12:15	Study of modified electrodes with silver and gold nanoparticles to determine heavy metals in polluted waters **K. Torres-Rivero,** A. Espriu-Gascon, J. Bastos-Arrieta, L. Torralba, M. Martínez and A. Florido	**Mrs. Karina Torres-Rivero**, Polytechnic University of Catalonia, **Spain**
12:15 - 12:30	Zn-ferrite nanoparticles, potential photocatalysts for water depollution: Why do we still need detailled structural characterizations **A. Jezzini**, T. Hamieh, J. Toufaily, A. Davidson, C. Jolivalt, L. Valentin, M. Selmane, G. Wallez, J.M. Greneche and R. Cole	**Ms. Aya Jezzini**, Sorbonne University, **France**
12:30-12:45	Synthesis of Polysulfone/Carbon Nanotubes-Polyamide Thin film Nano-composite Membranes for Forward Osmosis Applications **A.O. Rashed**, A.M.K. Esawi and A.R. Ramadan	**Mr. Ahmed O. Rashed**, The American University in Cairo, **Egypt**

June 29, 2018 NanoMatEn 2018 - Session III.B: Nanomaterials for Clean and Sustainable Technology		
Conference Room 561		
Session's Chairs: **Dr. Michael Holzinger, University Grenoble Alpes, France**		
09:00 - 09:30	Porous carbon nanostructures for biological energy conversion and the utility of glucose biofuel cells. **M. Holzinger**	**Dr. Michael Holzinger**, CNRS-University Grenoble Alpes, Departement of Molecular Chemistry, **France**
09:30 - 09:45	Ultralow lattice thermal conductivity and high thermoelectric performance of polycrystalline SnSe **I. Chung**	**Prof. In Chung**, Seoul National University, **Rep. of Korea**
09:45 - 10:00	Effect of the electrode polarization on the water properties in the system with and without glow discharge electrolysis **S. Sato** and M. Ohuchi	**Dr. Shuichi Sato**, Tokyo Denki University, **Japan**
10:00 - 10:30	**Coffee Break**	**Coffee Break Area**
10:30 - 10:45	Glucose Effect on Controlling TiO2 Physicochemical Properties for CO2 Reduction by UV/Vis Light Irradiation **N. U. M. Nor** and N. A. S. Amin	**Prof. Nor Aishah Saidina Amin**, University of Technology of Malaysia**, Malaysia**
10:45 - 11:00	Various Nanocatalysts for Catalytic Furfural Hydrogenation **K. An**	**Dr. Kwangjin An**, Ulsan National Institute of Science and Technology, **Rep. of Korea**
11:00 - 11:15	LaMnO3 perovskite/reduced graphene oxide nanocomposites for supercapacitor electrode application **Z. A. Elsiddig**, W. Zhang and J. Chen	**Mr. Zuhair A. Elsiddig**, Jiangsu Key Laboratory for Advanced Metallic Materials-Southeast University, **China**
11:15 - 11:30	Scattering Parameters and Dielectric Properties of Nano Barium Ferrite Microwave Absorber Composite **H. Al-Mattarneh** and M. Dahim	**Prof. Hashem Al-Mattarneh**, King Khalid University, **Saudi Arabia**
11:30 - 11:45	Surface Oxygen Vacancy Assisted Visible Light-induced Photocatalytic Dye Degradation and Photocapacitive Performance of CeO2-Graphene Nanostructures **M.E.Khan**, M.M. Khan and M.H.Cho	**Mr. Mohammad E. Khan**, Yeungnam University, **Rep. of Korea**
11:45 - 12:00	Biowaste-derived carbon functionalized with polyaniline: Recy-cling to multifunctional applications **S. Goswami**, S. Nandy, E. Fortunato and R. Martins	**Dr. Sumita Goswami,** Nova da Lisboa University, **Portugal**

June 29, 2018 Session III.C: NanoMedecine / Nanosafety		
Conference Room 558		
Session's Chairs: **Dr. Jean-Olivier Durand, Institut Charles Gerhardt Montpellier, France** **Dr. Sonia Trigueros, University of Oxford, UK**		
09:00 - 09:30	Short, long term fate and biodegradation of IONPs in vivo **V. Grazú** and J. M. de la Fuente	**Dr. Valeria Grazú,** University de Zaragoza and CIBER-BBN, **Spain**
09:30 - 09:45	Nanoparticle delivery of drugs for Tuberculosis **I.L. Batalha**, A. Bernut, R.A. Floto and M.E. Welland	**Dr. Iris Batalha**, University of Cambridge, **UK**
09:45 - 10:00	Synthesis of Gold Nanovehicles for Con-trolled Drug Delivery Applications **R. Lopes Rodrigues**, F.Xie, A. Porter and M. Ryan	**Ms. Rosalia L. Rodrigues**, Imperial College London, **UK**
10:00 - 10:30	**Coffee Break**	**Coffee Break Area**

10:30- 11:00	Nanopattern improves chondrogenesis for cartilage regeneration. I.Casanellas, A. Lagunas, I. Tsintzou, Y. Vida, D. Collado, E. Pérez-Inestrosa, C. Rodríguez Pereira, J. Magalhaes and **J.Samitier**	**Prof. Josep Samitier Martí**, Institute for Bioengineering of Catalonia (IBEC), **Spain**
11:00 - 11:15	Characterization of the interaction of graphene oxide with the mammalian sperm membrane **J.Simões**, M.Ramal Sanchez, R. Zappacosta M. Ciulla, A.Di Stefano, A. Fontana, P. Lanuti, E.Ercolino, M. Marchisio, G. Capacchietti, L. Valbonetti, N. Bernabò and B. Barboni	**Ms Juliana Simões**, University of Teramo, **Italy**
11:15 - 11:30	A Potential Approach to Assess and Control the Potential Risks Related to Nanomaterials **C. Schimpel**, S. Resch and A. Falk	**Ms. Christa Schimpel**, BioNanoNet, **Austria**
11:30 - 11:45	Tuball ™ Single wall Carbon Nanotubes: Health, Safety & Environmental issues **G. Van Kerckhove**	**Mr. Gunther Van Kerckhove**, OCSiAl Europe Sarl, **Luxembourg**
11:45 - 12:00	Review of human health risk assessment models considering their input requirements and applicability suring nanomaterial product development results from the EU H2020 'CALIBRATE' project **T. Oosterwijk**, R. Franken, M. Heringa, I. Rodriguez, A. Saämanen, T. Kanerva, M. Dal Maso, M. Poikkimaki, K.A. Jenssen, C. de Jong-Rubingh, R. Stierum and W. Fransman	**Mr. Thies Oosterwijk**,TNO, Risk Assessment of Products In Development, **The Netherlands**

June 29, 2018 **Session III.D: Nanomaterials for food applications**		
Conference Room 461		
Session's Chairs: **Dr Clara Silvestre, ICTP/CNR, Naples, Italy** **Dr. Giovanna G. Buonocore, ICTP/CNR, Naples, Italy**		
09:00 - 09:30	Nanotechnology in the food packaging sector: recent applications and future trends **A.Sanches Silva**	**Dr. Ana Sanches Silva**, National Institute of Agrarian and Veterinary Research, **Portugal**
09:30 - 10:00	Active biopolymer film or coating for food packaging application: structure-properties relationship and shelf life extension **E. Torrieri**	**Prof. Elena Torrieri**, University of Naples Federico II, **Italy**
10:00 - 10:30	**Coffee Break**	**Coffee Break Area**
10:30 - 10:45	PAA.PVA-PAMAM bio-nanocomposite films incorporating thymol for food packaging **G. Amariei**, K. Boltes, I. Iriepa, I. Moraleda, P. Letón and R. Rosal	**Ms. Georgiana Amariei** University of Alcalá, **Spain**
10:45 - 11:00	A novel antibacterial strategy based on oxide nanoparticles for medical and food-related polygraphy **J. Cymerys-Bulenda**, R. Pietuszka, A. Słońska-Zielonka, S. Gierałtowska, B.S. Witkowski, Z. Gajewski, M. M. Godlewski and M. Godlewski	**Dr. Joanna Cymerys-Bulenda**, Warsaw University of Life Sciences – SGGW, **Poland**

Posters Session I: June 27, 2018
Nanomaterials synthesis, characterization/Nanometrology and properties

Exhibition and Posters Hall

N.	Title	Author/Affiliation/Country
1	Preparation and Characterization of AlOOH-based Nanocrystalline Film on Aluminum Alloy **A. Serizawa**, K. Watanabe, T. Oda and T. Ishizaki	**Prof. Ai Serizawa**, Shibaura Institute of Technology, **Japan**
2	Dynamic behavior of water droplet on hydrophobic surfaces covered with two organic silane molecules with alkyl chain **T. Ishizaki**, S.Hisada and A. Takada	**Prof. Takahiro Ishizaki**, Shibaura Institute of Technology, **Japan**
3	Quantitative analysis of point and lattice defects in Si0.6Ge0.4 alloys with thickness variation using Terahertz Pump probe measurement **JH. Kim**, . KS. Jeong and MH. Cho	**Mr. Jong Hoon Kim**, Yonsei University, **Rep.of Korea**
4	A Combination of PVD and PECVD Techniques for Deposition of CrNx Coatings and Metal Oxide Top-Coats on Polymers M. A. Neto, M. S. Rodrigues, J. Borges, F. Vaz, M. Amaral, A. Ferreira, L. Godinho, M. A. Valente, L. C. Costa, M. P. F. Graça, A.V. Girão, F. J. Oliveira and **R.F. Silva**	**Prof. Rui Silva**, University of Aveiro, **Portugal**
5	Hydrophobic/oleophobic coating of polydimethylsiloxane from modified silica nanoparticles **C. Sanfona**, G. Borja, G. Romero, L. Bautista, D. Amantia, L. Aubouy, N. Ferrer, J. Rius and A. Canet	**Ms. Carolina Sanfona**, Leitat Technological Center, **Spain**
6	The corrosion studies of Ni/Al2O3 and Ni/Al2O3/PTFE composite coatings in anti-icing environments B. Kucharska and **J. R. Sobiecki**	**Prof. Jerzy Sobiecki**, Warsaw University of Technology, **Poland**
7	Adsorption and Penetration of Nano-dispersed Super Hydrophobic Colorants into High Molecular Weight Polyethylene **T. Kim**, E. Jeong, J. Bae, J.Lee, J. Park and J. Lee	**Prof. Taekyeong Kim**, Kyungpook National University, **Rep.of Korea**
8	Enhanced Barrier Property of Poly(vinyl chloride) Film by Nano-confinement effects of graphene oxide nanoribbons **H-J. Jin**	**Prof. Hyoung-Joon Jin**, Inha University, **Rep.of Korea**
9	Fabrication of polyaniline-graphene/polyvinyl alcohol nanocomposites for flexible gas sensor **J.Bhadra**, A. Popelka, A. Abdulkareem and N. Al-Thani	**Dr. Jolly Bhadra,** Qatar University, **Qatar**
10	Natural Polymer Gate Dielectrics for Low-voltage Organic Thin Film Transistors **S. Park** and T. Kyu An	**Ms.Sejin Park**, Korea National University of Transportation, **Rep. of Korea**
11	Gas molecule sensing of van der Waals tunnel field effect transistors **H.K. Choi**, J. Park, N. Myoung and Y-J. Yu	**Dr. Hong Kyw Choi**, Metal-Insulator Transition and Quantum Lab-Daejeon, **Rep.of Korea**
12	Preparation and Luminescence of (Ba,Sr)1.3Ca0.7SiO4:Eu2+,Mn2+, Dy3+ powders for Warm White Light-Emitting Diodes J. Kim and **Y.J. Kim**	**Prof. Young Jin Kim**, Kyonggi University, **Rep.of Korea**
13	Graphene Nanoflake Inks Fabrication, Characterization and Use in a Solar Energy Application **N. Hickman**, I. Kravchunovska and B. Guo	**Prof. Nicoleta Hickman**, Florida Polytechnic University, **USA**
14	Reliability of pre-deformed flexible-printed electrodes by silver nano-particle inks under temperature and humidity conditions **C. H. Kim**, J. Y. Kim and C. Kim	**Prof. Chung-Hwan Kim**, Chungnam National University, **Rep. of Korea**
15	Influence of dispersion solvent in catalyst ink of polymer electrolyte membrane fuel cell on Ionomer distribution J.H.Lee and **S. Geol Lee**	**Prof. Seung Geol Lee**, Pusan National University, **Rep. of Korea**
16	Influence of the TixAly/a-Si:H Interlayer on the Adhesion of DLC Coatings on Stainless Steel Substrates **W.S. Hincapie**, G. Capote, J.J. Olaya and V.J. Trava-Airoldi	**Mr. Williams Hincapie**, National University of Colombia, **Colombia**

17	Nanoporous anodic alumina membrane modified with Chitosan and copper nanoparticles and its use as three-dimensional matrix for the degradation of the industrial dye Methylene Blue **B. Duran**, S. Hevia and C. Saldías	**Dr. Boris Duran**, Pontifical Catholic University of Chile, **Chile**
18	Effects of Halloysite on Morphological and Properties of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/ Poly(butylene succinate) Blends **C. Remili**, S. Kennouche, L. Zaidi, M. Kaci and J.M. Lopez-Cuesta	**Dr. Cherifa Remili**, Bejaia University, **Algeria**
19	Biofunctionalized nanoscintillator for medical applications **E. Mihóková**, K. Popovich, L. Procházková, I.T. Pelikánová, V. Čuba, I. Jakubec,K. Tomanová,1,2 R. Dědic,4 M. Nikl1	**Dr. Eva Mihóková**, Institute of Physics, Czech Academy of Sciences, **Czech Republic**
20	Properties evaluation of Cu-based composite material by electroless plating **J-H. Jang**, H-K. Park, J-H. Lee, J-W. Lim and I-H. Oh	**Dr. Junho Jang**, Korea Institute of Industrial Technology, **Rep. of Korea**
21	Property evaluation of Ti-based target materials and their nitride nanocomposites coating layer **J-H. Lee**, H-K. Park, J-H. Jang and I-H. Oh	**Mr. Jeong Han Lee**, Korea Institute of Industrial Technology, **Rep. of Korea**
22	Nano-formulations of encapsulating Essential Oils in polymeric nano-carriers with antioxidant and antibacterial properties **A. Shetta** and W. Mamdouh	**Dr. Amro Shetta**, The American University in Cairo, **Egypt**
23	New Synthetic Route for the Preparation of Highly Ordered Multilayer Metal Membranes S. Pinilla, T. Campo, J.M. Sanz, F. Márquez and **C. Morant**	**Dr. Carmen Morant**, Autonomous University of Madrid, **Spain**

Posters Session II: June 28, 2018 NanoBioMedecine / Nanosafety		
Exhibition and Posters Hall		
1	Conductance measurements in Laponite-stabilized internally self-assembled particles in water. **C. Barth**, T. Dégousée, S. Gallanti and F. Muller	**Dr. Céline Barth**, ECE-Paris Engineering School, **France**
2	Capture and growth of cells on the ligand modified polystyrene chips coated with agarose and agarose/gelatin **M.K. Lee** and J. Jeong	**Dr. Myung Kyu Lee**, Korea Research Institute of Bioscience and Biotechnology, **Rep. of Korea**
3	Selective Claudin-4 Targeting of Clostridium Perfringens Entero-toxin (CPE)-conjugated Poly-sialic acid Nanoparticles for effective pancreatic cancer therapy M.K. Shim, I.K. Cho, K. Kim and **J-H. Kim**	**Prof. Jong-Ho Kim**, Kyung Hee University, **Rep. of Korea**
4	Silver-Polyvinyl Pyrrolidone (Ag-PVP) Nanoparticles Exhibit Antibacterial Activity against Chlamydia muridarum in Mouse J774 Macrophages S.Dixit, S. R. Singh and **V.A. Dennis**	**Dr. Vida A. Dennis,** Alabama State University, **USA**
5	Numerical optimization of the carboplatin encapsulation into Boron Nitride nanotubes **J. Bentin** and F. Picaud	**Mr. Jeremy Bentin**, University of Bourgogne-Franche-Comté, **France**
6	A new neural-cell specific peptide for targeted delivery of drug-loaded nanoparticles **R. Huey**, D. Rathbone, P. McCarron and S. Hawthorne	**Ms. Rachel Huey**, Ulster University, **UK**
7	Cationized Polymer (dCatAlb) Encrusted Nanoformulation enhance the chemotherapeutic activity of Doxorubicin V. Jhonson, **N. Raval**, P.Gondaliya, V.Tambe, K.Kalia and R. Tekade	**Ms. Nidhikumari Raval**, National Institute of Pharmaceutical Education and Research, **India**
8	Self-assembled Polymeric Nanoparticles for Targeting Mitochondrial Complex II K. Kwon, G. Battogtokh, Y.-Y. Cho, J. Y. Lee, H. S. Lee and **H. C. Kang**	**Prof. Han Chang Kang**, The Catholic University of Korea, **Rep. of Korea**
9	Customized D2B-gold coated Nanoparticles: promising therapeutic agents against prostate cancer. M. Sarkis, G. Minassian, H. Naim, G. Fracasso, J.D. Holmes, K. Rahme and **E.Ghanem**	**Dr. Esther Ghanem**, Notre Dame University, **Lebanon**
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13	Gold nanoparticle-based colorimetric immunosensor for estradiol **A. Minopoli**, B. Della Ventura, C. Schiattarella, N. Sakač and R. Velotta	**Mr. Antonio Minopoli**, University of Naples "Federico II", **Italy**
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17	Development of X-shaped DNA as an immune adjuvant for the cancer immunotherapy through dual activation of TLR9 and inflammasomes J.E. Koo, H.E. Lee, S.H. Eom, H.C. Kang, Y-Y. Cho, H.S. Lee and **J.Y. Lee**	**Dr. Joo Lee**, The Catholic University of Korea, **Rep.of Korea**
18	The Studies of Interaction Between Influenza Viruses and Surface of Nanocomposite PolyGraphene. **A.S. Botin**, V.N. Buravtsev, V.T. Ivanova, Ya.E. Kurochkina, L.A. Baratova, A.V. Timofeeva and T.S. Popova	**Dr. Alexander Botin**, Peoples' Friendship University of Russia, **Russia**

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20	Enhanced performance of non-fullerene ternary organic solar cells **Y-Y. Yu** and T-W. Tsai	**Prof. Yang-Yen Yu**, Ming Chi University of Technology, **Taiwan**
21	Polysilsesquioxane-Derived Hybrid Gel Polymer Electrolytes for Lithium Ion Batteries A.S. Lee, J.H. Lee, C.M.Koo and **S.S. Hwang**	**Dr. Seung Sang Hwang**, Korea Institute of Science and Technology, **Rep.of Korea**
22	Novel modulating the concentrations of zinc oxide nanowires using electron beam **Y-S Cho** and H. Ji	**Mr. Young-Seung Cho**, Samsung Electronics/ Sungkyunkwan University, **Rep. of Korea**
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24	The Synthesis & Analysis of Two Long Lasting Phosphorescent Compounds: SrAl2O4:Eu2+,Dy3+ **G. Alsaleem**	**Mrs. Ghayah Alsaleem**, University College Dublin, **Ireland**
25	CMOS Compatible Sensor for the Electrostatic Selectivity of Volatile Organic Compounds **N. Mahapatra**, A. Ben-Cohen, A. Henning, N. Swaminathan, H. Greenspan and Y. Rosenwaks	**Dr. Niharendu Mahapatra**, Tel Aviv University, **Israel**
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28	Endurance measurements of LixCoO2-based ReRAM cells V.S. Nguyen, V.H. Mai, A. Moradpour, P. Auban Senzier, C. Pasquier, K. Wang, M.J. Rozenberg,...and **O. Schneegans**	**Dr. Olivier Schneegans**, CNRS/ UPMC/Paris Saclay University, CentraleSupélec, **France**
29	Effect of nanofluidic electrolytes on the electrochemical reaction of vanadium redox flow batteries **J. Kim** and H. Park	**Mr. Jungmyung Kim**, Changwon National University, **Rep. of Korea**
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33	Significant COS adsorption ability on K-AC composite and adsorption mechanism analysis **J. Kim**, J. Y. Do, N. K. Park, J. P. Hong and M. Kang	**Mr. Junyeong Kim**, Yeungnam University, **Rep. of Korea**
34	Spin Hall Effects in Antiferromagnets **S. Gulbrandsen**	**Mr. Sverre Gulbrandsen**, Norwegian Univ. of Science and Tech., **Norway**

35	Preparation and characterization of poly(vinyl chloride)-montmorillonite clay composite membranes for water purification **M.M. Alghamdi**, A.A. Zahar and B.M. Aseery	**Dr. Majed M. Alghamdi**, King Khalid University, **Saudi Arabia**
36	Pavement Material Incorporated Nono Fly Ash Filler M. Dahim and **H. Al-Mattarneh**	**Prof. Hashem Al-Mattarneh**, King Khalid University, **Saudi Arabia**
37	Use of SiO2 Nanoparticles for Vanadium and Niquel separation from crude oil **V. Vargas**, J. Castillo, R. Ocampo Torres, C-P. Lienemann and B. Bouyssiere	**Dr. Vicmary Vargas**, Central University of Venezuela, **Venezuela**
38	Biopolymer nanofiber doped with nanospinels by electrospinning and microbiological assays E. Vanegas, **C. Cruzat**, D. Peña, R. Arrue, N. Novoa, G. Pauta, D. Ponce and O. Peña	**Dr. Christian Cruzat**, University of Cuenca, **Ecuador**