TENTATIVE PROGRAM

Last Update - November 20, 2017

Wednesday November 22, 2017

08:00-09:00	**Registration**	
09:00-09:10	**Opening Ceremony**	
09:10-09:40	**Arben Merkoçi** (ICN2, Spain) Health and environment diagnostics using paper-based nanobiosensors	K
09:40-10:00	**Anna Laromaine** (ICMAB-CSIC, Spain) Bacterial cellulose, a natural polymer for biological applications	I
10:00-10:30	**Kostas Kostarelos** (The University of Manchester, UK) Learning the pharmacology and toxicokinetics of biologically-relevant graphene materials	K
10:30-11:00	**Coffee Break, Poster Session & Exhibition**	
11:00-11:30	**Samuel Sánchez** (IBEC, Spain) Enzyme Catalysis to Power Nanovehicles Towards Nanomedicine	K
11:30-11:45	**Jose M. Lagaron** (CSIC, Spain) Novel poly(ε-caprolactone)/gelatin wound dressings prepared by emulsion electrospinning with controlled release capacity of Ketoprofen anti-inflammatory drug	O
11:45-12:00	**Carolina Carrillo Carrion** (CIC biomaGUNE, Spain) Self-assembled nanoclusters of fluorinated quantum dots as delivery platform for enzymes	O
12:00-12:15	**Martha Vázquez González** (Bicosome, Spain) Smart drug delivery system that targets the epidermis and follicles	O
12:15-12:30	**Anna Scomparin** (Tel Aviv University, Israel) Combination of Dendritic Cell-targeted Nano-vaccines with Immune Checkpoint Therapy for Melanoma	O
12:30-12:45	**Solène Passemard** (Institute of Material Science of Barcelona-CSIC, Spain) Improvement of the Enzymatic Activity of α-Galactosidase Using Nanovesicles with application to Fabry Disease treatment	O
12:45-13:45	**Cocktail Lunch - Poster Session & Exhibition**	
13:45-14:15	**Poster Session & Exhibition**	
14:15-14:45	**Kenneth Dawson** (CBNI - University College Dublin, Ireland) Microscopic Molecular Foundations of nano particle interactions with living systems	K
14:45-15:15	**Danny Porath** (The Hebrew University of Jerusalem, Israel) Novel DNA-Based Molecules and Their Charge Transport Properties	K
15:15-15:45	**Jurriaan Huskens** (University of Twente, The Netherlands) General-purpose, functionalized poly-L-lysine polymers as bio-sensing layers, and their use in DNA detection	K
15:45-16:15	**Coffee Break, Poster Session & Exhibition**	
16:15-16:45	**Ofra Benny** (The Hebrew University of Jerusalem, Israel) Mechanical cues affecting interactions of nanoparticles with tumor cells	K
16:45-17:15	**Julian Carrey** (INSA-Toulouse, France) Killing cancer cells using nanoparticles submitted to high- and low-frequency magnetic fields	K
17:15-17:45	**Álvaro Somoza** (IMDEA Nanociencia, Spain) Smart Nanoparticles for the Treatment of Cancer	K

17:45-18:15	**María J. Vicent** (Príncipe Felipe Research Center, Spain) Versatile Star-shaped Polypeptide Conjugates with Controlled Self-assembly as Single Agents and in Combination Therapy	K
18:15-18:45	**Orit Shefi** (Bar-Ilan University, Israel) Magnetic Manipulations for Controlling Neuronal Engineering and Regeneration	K
18:45-19:00	**Marina Pöttler** (University Hospital Erlangen, Germany) Magnetic tissue engineering of the vocal fold: generation of 3D cell constructs using superparamagnetic iron oxide nanoparticles	O
19:00-19:15	**Meder Kamalov** (University of Vienna, Austria) Biomimetic Synthesis of Functionalized Silica Particles	O

Thursday November 23, 2017

09:00-09:30	**Silvia Muro** (IBBR and Bioengineering - University of Maryland, USA) Receptor-Targeted Drug Delivery: Biological Mechanistic and Applications	K
09:30-09:45	**Tania Patiño** (Institute for Bioengineering of Catalonia (IBEC), Spain) Unravelling fundamental aspects of enzyme-powered micro-&nanomotors: towards biomedical applications	O
09:45-10:00	**Gabriela Calderó** (CIBER-BBN, Barcelona Spain / Institut de Química Avançada de Catalunya., Spain) Nano-emulsions as Microbubble Precursors for Biomedical Applications	O
10:00-10:15	**Fabrice Reuven Sultan** (MERCK CHIMIE SAS, France) New very small magnetic microspheres in Medical Applications	O
10:15-10:30	**Julia Xiaojun Zhao** (University of North Dakota, USA) Graphene-based Nanomaterials for Biomedical Applications	O
10:30-11:00	**Zvi Hayouka** (The Hebrew University of Jerusalem, Israel) Development of novel antimicrobial agents for several applications	K
11:00-11:30	**Coffee Break, Poster Session & Exhibition**	
11:30-11:50	**Jagoba Iturri** (BOKU, Austria) Atomic Force Microscopy as a tool for Studying Cell (and Cell Scaffold) Mechanics	I
11:50-12:10	**Francisco Porto** (Leica Microsystems, Spain) The DMi8S: an open inverted microscopy platform	I
12:10-12:25	**Christoph Geers** (Adolphe Merkle Institute, Switzerland) Detection and characterization of nanoparticles in biological systems via stimuli-induced heating	O
12:25-12:40	**Archana Ramadoss** (Nanolane, France) SEEC technology mediated label-free nano-biofilm characterization	O
12:40-12:55	**Philip Schäfer** (neaspec GmbH, Germany) Exploring biological micro- and nanostructures using infrared nanospectroscopy (nano-FTIR)	O
12:55-13:10	**Dedy Septiadi** (Adolphe Merkle Institute, Switzerland) 4D live cell imaging to study cellular interplay in a 3D lung model upon (nano)particle exposure	O
13:10-13:25	**Miguel Spuch-Calvar** (Adolphe Merkle Institute, Switzerland) Nanoparticle Detection in Consumer Products	O
13:25-13:40	**Enrique Navarro** (Bioinicia S.L., Spain) Electrospinning and Electrospraying applications in pharma and in the BioSpace. Some real practical cases	O
13:40-14:10	**Massimo De Vittorio** (CBN/IIT, Italy) Tapered optical probes and optrodes for optogenetics and neurophotonics	K
14:10-15:10	**Lunch**	

15:10-15:40	**Laura Lechuga** (ICN2, Spain) The potential of photonic point-of-care nanobiosensors for high-value diagnostics	K
15:40-16:10	**Avi Schroeder** (Technion, Israel) Barcoded nanoparticles for personalizing anti-cancer medicine in the primary tumor and metastasis	K
16:10-16:40	**Veronique Preat** (Université catholique de Louvain, Belgium) Nanomedicines for the local and targeted treatment of glioblastoma	K
16:40-17:10	**Duncan Graham** (University of Strathclyde, UK) Nanoparticle based analysis of biomolecules, cells and tissue	K
17:10-17:40	**Coffee Break, Poster Session & Exhibition**	
Parallel Session I		
17:40-17:55	**Linda Angela Zotti** (Universidad Autónoma de Madrid, Spain) Electron transport through peptides and blue-copper azurins	O
17:55-18:10	**Thorsten Knoll** (Fraunhofer Institute of Biomedical Engineering, Germany) Multimodular in vitro platform for evaluating the effects of nanoparticles on the human body	O
18:10-18:25	**Seunghwan Lee** (Technical University of Denmark, Denmark) Micro-to-Nanoscale Mechanical Properties of Pig Intestine and Gastric Mucus as Studied with Atomic Force Microscopy	O
18:25-18:40	**Thomas Moore** (Adolphe Merkle Institute / University of Fribourg, Switzerland) Shoot it or dilute it: Administration method in cell culture alters particle-cell interaction	O
18:40-18:55	**Valery Pavlov** (CIC BiomaGUNE, Spain) Optical and Electrochemical Bioassays Using Photo-catalytical Activity of Semiconductor Quantum Dots	O
18:55-19:10	**Carlos Elvira** (Institute of Polymer Science & Technology, CSIC, Spain) Design and synthesis of polymeric vectors improving transfection efficiency in gene therapy applications	O
19:10-19:25	**Pilar Rivera Gil** (Pompeu Fabra University, Spain) Theranostic nanocapsules for hyperthermia	O
Parallel Session II		
17:40-17:55	**Andrea Bernardos** (Interuniversity Research Institute for Molecular Recognition and Technological Development, Spain) Senescent-associated nanoparticles as therapeutic derivatives	O
17:55-18:10	**Helena Florindo** (Universidade de Lisboa, Portugal) Impact of multicomponent nano-vaccine on immune modulation against solid tumors	O
18:10-18:25	**David Limón** (Universitat de Barcelona, Spain) Slow microscale coiling in bis-imidazolium supramolecular hydrogel fibres induced by release of a cationic serine protease inhibitor	O
18:25-18:40	**Loris Rizzello** (University College London, UK) Targeting mononuclear phagocytes for eradicating intracellular parasites	O
18:40-18:55	**Dionysia Tsoutsi** (Universitat Pompeu Fabra, Spain) Hyperspectral microscopy for single and collective nanoparticle characterization in biological media	O
18:55-19:10	**Kaori Sugihara** (University of Geneva, Switzerland) Self-assembled lipid nanotubes	O
19:10-19:25	**Alina Vasilescu** (International Center of Biodynamics, Romania) Development of a SPR aptasensor: towards a robust tool for detecting traces of lysozyme dimer in oligomeric and aggregated mixtures	O

Friday November 24, 2017

09:00-09:30	**Yannick Guari** (Université de Montpellier, France) Biosafety of mesoporous silica nanoparticles	K

09:30-09:45	**Paola Sánchez-Moreno** (Istituto Italiano di Tecnologia, Italy) Biotransformation and biological impact of graphene-related materials during simulated oral ingestion	O
09:45-10:00	**Laura Rodriguez-Lorenzo** (Adolphe Merkle Institute, Switzerland) Quantification of CNT dose delivered to cell surfaces by UV-Vis-NIR spectroscopy	O
10:00-10:15	**Alba Hernández Bonilla** (Universitat Autònoma de Barcelona, Spain) Synergistic role of nanoceria on the ability of tobacco-smoke to induce carcinogenic hallmarks in lung epithelial cells	O
10:15-10:30	**Marcos Sanles-Sobrido** (Pompeu Fabra University, Spain) Outstanding characterization of Tungsten nanoparticles to anticipate health harmfulness in case of nuclear reactor accident	O
10:30-11:00	**Coffee Break, Poster Session & Exhibition**	
11:00-11:20	**Marilena Hadjidemetriou** (The University of Manchester, UK) In vivo biomolecule corona onto clinically used blood circulating liposomes	I
11:20-11:50	**Yan Yan** (CBNI - University College Dublin, Ireland) Biological Recognition of Nanoparticles	K
11:50-12:05	**Marija Vukomanovic** (IBEC, Spain) Arginine – Functionalized Gold Nanoparticles: Synthetic Analogues of Antimicrobial Peptides	O
12:05-12:20	**Clara Vilches** (Institut de Ciències Fotòniques ICFO, Spain) In vivo optimization of plasmonic photothermal therapy for oncological medicine	O
12:20-12:50	**Oded Shoseyov** (The Hebrew University of Jerusalem, Israel) Hybrid Nano Bio-fibers	K
12:50-14:20	**Lunch**	
14:20-14:50	**Lorenzo Albertazzi** (Institute for Bioengineering of Catalonia (IBEC), Spain) Nanoscopy for Nanomedicine: looking at nanomaterials in action one molecule at the time	K
14:50-15:20	**Ronit Satchi-Fainaro** (Tel Aviv University, Israel) Identifying molecular signatures of tumor dormancy as a basis for the rational design of precision nanomedicines	K
15:20-15:50	**Giuseppe Battaglia** (University College London, UK) Design principles in precision nano-medicine	K
15:50-16:10	**Matilde Duran Lobato** (Center for Research in Molecular Medicine and Chronic Diseases (CIMUS), Spain) Rational design of new oral peptide nanomedicines	I
16:10-16:25	**Elisabet Xifre-Perez** (Universitat Rovira i Virgili, Spain) Nanoporous Anodic Alumina for the Development of Molecular Gated Sensors	O
16:25-16:40	**Giancarlo Franzese** (Universitat de Barcelona - Institute of Nanoscience and Nanotechnology (IN2UB), Spain) Multiscale Approach for Water at Bio-Nano Interfaces	O
16:40	**Concluding remarks**	