



TENTATIVE PROGRAM

Last Update - November 12, 2018

Tuesday November 20, 2018

08:00-08:50	Registration	
08:50-09:00	Opening Ceremony	
09:00-09:30	Samuel Sánchez (IBEC, Spain) Bioengineering hybrid machines for nanomedicine and soft robotics	K
09:30-09:50	Xing Ma (Harbin Institute of Technology (Shenzhen), China) Fabrication and Multifunctional Applications of Micro/Nano-Motors	I
09:50-10:20	Larysa Baraban (TU Dresden, Germany) Nanoscale sensor devices: from molecules to a whole cell detection	K
10:20-10:35	Beatriz Prieto Simón (Universitat Rovira i Virgili, Spain) Nanostructured electrochemical biosensors as fit-for-purpose analytical devices	O
10:35-11:05	Coffee Break, Poster Session & Exhibition	
11:05-11:35	María J. Vicent (Príncipe Felipe Research Center, Spain) Targeting Tumor Microenvironment with Rationally Designed Polypeptide-based Conjugates	K
11:35-11:50	Helena Florindo (University of Lisbon, Portugal) Polymeric nano-vaccines improved immune checkpoint anti-tumor efficacy against breast cancer	O
11:50-12:05	Fabiana Quaglia (University of Napoli Federico II, Italy) Enhancing anticancer activity of chemotherapeutics with antiangiogenic biodegradable nanoparticles	O
12:05-12:20	Anna Scomparin (Tel Aviv University, Israel) Multicellular spheroids as novel tools for the evaluation of melanoma nano-vaccines and BRAF-MEK-targeted nanomedicines	O
12:20-12:35	Rita Guedes (University of Lisbon, Portugal) Small-molecule immune system modulators: A step forward in cancer immunotherapy	O
12:35-12:50	Salvatore Sortino (University of Catania, Italy) Engineered Combinations of Nitric Oxide Photoreleasers with Doxorubicin as Innovative Strategy to Overcome Multidrug Resistance	O
12:50-13:05	Fernando Dominguez (CIMUS, Universidad de Santiago de Compostela, Spain) Silver Atomic Quantum Clusters for Cancer Therapy: Targeting Chromatin	O
13:05-13:35	Avi Schroeder (Technion, Israel) Personalized Cancer Nanomedicines	K
13:35-14:35	Cocktail Lunch - Poster Session & Exhibition	
14:35-15:00	Poster Session & Exhibition	
15:00-15:30	Danny Porath (The Hebrew University of Jerusalem, Israel) Novel DNA-Based Molecules and Their Charge Transport Properties	K
15:30-16:00	Philip Tinnefeld (LMU München, Germany) DNA Origami Tools for NanoBioTec	K

16:00-16:30	Aurélien Bancaud (LAAS, France) DNA concentration, purification and identification with μ LAS microreactor: (i) identification of DNA biomarkers in the blood, and (ii) Cas9- targeted sequencing	K
16:30-17:10	Coffee Break, Poster Session & Exhibition	
17:10-17:40	Frank Koppens (ICFO, Spain) Next Generation Wearable Wellness Trackers with Graphene-based Flexible Photodetectors	K
17:40-18:00	Cecile Delacour (Institut Néel (CNRS), France) Graphene Neuroelectronics	I
18:00-18:30	Thomas Velten (Fraunhofer IBMT, Germany) Biosensors based on roll-to-roll printed graphene electrodes	K
18:30-19:00	Cécilia Ménard-Moyon (CNRS, France) Multifunctionalized carbon nanotubes towards targeted anticancer radiotherapy	K
21:00	Conference Dinner	

Wednesday November 21, 2018

09:00-09:30	Salvador Pané i Vidal (ETH Zurich, Switzerland) Magnetolectric Small-Scale Machines for Biomedical Applications	K
09:30-09:45	Pablo Guardia (Catalonia Institute for Energy Research (IREC), Spain) Nanostructuring and assembling magnetic nanoparticles for biomedical applications	O
09:45-10:15	Lluís F. Marsal (Universitat Rovira i Virgili, Spain) Nanoporous anodic alumina optical biosensors and biomedical applications	K
10:15-10:30	Juan Fernandez (VLC Photonics S.L., Spain) Silicon Nitride Photonic Integrated Circuits for Biophotonics and medical applications	O
10:30-10:45	Jose García-Guirado (ICFO-Plasmon Nano-Optics group, Spain) Enantio-Selective Sensing Using Plasmonic Racemic Arrays	O
10:45-11:15	Coffee Break, Poster Session & Exhibition	
11:15-11:45	Shlomo Magdassi (The Hebrew University of Jerusalem, Israel) Nanomaterials in 2D, 3D, 4D printing	K
11:45-12:00	Rafael Mestre (Institute for Bioengineering of Catalonia (IBEC), Spain) Training and force adaptability of 3D-bioprinted biological actuators based on skeletal muscle tissue	O
12:00-12:15	Silvia Ruiz Rincón (Instituto de Nanociencia de Aragón (INA), Spain) Reversible monolayer-bilayer transition in supported phospholipid Langmuir-Blodgett films: morphological and nanomechanical behavior	O
12:15-12:30	Giancarlo Franzese (Universitat de Barcelona, Spain) Hydrated Biomembranes and Nanomaterials: Perspectives for Blood-Brain-Barrier Crossing of Nanoparticles	O
12:30-13:00	Giuseppe Battaglia (University College London, UK) Multivalency and cooperativity in nanoparticle blood brain barrier crossing	K
13:00-13:20	Anna Lagunas (IBEC, Spain) Long distance electron transfer between redox partner proteins through the aqueous solution	I
13:20-14:35	Lunch	
14:35-14:55	Ernest Mendoza (Astrea Materials / UPC, Spain) From the laboratory to the market. Our history of commercialising a nanotechnology Discovery	I
14:55-15:15	Miguel Roncales (AlphaSip, Spain)	I
15:15-15:35	Carlos Fito-López (ITENE, Spain) Occupational exposure to nanobiomaterials in the medical sector	I

15:35-15:55	Oscar Ahumada (Mecwins, Spain) Detection of protein biomarkers at femtogram per milliliter levels using Mecwins technology	I
15:55-16:10	Angela Bejarano Villafuerte (Promethean Particles Ltd, United Kingdom) Development of a novel multifunctional bioglass-based coating for the next generation of prostheses	O
16:10-16:25	Virginia Saez-Martinez (i+Med S. Coop. / R&D, Spain) i+Med S. Coop. an innovative company in the field of controlled delivery	O
16:25-16:40	Jiahui Li (The Forest Next S.L., Spain) Controlled drug release of PLA/PLGA microspheres	O
16:40-17:00	Gerardo F. Goya (UNIZAR-INA, Spain) New developments in the field of Drug Release instrumentation	I
17:00-17:40	Coffee Break, Poster Session & Exhibition	
17:40-18:00	Silvia Pujals (IBEC, Spain) Super resolution microscopy for nanomedicine: visualizing nanomaterials in action	I
18:00-18:15	Xavier Milà Niubó (PERKINELMER, Spain) Single Cell ICP-MS: The Advantages of Quantifying Metals and Nanoparticulate Number Content in Individual Cells	O
18:15-18:30	Gustavo Bodelón (Universidad de Vigo, Spain) Surface-enhanced Raman scattering (SERS) imaging of bioactive metabolites in mixed bacterial populations	O
18:30-18:45	Silvia Hernández Ainsa (Univ. of Zaragoza / Institute of Nanoscience of Aragon, Spain) Engineered DNA nanostructures for photoacoustics bioimaging	O
18:45-19:00	Dumitru Ulieru (SITEX 45 SRL, Romania) Development of a non-invasive breath test for early diagnosis of tropical diseases "TROPSENSE"	O
19:00-19:30	Roy Beck (Tel Aviv University, Israel) Physics, biology and multiple sclerosis	K

Thursday November 22, 2018

09:00-09:30	Ronit Satchi-Fainaro (Tel Aviv University, Israel) Reverting cancer's poor prognosis using precision polymeric nanomedicines based on molecular fingerprints of long-term survivors	K
09:30-09:50	Loris Rizzello (University College London, UK) Designing principles of nanotherapies	I
09:50-10:05	Irene Anton Sales (Institute of Materials Science of Barcelona, Spain) Bacterial nanocellulose as a cell culture platform	O
10:05-10:35	Ofra Benny (The Hebrew University of Jerusalem, Israel) Tight control of polymeric nanoparticles fabrication for optimized interaction with cells and tissues	K
10:35-11:15	Coffee Break, Poster Session & Exhibition	
11:15-11:45	Jesus M de la Fuente (ICMA, CSIC / UNIZAR / CIBER-BBN, Spain) New Biotechnological Challenges for Magnetic Hyperthermia	K
11:45-12:00	Nikolas Daskalakis (Centre for Process Innovation, United Kingdom) Development of a Microfluidic-Based Pilot Line for the Production of Novel Nanomedicines	O
12:00-12:15	Jordi Esquena (IQAC-CSIC, Spain) Contact lenses functionalized with antimicrobial peptides for the prevention of corneal infections	O
12:15-12:30	Xavier Arqué (Institute for Bioengineering of Catalonia (IBEC), Spain) Effect of enzyme type, quantity and distribution on the motion behavior of microswimmers	O

12:30-12:50	Veronika Magdanz (TU Dresden, Germany) Teaming up sperm cells with micro- & nanostructures for novel diagnostic tools in reproductive biology	I
12:50-13:20	Samuel Ojosnegros Martos (IBEC, Spain) Imaging receptor-ligand response to nanopatterns of surface-bound ligands	K
13:20-14:45	Lunch	
14:45-15:00	Cigdem Dönmez Güngünes (Hitit University, Turkey) Cytotoxic Effects of Magnetite Nanoparticles on Human Periodontal Ligament Fibroblast Cells	O
15:00-15:15	Federico Fenaroli (University of Oslo, Norway) Long circulating nanoparticles passively accumulate in tuberculosis granulomas in zebrafish and mouse models	O
15:15-15:30	Hakan Gungunes (Hitit University, Turkey) AC susceptibility and Mössbauer analysis of Mn –Y substituted Sr _{1-x} Mn _x Fe _{12-y} Y _y O ₁₉ (0.0 ≤ x=y ≤ 0.5) nanohexaferrites	O
15:30-16:00	Meytal Landau (Technion, Israel) Functional Protein Fibrils	K
16:00	Concluding remarks	