

**MONDAY, October 19**

8:50 - 9:00 Welcome

Energy conversion and storage I	
9:00 - 9:30	<b>Nenad Marković:</b> Electrocatalysis; beyond the covalent interactions
9:30 - 10:00	<b>Mogens Mogensen:</b> The Effect of Nano-structures in Solid Oxide Electrodes
10:00 - 10:15	<b>Vincenc Nemanič:</b> Thermionic Energy Conversion Using Nanostructured Cathodes
10:15 - 10:30	<b>Nataša Zabukovec Logar:</b> New Materials for Thermal Storage

10:30 - 11:00 coffee break

Energy conversion and storage II	
11:00 - 11:30	<b>Boris Orel:</b> Nanocomposite electrolytes based on sol-gel functionalized ionic liquids
11:30 - 11:45	<b>Gregor Trimmel:</b> Application of Nanocomposite Layers consisting of Electroactive Polymers and Sulfidic Nanoparticles in Hybrid Photovoltaics
11:45 - 12:00	<b>Egon Pavlica:</b> Study of charge transport and recombination in bulk-heterojunction organic solar cell
12:00 - 12:15	<b>Andraž Kocjan:</b> Hydrogen Absorption in Ti-Zr-Ni Alloy
12:15 - 12:30	<b>Frank Sinner:</b> The European Center of Nanotoxicology - an Austrian activity
12:30 - 12:45	<b>Bojan Jenko:</b> EU Funding opportunities for research - FP 7 calls

12:45 - 14:30 Lunch and poster session

**Nanomaterials, Special Session in Honour of dr. Igor Vilfan**

14:30 - 15:00	<b>Anton Ramšak:</b> Quantum entanglement in quantum wires, quantum dots and qubit arrays
15:00 - 15:15	<b>Dragan Mihailović:</b> From a one-dimensional quantum fluid to an electronic nose with Mo6S9-xlx molecular wires
15:15 - 15:30	<b>Marko Uplaznik:</b> Quantum charge transport in Mo6S316 Molecular Wire circuits
15:30 - 15:45	<b>Rudolf Podgornik:</b> Dispersion Interaction between Optically Anisotropic Cylinders at all Separations: Retardation Effect for Insulating and Semiconducting Single Wall Carbon
15:45 - 16:00	<b>Abdou Hassanien:</b> Contactless characterization of metallic and semiconducting nanotubes

16:00 - 16:30

16:30 - 16:45	<b>Christoph Gadermaier:</b> Electron relaxation in MoS <sub>2</sub> nanowires
16:45 - 17:00	<b>Jure Strle:</b> Self-organized critical self-assembly in MoSI-GNP
17:00 - 17:15	<b>Gregor Kladnik:</b> Ultra fast Charge transport in nanotubular α-MnO <sub>2</sub> self assembly studied by X-ray resonant photoemission
17:15 - 17:30	<b>Marko Viršek:</b> Raman Spectroscopy of MoS <sub>2</sub> and WS <sub>2</sub> fullerene-like materials

**TUESDAY, October 20**

Li Ion Batteries I	
9:00 - 9:30	<b>Doron Aurbach:</b> On the use of nano-materials for rechargeable Li-ion and magnesium batteries
9:30 - 9:45	<b>Mirjana Kuzma:</b> New attractive cathode materials for Li-ion batteries
9:45 - 10:00	<b>Jakub Reiter:</b> Ionic liquids for safer 3V lithium-ion batteries
10:00 - 10:15	<b>Corrado Locati:</b> Interaction of nanoparticles of high-voltage cathode materials with an ionic liquid electrolyte

10:15 - 10:45 coffee break

Li Ion Batteries II	
10:45 - 11:15	<b>Clare P. Grey:</b> Using local Structural Probes to Understand and Optimise Function of Battery Materials
11:15 - 11:30	<b>Klemen Pirnat:</b> Green Secondary Li-Ion Batteries
11:30 - 11:45	<b>Boštjan Erjavec:</b> A new approach towards nanostructured high-rate performance insertion materials
11:45 - 12:00	<b>Maryline Mancini-Le Granvalet:</b> Morphology effect of titanate nanotubes and nanoribbons on TiO <sub>2</sub> varieties - anatase and TiO <sub>2</sub> (b) stability
12:00 - 12:15	<b>Jože Moškon:</b> Inter-phase contacts in positive electrodes for Li ion batteries

12:15 - 13:30 Lunch and poster session

**Bionanotechnology**

13:30 - 14:00	<b>Matteo Castronovo:</b> Controlling Proteins Diffusion in Surface-Bound DNA Nanostructures: The Case of a Type II Restriction Endonuclease
14:00 - 14:30	<b>Barbara Sanavio:</b> Nanostructures for Prion protein immobilization
14:30 - 14:45	<b>Gorazd Hribar:</b> Protein nanoparticle formation using specifically designed TNF-alpha analogues
14:45 - 15:00	<b>Mateja Cegnar:</b> Self-assembled polyelectrolyte nanocomplexes of alginate and chitosan for mucosal delivery of protein ovalbumin
15:00 - 15:15	<b>Marija Vukomanović:</b> Properties of poly (d,l-lactide-co-glycolide)/Hydroxyapatite biocomposite with loaded Clindamycin

15:15 - 15:45 coffee break

**Biomimetics - from nano to micro**

15:45 - 16:15	<b>Pietro Cicuta:</b> Hydrodynamic synchronization of colloidal oscillators
16:15 - 16:30	<b>Andrej Vilfan:</b> Self-assembled artificial cilia
16:30 - 16:45	<b>Blaž Kavčič:</b> Current state and trends in the field of laser micro-structuring
16:45 - 17:00	<b>Marko Verčič:</b> nanoBRICKS <sup>PRO</sup> - synthetic smart nanomaterials from nano to macro
17:00 - 17:15	<b>Tina Ukmar:</b> Incorporating drugs into ordered mesoporous matrices

**WEDNESDAY, October 21**

New materials	
9:00 - 9:30	<b>Marina Tyunina:</b> Nanoscale phenomena in thin-film ferroelectrics
9:30 - 9:45	<b>Matjaž Mazaj:</b> Micro/mesoporous silicate composites: Synthetic approaches and structural properties
9:45 - 10:00	<b>Matteo Tonezzer:</b> SuMBD growth of oligothiophenes thin films: influence of kinetic energy on sub-monolayer formation and device performance
10:00 - 10:15	<b>Irena Drevenšek Olenik:</b> Micropatterning of light-sensitive liquid crystal elastomers
10:15 - 10:30	<b>Miha Devetak:</b> Surface structure of Langmuire-Blodgett Films of lipophilic guanosine derivatives

10:30 - 11:00 coffee break

Cell Biology	
11:00 - 11:15	<b>Veronika Kralj-Iglič:</b> Membranous nanostructures
11:15 - 11:30	<b>Rok Podlpec:</b> Interaction of liposome carriers on epithelial cells as a model of drug transport across the blood brain barrier
11:30 - 11:45	<b>Elisa Migliorini:</b> AFM imaging of growth cones shows a nanopatterned structure of the cell surface determined by its motions
11:45 - 12:00	<b>Šarka Perutkova:</b> Transition between lamellar and inverted hexagonal phases in phospholipid self-assembly
12:00 - 12:15	<b>Maruša Lokar:</b> Membrane nanotubes connect neighbouring cells in T24 urothelial cell line: a morphological study
12:15 - 12:30	<b>Matija Rojnik:</b> Targeted PLGA and PEG-PLGA nanoparticles for improving photodynamic therapy in cancer

12:30 - 13:30 Lunch