NanoOstrava 2023

Tuesday
16 May, 2023

8:00		**Morning registration**								
9:00	9:45	**Opening Ceremony**	**Hall No. 1**							
			Plachá Daniela							
			Snášel Václav							
			Mišák Stanislav							
			Janovská Kamila							
			Foldyna Josef							
			Bláha Karel							
9:45	10:30	**Plenary presentation**	Fornasiero Paolo	The metal/non-metal trajectory in sustainable chemistry						
10:30	10:45	Coffee Break								
10:45	11:15	**T2 (In)**	Zbořil Radek	Low-dimensional Graphene Chemistry for Sustainable Technologies						
11:15	11:45	T2 (In)	Jagadeesh Rajenahally	Nanocatalysis for sustainable and advance chemical synthesis						
11:45	12:15	T2 (In)	Mazare Anca	Anodic TiO2 nanotubes and single-atom co-catalysts in photocatalytic H2 generation						
								Hall No. 2		
12:15	13:00	Lunch								
13:00	13:30	**T1 (In)**	Sara Pakseresht	Solid State Lithium-Ion Batteries: Bridging the Gap Between Performance and Safety	13:00	13:30	T2	Kmentová Hana	Separated TiO2 nanotubes with single atoms-based co-catalyst for photocatalytic hydrogen production	
13:30	13:45	T1	Simha Martynková Gražyna	Conductive ceramics for applications in batteries	13:30	13:45	T2	Grando Gaia	Single atoms functionalized carbon nitride for photocatalytic organic synthesis	
13:45	14:15	T1 (Specion)	Celine Eypert	Molecular characterization of batteries along its lifetime: from development to recycling	13:45	14:00	T2	Filip Jan	Beauty of iron nanoparticles: summary of more than 15 years' experience	
14:15	14:30	T1	Šindler Matyáš	Heat treated phosphate ceramics for energy applications	14:00	14:15	T2 (JEOL)	Brunetti Guillaume	Latest JEOL development in nanotechnologies	
14:30	14:45	Coffee Break					Coffee Break			
14:45	15:15	**T1 (In)**	Foldyna Martin	Silicone nanowires for solar energy harvesting and storage	14:45	15:00	T1	Tokarčíková Michaela	Methods of Lithium-ion Battery Recycling	
15:15	15:30	T1	Halagačka Lukáš	Charge selective transport materials based on sputtered nickel oxide and tin oxide thin films	15:00	15:15	T1 (Měřicí technika Morava)	Schott Norman	3D X-RAY MICROSCOPY (XRM) for Battery application	
15:30	15:45	T1	Dušenka Adam	Control of optical properties and surface morphology of ZnO thin films by sputtering deposition conditions	15:15	15:30	T1	Castellani Gaia	TiN-based photothermal catalyst	
15:45	16:00	T1 (Thermo Fisher Scientific)	Priecel Peter	CleanConnect: Inert gas sample transfer system for air-sensitive energy materials	15:30	15:45	T1	Ingle Avinash	Biogenic nanocatalysts for sustainable bioenergy production	
16:00	16:15	T1	Liu Jiaming	Modeling of THz Optical Activity in Biomolecules	15:45	16:00	T1	Férová Marta	Green synthesis of nanoparticles using a widely spread weedy plant	
16:15	16:30	T1	Mascaretti Luca	Broadband TiN solar absorbers with enhanced photothermal properties	16:00	16:15	T1 (TESCAN)	Klášterecký Michal	TESCAN's Analytical Solutions for Battery Research	

Wednesday
17 May, 2023

8:00			**Hall No. 1**						**Hall No. 2**	
9:00	9:30	**T1 (In)**	Rummeli Mark H.	ON-line: Towards atom precise synthesis and engineering with electron microscopes	9:00	9:30	T3	Bačáková Lucie	Nanostructured biomaterials as analogs of extracellular matrix for adhesion and growth of cells in tissue engineering – a review	
9:30	9:45	T1	Kallio Tanja	Influence of coatings on nickel rich positive electrode material properties	9:30	9:45	T3	Malić Marina	Modified nanofibrous membranes for tissue engineering	
9:45	10:00	T1	Matějka Vlastimil	Graphitic carbon nitride as the component of friction composites	9:45	10:00	T3	Doubková Martina	Surface modification of metallic bone implants for improved osseointegration	
10:00	10:15	T1 (Měřicí technika Morava)	Horák Jakub	Let's go through the battery	10:00	10:15	T3	Antończyk Agnieszka	ON-line: Analysis of the silanization process of spherical aluminosilicates as a dedicated filler for composites in biomedical engineering	
10:15	10:30	T1	Kubáň Vít	Thin graphene oxide foil applicable as separator for batteries	10:15	10:30	T3 (Carl Zeiss)	Samadi Khoshkhoo Mohsen	High spatial resolution X-ray microscopy - a new technology approach for the research laboratory	
10:30	10:45	Coffee Break			10:30	10:45	Coffee Break			
10:45	11:15	**T2 (in)**	Kment Štěpán	Defect engineering for highly active semiconductor photocatalysts	10:45	11:15	T3	Nakonieczny Damian	ON-line: Polyamide PA-12 ceramic oxide reinforced composites: manufacturing and degradation tests	
11:15	11:30	T2	Praus Petr	Graphitic carbon nitride for photocatalytic applications	11:15	11:30	T3	Taratuta Anna	Study of the change in corrosion resistance of NiTi alloy wires coated with a thin layer of tantalum pentoxide	
11:30	11:45	T2	Pikal Petr	Nano vs pigment TiO2 - latest issues from producer's perspective	11:30	11:45	T3 (Anamet)	Válek Lukáš	Atomic resolution of AFM in 5 minutes; news in nanoparticle characterization	

11:45	12:00	T2 (Nicolet CZ)	Pásztor Ján	New advances in molecular (FTIR and Raman) microscopy and nanoscopy	11:45	12:00	T3	Havrlant David	Stem cells growth observations and material testing aimed to engineer bone tissue replacements and appropriate scaffolds
12:00	12:15	T2	Vani Sankaralingam Nivitha	The effect of metal-related nanoparticles in the germination of selected commercial crop	12:00	12:15	T3	Černý Šimon	Electronical and optical properties of carbide molybden modifications
12:15	13:00	Lunch			12:15	13:00	Lunch		
13:00	13:30	**T3 (In)**	Hobza Pavel	Anisotropic charge distribution on halogen atom, σ-hole, really exists: atomic force microscopy and high-level quantum chemical calculations	13:00	13:30	T1	Bakandritsos Aristeidis	Earth-abundant photocatalyst for cost-and energy-efficient production of amines
13:30	14:00	**T3(In)**	Nachtigallová Dana	On the characterization of TiO2 anatase surface using a computational approach	13:30	13:45	T1	Syrový Michal	Chemically modified nanofibrous membranes for CO2 capture
14:00	14:15	T3	Tokarský Jonáš	Simple method for prediction of preferred crystallographic orientation	13:45	14:00	T1	Deshmukh Megha	Electrochemical properties of nano-metal catalyst
14:15	14:30	T3	Svoboda Ladislav	Radiation-assisted synthesis of nanocomposites	14:00	14:15	T1 (Anton Paar)	Špringer Jiří	XRDynamic 500 - a universal solution for X-ray diffraction
					14:15	14:30	T1	Toběrný Jakub	Optimization of direct laser lithography exposition by modelling of Gaussian beam
14:30	14:45	Coffee Break			14:30	14:45	Coffee Break		
14:45	15:15	**T2 (In)**	Kukutschová Jana	Impact of nanomaterials on the environment	14:45	15:15	T3	Rubáčková Kateřina	From Lab Scale to Fabrication
15:15	15:30	T2 (LANIK)	Iliushchenko Valeriia	Using foam ceramics as photocatalytic substrate	15:15	15:30	T3 (PREVAC)	Miensopust Dominika	Prevac world innovations 2023
15:30	15:45	T2	Sportelli Giuseppe	Interfacing BiOx nanoparticles to carbon nitride for solar fuel production	15:30	15:45	T3	Melchionna Michele	Electrochemical synthesis of hydrogen peroxide by carbon-based catalyst: a look
15:45	16:00	T2 (Pragolab)	Kolouchová Anna	A new insight into nanoparticle mobility	15:45	16:00	T3	Krishnamoorthy Baby Monish	ON-line: Interaction of metal oxide nanoparticles with plant under the i nfluence of electric field
16:30	18:00	**Poster sections**							
19:00	23:59	**Conference dinner**							

Thursday
18 May, 2023

8:00			**Hall No. 1**	
9:00	9:30	**T3 (In)**	Faria Joaquim Luís	Synthetic Fuels and Green Hydrogen: Paving the Way for a Sustainable Development
9:30	9:45	T3	Henrotte Olivier	Multiscale investigation of plasmon-driven photocatalysts by scanning electrochemical microscopy
9:45	10:00	T3	Smijová Julie	Photocatalytic activity of nano-ZnS under different types of radiation
10:00	10:15	T3 (NenoVision)	Komarov Pavel	LiteScope 2.5: Pushing the Boundaries of Correlative AFM-in-SEM Microscopy
10:15	10:30	Coffee Break		
10:30	10:45	T1	Ahmad Razi	Design of Stable Lead-Free Double Perovskite Nanocrystals for Optoelectronic and Photocatalysis Application
10:45	11:00	T1	Rej Sourav	Plasmonic and Semiconductor Photocatalysis for Solar to Energy Conversion
11:00	11:15	T1	Raza Waseem	Anchoring Pt single atom co-catalysts on CdS sensitized single crystal TiO2 nanoflakes for efficient visible light photocatalytic hydrogen production
11:15	11:30	**Closing ceremony**		
11:30	12:30	Lunch