

NanoOstrava 2025

Monday

19 May, 2025

16:00 18:00 Afternoon registration

16:00 18:00 Welcome party



Tuesday

20 May, 2025

8:00 Morning registration

9:00 9:45 Opening Ceremony

Hall No. NA2

Simha Martynková Gražyna

Snášel Václav

Mišák Stanislav

Kukutschová Jana

Foldyna Josef

9:45 10:30 Plenary presentation

Akbulut Hatem

Fabrication of high-performance graphene oxide-reinforced Ni-P composite coatings via ultrasonic-assisted pulse electrodeposition

Hall No. NA2

10:30 10:45 Coffee Break

10:45 11:15 T3 (In):

Bakandritsos Aristeidis

Low-dimensional functional materials for energy security

11:15 11:45 T3 (In)

Ponnada Srikanth

Advancing Li-S Batteries: Two-Dimensional (2D) Heterostructures for Enhanced Performance and Longevity

11:45 12:00 T3

Usta Samet

Enhanced solid electrolyte interface by innovative producing method: Screen-printed LATP solid electrolyte

12:00 12:15 T3

Akbulut Uludag Ahsen

Comparative life cycle assessment of cathode synthesis methods for sodium-ion batteries

12:15 13:15 Lunch

13:15 13:45 T3 (In):

Cetinkaya Tuğrul

The Future of Batteries and Supercapacitors: Unlocking the Power of 2D Materials

13:45 14:00 T3

Usta Samet

Optimizing printable LFP electrode ink formulations: Binder and viscosity effects on printing quality and electrode performance

14:00 14:15 T3

Plesník Lukáš

Effect of water electrolyte on properties of nanocomposite PVDF and PVDF-CTFE membranes

14:15 14:30 T3

Špringer Jiří (Anton Paar s.r.o.)

New instruments for measuring the pore and particle size distribution of carbon and polymer samples

14:30 14:45 Coffee Break

15:30 17:30 Trip to Landek - Mining museum

Wednesday
21 May, 2025

Hall No. NA2

		CarboFun	
8:00			
9:00 - 9:30	T1 (In):	Fraus Petr	Graphitic carbon nitride: what is not talked about
9:30 - 9:45	T1 (In):	Abrahamczyk Szymon	Electron Beam Direct Writing of Graphene: Mechanisms, Materials, and Prospects for Nanoelectronics
9:45 - 10:00	T1	Akbulut Hatem	Effect of laser power on friction and wear performance of 316L stainless steel-based composite coating manufactured by laser cladding on brake disc
10:00 - 10:15	T1	Taratuta Anna	Modification of biological surface activity of biomedical alloys using ultra-thin ALD layers
10:15 - 10:30	T1	Pasarakonda Satyalakshmi	Graphitic carbon nitride as Green electrocatalyst for highly selective overall Water splitting
10:30 - 10:45	Coffee Break		
10:45 - 11:15	T1 (In):	Čapková Pavla	Nanostructured materials for solid state hydrogen storage
11:15 - 11:30	T1	Głowacka Karolina	Polymer particles fabrication via the dewetting phenomenon
11:30 - 11:45	T1	Havaldar Darshana	Optimising UHMWPE/BaTiO ₃ nanocomposites for biomedical applications: role of surface functionalisation in enhancing performance
11:45 - 12:00	T1	Mačák Livia	Preparation of polymer nanocomposites with silver nanoparticles
12:00 - 12:15	T1	Antończyk Agnieszka	The influence of temperature on the parameters of spherical aluminosilicates
12:15 - 13:15	Lunch		
14:30 - 16:00	Poster sections		

Hall No. NA2

18:30 Performance by a folklore ensemble ZF Bystrzyca
19:00 23:59 Conference dinner

Hall No. NA3

9:00 - 9:30	T4 (In):	Foldyna Martin	Silicon nanowire devices and optical methods to characterize them
9:30 - 9:45	T4	Toběrný Jakub	Design and fabrication of metastructures for terahertz applications
9:45 - 10:00	T4	Halagačka Lukáš	Design and characterization of biochips for surface plasmon resonance ellipsometry
10:00 - 10:15	T4	Hejtmán Oliver Jan	Semiconductor spin-lasers with periodic gratings for ultrafast applications
10:15 - 10:30	T4	Šec Karel (Nicolet CZ s.r.o.)	Infrared Nanoscopy / nano-FTIR Spectroscopy Fundamentals and Practical Aspects
10:30 - 10:45	Coffee Break		
10:45 - 11:00	T4	Silber Robin	Magneto-optic kerr effects of higher orders in magnetization in structural analysis of Heusler alloys, twinning detection in cubic crystal structures and
11:00 - 11:15	T4	Liu Jiaming	Broadband optical function detection from THz to Ultraviolet range
11:15 - 11:30	T4	Férová Marta	NMR relaxometry to characterize the interlayer spaces of the vermiculite nanostructured materials
11:45 - 12:00	T4	Krzan Marcel	The effect of interfacial hydrogen bonding and electrostatic interactions on the surface properties and foam stability in saponin mixtures
12:00 - 12:15	T4	Orolín Jakub (Měřicí technika Morava s.r.o.)	Company portfolio
12:15 - 13:15	Lunch		
13:15 - 13:30	T4	Klimčík Martin (Optik Instruments s.r.o.)	Advancing Microscopy: Introducing Bruker's New FTIR and Raman Solutions
13:30 - 13:45	T4	Tokarcíková Michaela	Micro-arc oxidation for thin layer preparation
13:45 - 14:00	T4	Goldsztajn Karolina	The potential of using biodegradable polymer coatings as carriers of substances supporting bone tissue regeneration processes
14:00 - 14:15	T4	Dudák Michal (ANAMET s.r.o.)	Comparing Analytical Techniques for (Nano)Particle and Molecular Size and Concentration Measurements
14:15 - 14:30	Coffee Break		

Thursday
22 May, 2025

Hall No. NA3

		Advanced materials for energy and environmental technologies	
8:00			
9:00 - 9:30	T2 (In):	Ghosh Indrajit	Photoredox Catalysis with One or Two Photons & an Electron Transfer
9:30 - 9:45	T2	Běčák Petr	Potential use of albumin stabilized metallic and trimetallic nanoclusters
9:45 - 10:00	T2	Velgosoová Oksana	Green synthesis of gold nanoparticles
10:00 - 10:15	T2	Rybková Zuzana	Evaluation of antimicrobial and biocompatible properties of nanocomposites
10:15 - 10:30	Coffee Break		
10:30 - 11:00	T2 (In):	Kosydar Robert	Pd-nanoparticles supported on bacterial nanocellulose as a catalyst for the hydrogenation of polyfunctional
11:00 - 11:15	T2	Valovičová Věra	MnO ₂ -coated smectites: Structural and sorption insights
11:15 - 11:20	Closing ceremony		
11:15 - 11:20	Simha Martynková Gražyna		
11:30 - 12:30	Lunch		



19 – 22 May 2025
Aula, VSB–TUO, Ostrava