

StudKon 2026 programme:

WHERE: Centre for Natural Sciences and Technologies, Jan Evangelista Purkyně University in Ústí nad Labem, Pasteurova 3632/15, 400 96 Ústí nad Labem; Talk session: Aula 1.01; Poster session: Hall around the reception, Coffee break: Room 1.02.

MONDAY 25. 5. 2026	
Registration	8:00 - 9:00
Morning sessions	9:00 – 14:00
9:00 – 9:10	Opening and welcome session
	Talks session 1
9:10 – 10:50	9:10 Jakub Nicek
	9:30 Anna Čimová
	9:50 Jiří Fafek
	10:10 Vsevolod Kazakov
	10:30 Lisa Postelt
10:50 – 11:30	Coffee break
	Talks session 2
11:30 – 13:10	11:30 Batoul Hamade
	11:50 Marek Dubovský
	12:10 Viktória Košíková
	12:30 František Vondráček
	12:50 Ifeanyichukwu Egeolu
13:10 – 14:00	Lunch break
Afternoon sessions	14:00 – 18:00
14:00 – 14:10	Introduction of PhD Academy at UJEP
	Talks session 3
14:10 – 15:50	14:10 Jan Čundrle
	14:30 Jan Vespalec
	14:50 Abdulmannan Rouhani
	15:10 Ladislav Bříza
	15:30 Vojtěch Trnka
15:50 – 16:00	Taking photo together
16:00 – 18:00	Poster session + light refreshment during the session
Evening programme	18:00 – 22:00
18:15 – 18:45	The Miroslav Broul award ceremony and conclusion of the conference
18:45 – 22:00	Informal social evening in Pajda bistro

List of participating students and their contributions:

The talk sessions are divided primarily by year of the study.

Talk session 1

- **Jakub Nicek** (*1st year, Environmental Chemistry and Technology, Faculty of Environment UJEP*): The Use of Chelating Ion Exchangers in the Separation of Products from Recycled Lithium Batteries.
- **Anna Čimová** (*1st year, Applied Nanotechnology, Faculty of Science UJEP*): Development of New Types of Biopesticides Based on Extracellular Vesicles from Plants and Fungi.
- **Jiří Fafek** (*1st year, Environmental Chemistry and Technology, Faculty of Environment UJEP*): The Use of Membrane Separation Processes in Leachate Recycling for Processing Waste Lithium Batteries.
- **Vsevolod Kazakov** (*master student, Faculty of Mechanical Engineering UJEP*): Two-Phase Numerical Simulation for the Optimization of Combat Vehicle Smoke Screens.
- **Lisa Postelt** (*1st year, Environmental and Biomaterial Sciences, CENAB Faculty of Science UJEP*): Uncovering the Interplay between Tardigrade Intrinsically Disordered Proteins and the Cytoskeleton.

Talk session 2

- **Batoul Hamade** (*2nd year, Landscape Reclamation and Ecosystem Services, Faculty of Environment UJEP*): Enhancing the Soil Quality with Different Amendments under the Cultivation of *Silphium Perfoliatum*: Field Experiment.
- **Marek Dubovský** (*2nd year, Environmental and Biomaterial Sciences, Faculty of Environment UJEP/ Institute of Inorganic Chemistry CAS*) Photoactive Nanocomposite Materials Based on Molybdenum Clusters and Functional Nanoparticles.
- **Viktória Košíková** (*2nd year, Applied Analytical and Bioanalytical Chemistry, Faculty of Natural Sciences, Institute of Chemistry and Environmental Sciences, University of Ss. Cyril and Methodius in Trnava*): Application of Colorimetric Method for Determination of Phytic Acid by Microplates in Various Plant Experiments.
- **František Vondráček** (*2nd year, Computer Modelling in Science and Technology, Faculty of Science UJEP*): Secondary Flows, Mixing and Granular Segregation.
- **Ifeanyichukwu Egeolu** (*2nd year, Computer Modelling in Science and Technology, Faculty of Science UJEP*): The Impact of Block-Dispersity on Self-Assembly of Diblock Copolymer Melts: Insights from DPD Simulations.

Talk session 3

- **Jan Čundrle** (*3rd year, Environmental Chemistry and Technology, Faculty of Environment UJEP/Institute of Inorganic Chemistry CAS*): Nanoceria Catalysts for Environmental and Biological Applications.
- **Jan Vespalec** (*3rd year, Chemistry and Technology of Environmental Protection, Faculty of Chemistry, Brno University of Technology*): Membrane Fouling: Basic Mechanisms and Principles.
- **Abdulmannan Rouhani** (*3rd year, Landscape Reclamation and Ecosystem Services, Faculty of Environment UJEP*): Advancing Biomass Ash Application from Controlled Trials to Field Validation for Soil and Plant Enhancement.
- **Ladislav Bříza** (*3rd year, Environmental Chemistry and Technology, Faculty of Environment UJEP*): From Analytical Chemistry to Technology: Dimethylglyoxime as Ni/Co Separation Agent.
- **Vojtěch Trnka** (*3rd year, Environmental and Biomaterial Sciences, CENAB Faculty of Science UJEP*): Polymer Micropatterning via Hot-Embossing for Spatially Defined Cancer Cell Culture.

Poster session

- **Aleš Novák** (1st year, Applied Ion Technology, Faculty of Science UJEP/Nuclear Physics Institute CAS): Insti Preparation of Advanced Converter Materials for Neutron Detection.
- **Alexandra Hlavatá** (3rd year, Molecular Biology, University of ss. Cyril and methodius in Trnava, Faculty of Natural Sciences): Zinc Biofortification in Durum Wheat: a Trade-off between Yield and Nutritional Quality.
- **Eva Štěpanovská** (4th year, Applied Ion Technology, Faculty of Science UJEP/Nuclear Physics Institute CAS): Surface Functionalization of Graphene Sheet with C60 for Improved Electrode-Electrolyte Interface in Lithium-Ion Batteries.
- **Ghazwa Basma** (2nd year, Landscape Reclamation and Ecosystem Services, Faculty of Environment UJEP): Evaluating Brownfield Phytoremediation with Miscanthus × Giganteus and Arundo Donax Using Soil Bioindicators and Plant Performance.
- **Jaffar Iqbal** (3rd year, Landscape Reclamation and Ecosystem Services, Faculty of Environment UJEP): Effect of Chemical Composition of Spelt Wheat.
- **Jakub Neumann** (4th year, Applied Ion Technology, Faculty of Science UJEP): Agglomeration of Micrometer-Sized Uranium Particles for Nuclear Safeguargds Purposes.
- **Jaroslava Jarolímková** (4th year, Applied Nanotechnology, CENAB Faculty of Science UJEP): Polyaniline Nanoparticles with High Specific Surface Area for Gas Sorption.
- **Jiří Brejcha** (4th year, Engineering Technology, Faculty of Mechanical Engineering UJEP): Tyre and Rubber Development.
- **Klára Španbauerová** (1st year, Applied Nanotechnology, Faculty of Science UJEP): Characterization of Biological Nanotubes in Tumor Cells in a Nano/Microstructured Microfluidic Device.
- **Kristýna Šedivá** (3rd year, Landscape Reclamation and Ecosystem Services, Faculty of Environment UJEP): Environmental Stability Dictates the Long-term Photosynthetic and Developmental Response of Lettuce to Cold Plasma Priming.
- **Mária Pavlovičová** (5th year, Biotechnology, Faculty of Natural Sciences, University of Ss. Cyril and Methodius/Institute of Biology and Biotechnology): Heavy Metal Phytoextraction from Contaminated Soils by Linum usitatissimum.
- **Markéta Předotová** (2nd year, Environmental Chemistry and Technology, Faculty of Environment UJEP): Chemical Recycling of Textile Materials Using Ionic Liquids.
- **Muhammad Roman** (3rd year, Landscape Reclamation and Ecosystem Services, Faculty of Environment UJEP): How different climate conditions affect soil properties and cereals- Analysis of long-term field experiments in Czech Republic.
- **Muhammad Zubair** (3rd year, Landscape Reclamation and Ecosystem Services, Faculty of Environment UJEP): Topic is not provided by the author.
- **Oksana Batkivska** (3rd year, Applied Nanotechnology, CENAB Faculty of Science UJEP): Improving Plasma-Derived Extracellular Vesicle Purity for Galectin Biomarker Analysis in Glioblastoma.
- **Laura Židek Jozefiková** (5th year, Biotechnology, Faculty of Natural Sciences, University of Ss. Cyril and Methodius): Subcellular Distribution of Cadmium and Its Relation to Tolerance in Wheat Varieties
- **Roman Otahal** (2nd year, Environmental and Biomaterial Sciences, Faculty of Environment UJEP): Asphalt Recycling.
- **Sára Svobodová** (1st year, Environmental and Biomaterial Sciences, Faculty of Environment UJEP): Alternative Synthesis of a Pharmaceutical Compound.
- **Simona Grabovská** (2nd year, Applied Nanotechnology, Faculty of Science UJEP): System-Specific PEG Mediated EV-Liposome Fusion.
- **Tereza Špitálská** (2nd year, Environmental and Biomaterial Sciences, Faculty of Environment UJEP): Materials Approach to the Safety Management of Li-ion Batteries: Electro- and Hybridspinning of Bifunctional Separators.