83. Latvijas Universitātes starptautiskā zinātniskā konference 2025

ĶĪMIJA
CHEMISTRY
Analītiskās un Fizikālās Ķīmijas Sekcija
Section of Analytical and Physical Chemistry

Piektdien, **2025. gada 14. februārī plkst. 9:15**, 319 aud.
Friday, **14 February 2025, 9:15 AM**, room 319

Programma/Programme

9.00–09.15	**Prezentāciju ievietošana konferences datorā**	
Sekciju vadītāji/ Section chairs: Agris Bērziņš; Agnese Arāja; Arturs Vīksna		
09.15–09.20	Atklāšana / Opening	
09.20–09.35	**Laura Lazdiņa** *Institute of Food Safety, Animal Health and Environment "BIOR"*	SIMULTANEOUS DETERMINATION OF C10-17 POLYCHLORINATED ALKANES IN FOOD BY A LIQUID CHROMATOGRAPHY-TANDEM MASS SPECTROMETRY METHOD Laura Lazdiņa, Ingus Pērkons
09.35–09.50	**Pāvels Ļapunovs** *Latvian State Insitute of Wood Chemistry*	Cu(II) AND Cd(II) HEAVY METALS SORPTION CAPACITY OF MYCELIUM BIO-COMPOSITES MODIFIED WITH CHITOSAN Pāvels Ļapunovs, Arturs Vīksna, Māris Bērtiņš, Oskars Bikovens, Ilze Irbe
09.50–10.05	**Renāte Teterovska** *Riga Stradins University*	POLYPHENOL CHARACTARIZATION AND ANTIOXIDANT ACTIVITY OF RIBES NIGRUM BERRY PRODUCTS Renāte Teterovska, Diāna Brūvere, Ance Bārzdiņa, Agnese Brangule
19.05–10.20	**Georgijs Baškirovs** *Institute of Horticulture*	METHOD DEVELOPMENT AND COMPARATIVE EVALUATION OF FLUORESCENCE DETECTION IN HPLC AND SFC FOR TOCOCHROMANOL ANALYSIS IN OILS AND SEED EXTRACTS Baškirovs Georgijs, Soliven Arianne, Gornas Pawel
10.20–10.35	**Mārcis Mežulis** *Department of Environmental Science, University of Latvia*	GREEN CHEMISTRY-BASED PROCESSING OF SPRUCE GREENERY FOR SUSTAINABLE INDUSTRIAL USE Mārcis Mežulis, Lauris Arbidans, Māris Kļaviņš, Māris Lauberts, Uldis Grīnfelds
10.35–10.50	**Lauris Arbidans** *Department of Environmental Science, University of Latvia*	HYDROTHERMAL HUMIFICATION OF SPRUCE GREENERY AS A TOOL FOR SUSTAINABLE PRODUCTION OF SYNTHETIC HUMIC SUBSTANCES Lauris Arbidans, Mārcis Mežulis, Uldis Grīnfelds, Māris Kļaviņš
10.50–11.15	**Andris Actiņš** *Department of Chemistry, University of Latvia*	CALIBRATION STRATEGY OF ICP-MS METHOD Māris Bērtiņš, Aldis Zekunde, Arturs Vīksna, Andris Actiņš
11.15–11.30	**Dārta Adzilča**	CHEMICAL COMPOSITION OF METALLIC ALLOY AND

	Department of Chemistry, University of Latvia	POLYMER PENCILS Dārta Adzilča, Vita Rudoviča, Megija Neimane, Māris Bērtiņš
11.30–12.00	**Coffee break, discussions**	
Otrā daļa/Second part		
12.00–12.15	**Zane Čerpakovska** *Department of Chemistry, University of Latvia*	MECHANOCHEMICAL CONTROL OF CAFFEINE - ANTHRANILIC ACID COCRYSTAL POLYMORPHS: INFLUENCE OF ADDITIVES ON POLYMORPHIC OUTCOMES Zane Čerpakovska, Agris Bērziņš
12.15–12.30	**Rouz Barjoud** *Institute of Chemical Physics, University of Latvia*	BINDER-FREE CARBON AEROGEL ELECTRODES: ADVANCING SUPERCAPACITOR PERFORMANCE Rouz Barjoud, Yelyzaveta Rublova, Vitāljis Lazarenko, Jana Andžane, Donats Erts
12.30–12.45	**Lāsma Bugovecka** *Institute of Chemical Physics, University of Latvia*	EXPLORING ATOMIC FORCE MICROSCOPY FOR EX VIVO CHARACTERIZATION OF HUMAN LUNG CANCER TISSUE HISTOLOGY SAMPLES Lāsma Bugovecka, Uldis Maļinovskis, Sergejs Isajevs, Aiga Andrijanova, Andis Liepiņš, Donāts Erts
12.45–13.00	**Ugis Eismonts** *Faculty of Medicine and Life Sciences, University of Latvia*	MONTMORILLONITE – IRON (III) HEXACYANOFERRATE (II) COMPOSITE: CO-SYNTHESIS, PROPERTIES AND APPLICATIONS Ugis Eismonts, Ingars Reinholds, Maris Bertins, Karlis Svirksts, Valdis Seglins, Andrejs Grinbergs
13.00-13.15	**Ilga Lauma Leimane** *Institute of Chemical Physics, University of Latvia*	THERMOELECTRIC PROPERTIES AND APPLICATIONS OF AQUEOUS ELECTROLYTE INFILTRATED IN ANODIC ALUMINIUM OXIDE NANOCHANNELS FOR ENERGY HARVESTING Ilga Lauma Leimane, Irina Oliseveca, Jana Andzane, Raimonds Meija, Raimonds Poplausks, Justin D. Holmes, Donats Erts
13.15-13.30	**Elizabete Maškova** *Institute of Chemical Physics, University of Latvia*	EVALUATION OF THERMAL STABILITY AND STRUCTURAL CHANGES OF 3-NITROBENZANTHRONE DURING ANNEALING IN VACUUM AND AIR Elizabete Maškova, Līga Avotiņa, Artūrs Zariņš, Elena Kirilova
13.30-13.45	**Aleksandra Strach** *University of Silesia*	MOLECULAR ENVIRONMENTAL FILTERS BASED ON SBA-15 FOR THE SORPTION OF SILVER AND COBALT IONS A. Strach, M. Dulski, V. Grebnevs, M. Bertins, A. Viksna, R. Zaleski, M. Gorgol, M. Laskowska and Ł. Laskowski
13.45-14.00	**Vladlens Grebnevs** *Silesian University of Technology*	PEO METHOD AS AN ALTERNATIVE TOWARDS CARBONATE AND APATITE COATINGS – A REVIEW OF CURRENT STATE OF ART Vladlens Grebnevs, Arturs Viksna, Wojciech Simka
14.00	**Noslēgums, diskusijas / Conclusion, discussions**	