

# SEMINÁŘ STUDENTŮ 2023

**PROGRAM 1. dne konference – úterý 23. května 2023**

## STUDENT SEMINAR 2023

**PROGRAM - Tuesday May 23, 2023**

	<i>Předseda- jící/ chairman</i>	<i>Přednášející/ lecturer</i>	<i>Název/ presentation title</i>
9:00-9:10	<b>Zahájení konference „Seminář studentů 2023“</b> <i>Opening of Annual conference "Seminar of Students 2023"</i>		
9:10-9:25	<b>Jakub Martinka</b>	Václav Ráliš ( <i>PřF UK Praha, školitel J. Pinkas</i> )	POLYETHYLENE TERMINATED WITH SILICON AND ITS UTILISATION
9:25-9:40		Karolina Fárníková ( <i>VŠCHT Praha, školitelka E. Krupičková Pluhařová</i> )	MOLECULAR SIMULATIONS OF LIPASE: FROM THE LID OPENING TO THE ACTIVE SITE
9:40-9:55		Marek Beneš ( <i>VŠCHT Praha, školitelka R. Sokolová</i> )	STUDIUM MECHANISMU OXIDACE PSYCHOAKTIVNÍ LÁTKY 25E-NBOH
9:55-10:10		Mariia Lemishka ( <i>školitel J. Dědeček</i> )	MULTISPECTROSCOPIC STUDY OF MOLECULAR OXYGEN DISSOCIATION OVER ZEOLITES
10:10-10:45	<b>PŘESTÁVKA NA KÁVU A ZÁKUSEK</b> ( <i>Coffee break in lobby</i> )		
10:45-11:00	<b>Václav Ráliš</b>	Seyed A. M. Bukhari ( <i>školitel O. Frank</i> )	SHEDDING LIGHT ON THE INFLUENCE OF STRUCTURAL DEFECTS ON THE BEHAVIOUR OF TWO-DIMENSIONAL MATERIALS
11:00-11:15		Eliška Jiroušková ( <i>PřF UK Praha, školitelka R. Sokolová</i> )	ELECTROCHEMISTRY OF NEW PSYCHOACTIVE SUBSTANCES 3 FLUOROPHENMETRAZINE, 4 METHYLPENTEDORNE AND FLUOROMETHOXY- ACETYL FENTANYL
11:15-11:30		Jakub Martinka ( <i>školitel J. Pittner</i> )	EXCITED STATE MOLECULAR DYNAMICS ASSISTED BY MACHINE LEARNING
11:30-11:45		Johana Fialová ( <i>VŠCHT Praha, školitel J. Fedor, P. Nag</i> )	STUDY OF LOW ENERGY ELECTRON-INDUCED DISSOCIATION OF CF <sub>3</sub> I USING VELOCITY MAP IMAGING
11:45-13:00	<b>PŘESTÁVKA (OBĚD NENÍ NA KONFERENCI ZAJIŠTĚN)</b> ( <i>time for a lunch</i> )		

13:00-13:15	<b>Isabel Králová</b>	David Šťastný (školitel R. Šachl)	TRACKING MEMBRANE PERMEABILIZATION ON SINGLE LIPID VESICLES - METHOD DEVELOPMENT
13:15-13:30		Michaela Hanušová (školitel M. Velický)	FUNDAMENTAL PHYSICS AND CHEMISTRY OF THE INTERFACE BETWEEN MONOLAYER TRANSITION METAL DICHALCOGENIDES AND METALS
13.30-13:45		Jozef Ďurana (školitel M. Fárník)	PHOTODISSOCIATION OF TRIFLUOROACETYL CHLORIDE PROBED BY VELOCITY MAP IMAGING (VMI) TECHNIQUE
13:45-14:00		Zuzana Johanovská (školitel M. Hof)	MICROMANIPULATION AS A NEW INSTRUMENT FOR RESEARCH OF BIOMEMBRANE STRUCTURE AND ITS MECHANICAL PROPERTIES
<b>14:00-14:30</b>	<b>PŘESTÁVKA NA KÁVU A ZÁKUSEK</b> ( <i>Coffee break in lobby</i> )		
14:30-14:45	<b>Jozef Ďurana</b>	Maroua Gnioua Omezzine (školitel P. Španěl)	EXPERIMENTAL AND THEORETICAL STUDIES OF GAS PHASE ION MOBILITY AND ENERGETICS: PROTONATED SATURATED AND UNSATURATED ALDEHYDES IN HELIUM
14:45-15:00		Barbora Kocábková (školitel M. Fárník)	MOLECULAR AND CLUSTER MASS SPECTRA OF TRIFLUOROACETYL CHLORIDE
15:00-15:15		Isabel Králová (školitel J. Sýkora)	REGULATION OF THE MEMBRANE CHANNEL ACTION STUDIED BY FLUORESCENCE TECHNIQUES
15:15-15:30		Hlib Lyshchuk (školitel J. Fedor)	DISSOCIATIVE IONIZATION OF MeCpPtMe <sub>3</sub> : FORMATION OF METHANE AND ETHANE AT SINGLE-COLLISION CONDITIONS WITH ELECTRONS
15:30-15:45		Václav Adamec (PřF UK Praha, školitel: M. Lamač)	TRANSITION-METAL-CATALYSED HYDROGENATION REACTIONS USING THE HYDROSILANE-B(C <sub>6</sub> F <sub>5</sub> ) <sub>3</sub> SYSTEM AS AN ACTIVATOR
<b>15:45-17:00</b>	<b>PODVEČERNÍ OBČERSTVENÍ</b> ( <i>Dinner refreshment in lobby</i> ) <b>UKONČENÍ PRVNÍHO DNE KONFERENCE</b> ( <i>End of the 1st day of conference</i> )		

**PROGRAM 2. dne konference - středa 24.5.2023****PROGRAM - Wednesday May 24, 2023**

	<i>Předseda- jící/ chairman</i>	<i>Přednášející/ lecturer</i>	<i>Název/ presentation title</i>
8:55	<b>Zahájení 2. dne konference „Seminář studentů 2023“</b> <i>Opening of the 2nd day of Annual conference "Seminar of Students 2023"</i>		
9:00-9:15	<b>Mikuláš Matoušek</b>	Soumya Frederick (školitelka V. Petráková)	VISUALIZING PLASMONIC MISLOCALIZATION USING SINGLE-MOLECULE LOCALIZATION MICROSCOPY
9:15-9:30		Martin Melčák (školitel S. Záliš)	TOWARDS SOLVENT SPECIFIC EFFECTS IN INFRARED SPECTRA OF RHENIUM COMPLEX
9:30-9:45		Abhinav (školitel J. Sýkora)	HYDRATION AND DYNAMICS OF FUNCTION- RELEVANT REGION OF HPUREI
9:45-10:00		Karolina Salvadori (školitel J. Ludvík)	VARIOUS ROLES OF -NO <sub>2</sub> SUBSTITUENT IN ELECTROCHEMICALLY INVESTIGATED SUPRAMOLECULAR SYSTEMS
10:00-10:30	<b>PŘESTÁVKA NA KÁVU A ZÁKUSEK</b> ( <i>Coffee break in lobby</i> )		
10:30-10:45	<b>Barbora Chmelová</b>	Mikuláš Matoušek (školitel L. Veis)	THE CHASE FOR AN INVERTED S-T ORDERING FOR MORE EFFICIENT ORGANIC LEDS
10:45-11:00		Petra Kohútová (školitel M. Hof)	THE FUNCTIONAL PORE FORMATION OF PRO- APOPTIC PROTEINS (BID AND BAX) IN GIANT UNILAMELAR VESICLES AS THE MODEL SYSTEM
11:00-11:15		Priyam Bharadwaz (školitel M. Srnec)	ROLE OF THERMODYNAMICS IN -ATOM ABSTRACTION REACTIVITY OF S- ADENOSYLMETHIONINE ENZYMES
11:15-11:30		Satyam Sahu (školitel M. Velický)	LARGE-AREA MECHANICALLY-EXFOLIATED TWO- DIMENSIONAL MATERIALS ON ARBITRARY SUBSTRATES
11:30-11:45		Federica Scollo (školitel M. Hof)	« SPECIFIC OR NOT SPECIFIC, THAT IS THE QUESTION »: AN OVERVIEW ON GAL-1 - GM1 INTERACTION
11:45-13:00	<b>PŘESTÁVKA (OBĚD NENÍ NA KONFERENCI ZAJIŠTĚN)</b> ( <i>time for a lunch</i> )		
13:00-13:15	<b>Mark Niklas Hansen</b>	Barbora Chmelová (školitel R. Šachl)	INTERLEAFLET ORGANIZATION OF MEMBRANE NANODOMAINS: WHAT CAN(NOT) BE RESOLVED BY FRET?
13:15-13:30		Tomáš Imrich (školitelka-konzultantka H. Krýsová)	SYNTHESIS OF DOPED PSEUDOBROOKITE (Fe <sub>2</sub> TiO <sub>5</sub> ) FILMS: PROPERTIES AND APPLICATIONS IN PHOTO(ELECTRO)CATALYSIS

13:30-13:45		Khalilullah Umar (školitelka V.Petráková)	HIGH RESOLUTION NEAR INFRARED IMAGING WITH DNA-PAINT
13:45-14:00		Barbora Sedmidubská (školitel J. Kočíšek)	FULLERENOLS AND THEIR INTERACTIONS WITH SECONDARY LOW-ENERGY ELECTRONS
14:00-14:30	<b>PŘESTÁVKA NA KÁVU A ZÁKUSEK</b> (Coffee break in lobby)		
14:30-14:45	<b>David Davidovič</b>	Marta K. Choińska-Młynarczyk (školitel T. Navrátil)	ELECTROCHEMISTRY FOR MEDICAL AND FORENSIC SCIENCE. DETERMINATION OF ILLICIT DRUGS AND BIOLOGICALLY ACTIVE COMPOUNDS USEFUL FOR THE TREATMENT OF PSYCHIATRIC DISEASES
14:45-15:00		Martin Jindra (školitel O. Frank)	REDUCTION AND LARGE-AREA MICROSCOPIC MONITORING OF CONTAMINATION LEVELS OF TRANSFERRED CVD GRAPHENE
15:00-15:15		Mark Niklas Hansen (školitelka V. Petráková)	CONTROLLED ASSEMBLY OF NOBLE METAL NANOPARTICLES AND FLUOROPHORES FOR SUB-DIFFRACTION MANIPULATION OF LIGHT TO STUDY PLASMONIC LIGHT MODULATIONS
15:15-15:30	<b>PŘESTÁVKA</b> (break)		
15:30-15:45	<b>Priyam Bharadwaz</b>	David Davidovič (školitel R. Šachl)	NATURE OF THE INTERACTION BETWEEN ssDNA-LOADED CATIONIC LIPID NANOPARTICLES (cLNPs) AND GIANT UNILAMELLAR VESICLES (GUVs) IN MEMBRANE FUSION
15:45-16:00		Vandana (školitel R. Šachl)	INVESTIGATING THE IN-MEMBRANE FUNCTIONAL/DYSFUNCTIONAL PROTEIN OLIGOMERIZATION IN FGF2 TRANSLOCATION ON VESICLES
16:00-16:15		Hüseyin Evcı (školitel J. Sýkora)	DEVELOPMENT OF NEW SUBSTRATES FOR SUPER-RESOLUTION STUDIES OF SUPPORTED LIPID BILAYERS (SLB) BY GRAPHENE INDUCED ENERGY TRANSFER
16:15-16:25	<b>UZAVŘENÍ KONFERENCE - V SÁLE RUDOLFA BRDIČKY</b> Closing ceremony (in Brdička Hall)		
16:25-17:45	<b>VEČEŘE K UKONČENÍ KONFERENCE (VE VESTIBULU)</b> (Dinner in lobby)		