

Tuesday October 1, 2024		
17:00 - 18:30	Registration	
19:00	Welcome dinner	
Wednesday October 2, 2024		
9:00 - 9:20	Opening	
Session 1		
Chaired by	Jaroslav Mosnáček	
9:20 - 9:40	L-01 Pavol Alexy	Ecological materials from bio-based and bio-degradable polymers
9:40 - 10:00	L-02 Ivan Chodák	Modification of thermoplastic starch as a component in mixtures with biopolymers
10:00 - 10:20	L-03 Ivan Kelnar	Processing, blending and modifications of chitin/glucan complex in ionic liquids
10:20 - 10:50	Coffee Break	
Session 2		
Chaired by	Chih-Feng Huang	
10:50 - 11:10	L-04 Petr Štěpánek	Microfluidic preparation of polymer nanoparticles and giant polymer vesicles
11:10 - 11:30	L-05 Jozef Kollár	Exploring various techniques to produce polymeric nanoparticles
11:30 - 11:50	L-06 Vladimír Raus	Polysaccharide-synthetic polymer hybrids: from graft copolymers to blends and (nano)composites
11:50 - 12:10	L-07 Jaroslav Mosnáček	Oxygen tolerant surface initiated photochemically induced ATRP
12:10 - 12:30	L-08 Sachin Gupta	Functionality amplification for the straightforward synthesis of complex polymeric architectures
12:30 - 14:00	Lunch	
Session 3		
Chaired by	Zdenko Špitalský	
14:00 - 14:20	L-09 Shiao-Wei Kuo	Construction archimedean tiling patterns based on soft materials
14:20 - 14:40	L-10 Martin Danko	Dynamic polyester networks based on tulipalin a and ϵ -caprolactone crosslinked by thia-Michael reaction and activated by alkylation of thioether group
14:40 - 15:00	L-11 Katarína Borská	Poly lactide-based dynamic networks
15:00 - 15:20	L-12 Abolfazl Heydari	Dynamic networks in biomedical applications: connecting molecular behavior to macroscopic properties
15:20 - 15:40	L-13 Chih-Feng Huang	Investigations of efficient reactions towards polymerizations to the preparations of novel functional polyesters
15:40 - 16:00	L-14 Stepan Podzimek	Synthesis and molecular structure of acrylic copolymers containing bio-synthetic monomers
16:00 - 18:00	Poster session	
18:00 - 20:00	Excursion in Astronomical Institute SAS, dinner	
Thursday October 3, 2024		
Session 4		
Chaired by	Dušan Račko	
9:00 - 9:30	L-15 Peter Košován	Acid-base equilibria and partitioning of solutes in two-phase systems containing charged polymers and colloids
9:30 - 9:50	L-16 Pritam Guha	Tailoring 2-oxazoline based digradient copolymers for rifampicin delivery: synthesis, physicochemical properties, and colloidal behavior

9:50 - 10:10	L-17 Rafal Poreba	Well-defined poly(2-isopropenyl-2-oxazoline) brushes provide fouling resistance and versatility in surface functionalization
10:10 - 10:30	L-18 Zuzana Benková	Interactions of proteins with poly(ethylene oxide) modified surfaces in two different setups studied by molecular dynamics
10:30 - 10:50	Coffee Break	
Session 5		
Chaired by	Martin Hrubý	
10:50 - 11:10	L-19 Igor Lacík	Alginate-based microspheres for cell encapsulation in diabetes treatment
11:10 - 11:30	L-20 Michal Babič	Polymer particles as contrast agents for photoacoustic tomography
11:30 - 11:50	L-21 Krzysztof Jerczynski	Synthesis of molecular brushes with lubrication properties as component of novel injectable polymer gels for osteoarthritis treatment
11:50 - 12:10	L-22 Michal Pechar	Targeting of polymer drug delivery systems with recombinant proteins bound via tris(nitrilotriacetic acid)
12:10 - 12:30	L-23 Jiří Pflieger	Electronic memory phenomena in polymers – from digital memory to memristors and simulation of neuronal synapses
12:30 - 14:00	Lunch	
Session 6		
Chaired by	Zuzana Benková	
14:00 - 14:20	L-24 Peter Virnau	Knots in polymers, DNA and proteins
14:20 - 14:40	L-25 Dušan Račko	Knots in polymers and biopolymer and chirality
14:40 - 15:00	L-26 Renáta Rusková	DNA topology in Atomic Force Microscopy
15:00 - 15:20	L-27 Pawel Dabrowski-Tumanski	Borromean rings in proteins
15:20 - 15:40	L-28 Peter Cifra	Cavity confinement of semiflexible macromolecules
15:40 - 16:00	L-29 Ján Smrek	Active polymer melt
16:00 - 16:15	L-30 Stanislav Kukla	Chapters in Green chemistry
16:15 - 16:30	Coffee Break	
Session 7		
Chaired by	Zuzana Kroneková	
16:30 - 16:45	LS-01 Nafiseh Babaei	Synthesis and characterization of biocompatible and 3D printable poly (OEGMA-stat-MMA) thermoplastic elastomers via ATRP polymerization suitable for tissue engineering applications
16:45 - 17:00	LS-02 Ankita Meena	Propagation rate coefficient of methyl acrylate and 2-methoxy ethyl acrylate in water and ethanol/water mixtures
17:00 - 17:15	LS-03 Omid Moghaddam	Investigation of dynamic and static properties of cyclic polyacrylate melts
17:15 - 17:30	LS-04 Silvia Mares Barbosa	Natural nanofillers from <i>Aspergillus niger</i> as a highly efficient reinforcement in novel elastomers based on waterborne polyurethane
17:30 - 17:45	LS-05 Fereshteh Kazemi-Aghdam	Mechanical characterization of dual crosslinked alginate-based hydrogel formed via reversible covalent bonds
17:45 - 18:00	LS-06 Aakash Sharma	The unusual gelation in aspartate-based polyurea: effect of sniv salt on network structure
19:00	Conference dinner	
	Special evening lecture Ivan Chodák	Swing, an important part of jazz music, piano performance and comments

Friday October 4, 2024**Session 8**

Chaired by	Matej Mičušík	
9:00 - 9:20	L-31 Zdenko Špitalský	Antibacterial activity of 3D printed thermoplastic elastomers for biomedical applications
9:20 - 9:40	L-32 Radek Stocek	A detailed study of the effect of cyclic loading on the thermal expansion coefficient of reinforced styrene-butadiene rubber as a function of different carbon black types"
9:40 - 10:00	L-33 Anastasiia Stepura	Study of properties of novel HAVOH-based polymeric nanocomposites with 2D MXene
10:00 - 10:20	L-34 Mária Kováčová	Hydrophobic carbon quantum dots as antimicrobial agent in polymer coatings and their eco-toxicity study
10.20 - 10.50	Coffee Break	

Session 9

Chaired by	Igor Lacík	
10:50 - 11:10	L-35 Martin Hrubý	Stimuli-responsive polymers for bioapplications: From drug delivery systems to sensor
11:10 - 11:30	L-36 Juraj Kronek	Poly(2-isopropenyl-2-oxazoline) as a versatile functional polymer for advanced materials
11:30 - 11:50	L-37 Tibor Macko	Advanced analytical characterization of synthetic polymers with chromatographic and spectroscopic method
11:50 - 12:10	L-38 Zuzana Kroneková	Cationic poly(2-ethyl-2-oxazoline)s as new class of biocompatible modifiers of montmorillonites for sorption and decontamination of organic molecules
12:10 - 12:30	L-39 Matej Mičušík	Two-dimensional materials and hybrids for advanced application
12:30 - 13:00	Closing	
13:00 - 14:00	Lunch	