

POLYMERY 2026 - Conference Programme

Monday, 5 October 2026

17:00 – 18:30	Registration
19:00	Welcome dinner

Tuesday, 6 October 2026

9:20 – 9:30	OPENING Petr Chytil, Jaroslav Mosnáček, Tomáš Etrych
<i>Chaired by:</i> Jana Machotová / Zdenko Špitalský	
9:30 – 9:45	L-01 Jaroslav Mosnáček Functional polymers from biorenewable monomers
9:45 – 10:00	L-02 Hynek Beneš Cleaveable and reprocessable polymer networks – a promising path to recyclable thermosets
10:00 – 10:15	L-03 Martin Danko Polyester-based adaptable networks; example of Tulipalin A and epsilon-caprolacton copolymer cross-linked with thioether
10:15 – 10:30	L-04 Sambit Kumar Lenka Green synthesis and properties of fully renewable poly(amidoamine)s from Tulipalin A and aliphatic diamines
10:30 – 11:00	Coffee break

Chaired by: Tomáš Etrych / Zuzana Kroneková

11:00 – 11:40 IL-01

Lutz Nuhn

In vivo degradable aliphatic polycarbonate nanocarriers for immunodrug delivery and gene interference

11:40 – 11:55 L-05

Zuzana Benková

Why AFM and SFA measurements do not fully predict protein interactions with PEO and PMOx polymer layers

11:55 – 12:10 L-06

Omid Moghaddam

Evaluating Martini 3 models of human serum albumin for molecular-level understanding of protein resistance in self-assembled monolayers

12:10 – 14:00

Lunch

Chaired by: Jana Navrátilová / Hynek Beneš

14:00 – 14:15 L-07

Jana Machotová

Sustainable acrylic latexes incorporating vegetable oil-derived monomers for waterborne facade coatings

14:15 – 14:30 L-08

Michaela Vaňková

Functionalized porous organic polymers for reversible sorption of solvent vapors

14:30 – 14:45 L-09

Miroslav Slouf

Energy-efficient production of thermoplastic starch through reduction of the average molecular weight of native starch

14:45 – 15:00 L-10

Miroslava Dušková-Smrčková

Polyaspartic-polyurea networks for high-performance coatings: Insights into gelation and crosslink density

15:00 – 15:15 L-11

Jaroslav Kolejka

Modern approach to thermal analysis

15:15 – 16:00

Coffee break

Chaired by: Lutz Nuhn / Markéta Ilčíková

- 16:00 – 16:15 L-12
Juraj Kronek
Drug delivery systems based on poly(2-oxazolines) in the treatment of cancer and infectious diseases
- 16:15 – 16:30 L-13
Petr Chytil
Polymer-drug conjugates with immunomodulating properties
- 16:30 – 16:45 L-14
Zuzana Kroneková
Poly(2-isopropenyl-2-oxazoline) hydrogels for biomedical applications
- 16:45 – 17:00 L-15
Libor Kostka
Beyond linear chains: Topological engineering of HPMA-based nanomedicines for superior anti-cancer efficacy
- 17:00 – 17:15 L-16
Emrah Celen
Synthesis and characterisation of amphiphilic DMA/PEGMA/FMA copolymers

18:00 – 19:00

Dinner

19:30 – 22:00

POSTER SESSION

Wednesday, 7 October 2026

Chaired by: Ian Teasdale / Anita Eckstein

9:30 – 9:45 L-17

Jozef Kollár

Design and synthesis of functional amphiphilic polymers via multicomponent reactions

9:45 – 10:00 L-18

Tomáš Porubský

Mechano-ATRP of *n*-butyl acrylate, effect of particle size, crystal structure and type of solvent on polymerization control

10:00 – 10:15 L-19

Vladimír Raus

Modification of poly(2-isopropenyl-2-oxazoline) with amines

10:15 – 10:30 L-20

Tania Jacob

Extending TAI- initiated Cu-RDRP to water soluble monomers: Polymerization of *N*-(2-hydroxypropyl) methacrylamide and investigation of solvents effects

10:30 – 11:00

Coffee break

Chaired by: Jaroslav Mosnáček

11:00 - 11:40 IL-02

Ian Teasdale

Inorganic polymers as new materials for biomedicine and sustainability

11:40 – 12:30 ÚP-ÚMCH meeting

12:15 – 14:00

Lunch

Chaired by: Miroslav Šlouf / Matej Mičušík

- 14:00 – 14:15 L-21
Jana Navratilova
Control of polypropylene crystallization and morphology via heterogeneous and self-nucleation
- 14:15 – 14:30 L-22
Zdeněk Starý
Polypropylene composites with short carbon fibres for 3D printing
- 14:30 – 14:45 L-23
Marek Pakosta
StructRelaX: An integrated computational framework for TNM-based analysis of structural relaxation in polymer glasses
- 14:45 – 15:00 L-24
Zdenko Špitalský
Polymer materials in a neonatal simulator
- 15:00 – 15:15 L-25
Anastasiia Stepura
Study of the physical properties of 2D graphene oxide and MXenes

15:15 – 16:00 *Coffee break*

Chaired by: Zuzana Benková / Miroslava Dušková

- 16:00 – 16:15 L-26
Roman Svoboda
New interpretation frameworks for the structural relaxation and crystallization kinetics
- 16:15 – 16:30 L-27
Josef Jůza
Shape relaxation of viscous drop and boundary tension measurement using a pendant drop method
- 16:30 – 16:45 L-28
Renáta Reissová (Rusková)
The interplay of chiralities – supercoiled DNA knots in confinement
- 16:45 – 17:00 L-29
Aakash Sharma
Epoxy thermosets based on aspartate esters
- 17:00 – 17:15 L-30
Radmila Sedlářová
BioRenewable solvents for chromatography

18:30 **Conference dinner**

Thursday, 8 October 2026

Chaired by: Martin Danko / Martin Hrubý

9:30 – 9:45 L-31

Miroslav Šlouf

Novel embedding resins for 3D-SEM with enhanced resistance to e-beam damage

9:45 – 10:00 L-32

Ahmed Ali Nada

Organic cathodes based on redox-active polymers for Al-ion batteries

10:00 – 10:15 L-33

Konstantin Milakin

Functional conducting polymer cryogels

10:15 – 10:30 L-34

Darshak Pathiwada

Covalent flame-retardant surface modification of polypropylene battery separators via plasma activation and photoinduced ATRP

10:30 – 11:00

Coffee break

Chaired by: Juraj Kronek / Libor Kostka

11:00 – 11:15 L-35

Markéta Ilčíková

Poly (OEGMA-*stat*-MMA) copolymers with sparse bottlebrush structure for 3D printing and multicellular spheroids harvesting

11:15 – 11:30 L-36

Martin Hrubý

Adaptive polymer biointerfaces: From polyelectrolyte complexes to hybrid particles

11:30 – 11:45 L-37

Matej Mičušík

Implants based on biodegradable polylactic acid/polyhydroxybutyrate blends and modified bioglass composites

11:45 – 12:00 L-38

Ivan Kelnar

Preparation of collagen/chitin–glucan biomaterials using ionic liquids

12:00

CLOSING OF THE CONFERENCE

12:15

Lunch