

22nd International Conference on POLYSACCHARIDES-GLYCOSCIENCE

Preliminary Programme



11–13 November, 2026



Novotného lávka 5, Prague,
Czech Republic



UNIVERSITY OF
CHEMISTRY AND TECHNOLOGY
PRAGUE

Chem
Plus
Chem



Chemistry
Europe

11th November 2026

18:00 Glass of wine – unofficial openings

Vinný újezd

Újezd 19, 150 00 Malá Strana

<https://www.vinnyujezd.cz/>



Tram stop – Újezd, Pražské Jezulátko or Tyršův dům - (Tram numbers: 1, 5, 9, 12, 15, 18, 20, 22, 23, 25)



This place is located in the historical centre of Prague under Petřín hill, at about 800 meters from Charles Bridge.

12th November 2026

8:00 - 9:00 Registration

9:00 - 9:10 Opening Ceremony

Novotného Lávk 5, Prague 1

- Keynote lecture: 30+10 min. discussion
- Oral presentation: 10+5 min. discussion
- Poster size is recommended max. width 90 cm and max. height 110 cm.

9:00 WELCOME

JANA ČOPIKOVÁ and PAVEL NOVÁK, UNIVERSITY OF CHEMISTRY AND TECHNOLOGY, PRAGUE

ORAL SESSION

9:10 – 12:30		Oral session 1 Chairwoman: JANA ČOPIKOVÁ
9:10 – 9:50	<u>Ulrica Edlund</u> Keynote lecture: From native tissues to bioproducts: 3D visualization of polysaccharides and other biopolymers in biomass	
9:50 – 10:05	<u>R. Guo*</u> , J. A. Cain, J. H. Fitton, P. Winberg, E. S.X. Moh, N. H. Packer In-depth characterization of a unique Australian seaweed-derived polysaccharide and protein extract	
10:05 – 10:20	<u>M. Fiedot*</u> , A. Junka, A. Bastrzyk, Z. Stepnicka, M. Ahmed, M. Mohamed, M. Wojtas, A. Lewińska, R. Jędrzejewski, J. Cybulska, A. Zdunek, M. Brożyna, B. Dudek, K. Szustakiewicz Intrinsic pectin architecture governs silver nanoparticle formation and antimicrobial function	
10:20 – 10:30	<u>J. Elleuch*</u> , F. Hadjkacem, P. Michaud, I. Fendri, G. Pierre, S. Abdelkafi Bioactive polysaccharides from the tunisian brown seaweed <i>Halopteris scoparia</i>	
10:30 – 11:00		Coffee break / poster section

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|---------------|---|
| 11:00 – 11:40 | <u>Jian-yong Wu</u>
Keynote lecture: Current trends and important directions of research on natural polysaccharides and nutraceutical functions |
| 11:40 – 11:55 | <u>K. K. Santhil Nathan</u> , L. Ee Low, N. Wan Rasdi, N. Abdul Hadi*
Evaluation of the efficiency of native and modified <i>Dioscorea hispida</i> Dennst (<i>D. hispida</i>) starches in structuring stable Pickering emulsion gels |
| 11:55 – 12:10 | <u>S. Abdullah*</u>
Polysaccharide-Based Nanogels for Targeted Drug Delivery and Tissue Regeneration: From Cancer Therapy to Advanced Wound Healing |

12:10 – 12:25 S. Pramanika, M. M. Bharalia, A. Santraa*
Influence of 4,6-O-Benzylidene Protection on Galactosylation Stereoselectivity: Mechanistic Insight into Unexpected α -Galactosylation

12:30 – 13:30

Lunch break

13:30 – 16:00

Oral session 2

Chairman: Roman Bleha

13:30 – 14:10 Pedro Fardim
Keynote lecture: Engineering microbial polysaccharides for human health applications

14:10 – 14:25 J. Zieher, B. Benetková, L. Fliri, A. Potthast, T. Rosenau, H. Hettegger*
Selective de-crosslinking of cellulose fibers for improved textile recycling

14:25 – 14:40 L. V. Ponsoni*, M. Beaumont, F. Liebner, M. V. G. Zimmermann
Development of oxidized cellulose from native Brazilian species for hemostatic foam applications

14:40 – 14:55 M. Chiorean*, N. Fasching, A. Winter, T. Rosenau, M. Beaumont^a
From aquatic biomass to functional paper materials: conversion of *Myriophyllum spicatum* into polysaccharide-based papers

14:55 – 15:10 M. Mujtaba*, V. Linh, R. Pylkkanen, K. Marjamaa
Engineering Cellulose Structure for Enhanced Light Scattering through Alkaline and Enzymatic Processing

15:10 – 15:25 B. Ivens, J. Delcour, B. Goderis*
An advanced SAXS and WAXS study on starch gelatinization under limited water conditions reveals mechanistic aspects

15:25 – 15:40 N. Minh Ta, T. Thao Le, X. Qi*, R. Tester
Carbohydrate engineering in sweet oat-based biscuits

15:40 – 15:55 M. Tsirigotis-Maniecka*
Tuning structure to control function: polysaccharide hydrogel microcarriers for phytochemical protection and delivery

16:00 – 16:30

Coffee break / poster section

16:30 – 18:00

Oral session 3

Chairman: Jacek Lewandowicz

16:30 – 16:45 M. Wimmerová*
Microbial lectins in host–pathogen interactions: from glycan recognition to structural diversity

16:45 – 17:00 I. Pozzan, S. Jarzabek, I. Pawlaczyk-Graja*
Optimization of NADES-assisted pectin extraction from celeriac pomace

- 17:00 – 17:15 P. K. Borah*, A. H. Irani, D. Russo, J. Smiatek, M. Sarter, M. A. K. Williams, G. E. Yakubov
preferential solvation drives polysaccharide conformation in miscible heterogeneous solvents
- 17:15 – 17:30 G. E. Yakubov*, P. K. Borah, J. E.S.J. Reid, T. MacCalman, V. Dinu, J. Hunger, M. Sarter, D. Russo, F. Natali, M. W. Boehm, S. E. Harding, M. A.K. Williams, S. K. Baier
From solvation to rheology: non-monotonic conformational transitions of okra pectin in water–glycerol mixtures
- 17:30 – 17:45 M. Rihova*, L. Hromadko, V. Cícmancova, J. M. Macak
Gum arabic fibers by centrifugal spinning for cosmetic and dermatologic application

20:00 – 24:00

Conference dinner

19:00 Departure from Novotného lávka (We will walk across Charles Bridge)

19:30 Arrival to BRICK'S Restaurant

20:00 Welcome and start of dinner

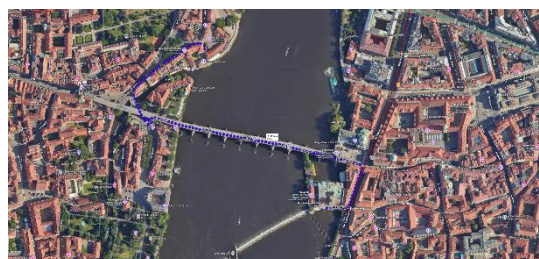
24:00 Expected end

The social evening will take place at BRICK'S Restaurant, an elegant riverside venue in Prague's historic district, just a short walk from the iconic Charles Bridge. Located on the banks of the Vltava River, the restaurant offers beautiful views of Prague's historic skyline and combines contemporary style with the unique atmosphere of the city.

BRICK'S is situated next to the Franz Kafka Museum, dedicated to one of the most influential writers of the 20th century. The museum explores Kafka's life, literary works, and strong connection to Prague, adding a distinctive cultural character to this historic location.



BRICK'S Restaurant, Cihelná 2b, 118 00 Malá Strana, <https://bricksprague.com/>



13th November 2026

Novotného Lávk 5, Prague 1

ORAL SESSION

9:00 – 10:30		Oral session 4 Chairman: Andrej Sinica
9:00 – 9:40	<u>Alexei V. Demchenko</u> Keynote lecture: Automated synthesis and purification of glycans	
9:40 – 9:55	<u>D. Giguère*</u> Synthesis of a Hexasaccharide Epitope Towards a Vaccine Against Group B Streptococcus	
9:55 – 10:10	<u>P. Marten, O. Weichold*</u> Plasticisation of polylactide using chitin and lecithin	
10:10 – 10:25	<u>R. Korman*</u> , <u>R. Bleha</u> , <u>D. Avci</u> , <u>M. Sogel</u> , <u>A. Synytsya</u> Isolation, fractionation and structural analysis of polysaccharides from <i>Pleurotus ostreatus</i> „Black pearl“	
10:30 – 11:00		Coffee break / poster section
11:00 – 13:10		Oral session 5 Chairman: Simon Leonhartsberger
11:00 – 11:40	<u>Cláudia P. Passos</u> Keynote lecture: Polysaccharide-based formulations as potential carriers for pulmonary delivery	
11:40 – 11:55	<u>M. Sogel*</u> , <u>R. Korman</u> , <u>D. Avci</u> , <u>R. Bleha</u> , <u>A. Synytsya</u> Structural characterisation of polysaccharide fractions from brewer's spent grain especially obtained by cold water extration	
11:55 – 12:10	<u>A. Zvirgzdins</u> , <u>A. Zile</u> , <u>A. Lends*</u> Multidimensional solid-state NMR of intact fungal polysaccharides: from structure to fungal cell-wall architecture	
12:10 – 12:25	<u>D. Avci*</u> , <u>R. Korman</u> , <u>M. Sogel</u> , <u>R. Bleha</u> , <u>A. Synytsya</u> Exploring polysaccharides from the green microalga <i>Micractinium inermum</i> through extraction, fractionation and structural characterisation	
12:25 – 12:40	<u>C. T. P. Coelho</u> , <u>S. Gang</u> , <u>N. Binney</u> , <u>S. Mugica</u> , <u>J. Clare</u> , <u>D. A. Fulton*</u> Mechanochemically Synthesised Chitosan Schiff Bases as Sustainable Pro-Perfume Delivery Systems for Laundry Applications	
12:40 – 12:55	<u>N. Münstermann</u> , <u>O. Weichold*</u> Chitosan-based interpolyelectrolyte complexes as wood	
12:55 – 13:10	<u>J. Hasjim*</u> Roquette clean label starches	
13:10 – 14:00		Coffee break / poster section

14:00 – 16:00

Oral session 6
Chairman: Andrej Sinica

- 14:00 – 14:40 Christian Stanetty
Keynote lecture: Engineering Functional Polysaccharides for Sustainable Adhesives and Water Treatment
- 14:40 – 14:55 S. Leonhartsberger
Beyond the plastic bottle - The overlooked footprint of synthetic polymer flocculants
- 14:55 – 15:10 B. Basu*, R. Sarkar, C. Kundu, B. Prajapati
Design and optimization of a dual-drug chitosan-based buccal patch of amlexanox and vitamin B12 for enhanced aphthous/oral ulcer treatment
- 15:10 – 15:25 J. Obradović*, N. Münstermann, O. Weichold
Investigating the rheology of chitosan and its derivative blends in solution
- 15:25 – 15:40 J. Lewandowicz
Starches in food technology
- 15:40 – 15:55 C. I. Idumah*
Emerging Advances in Polysaccharides Hydrogel Bionanoarchitectures for Biomedical Applications

16:00 – 16:30

Young Science Award

16:30 – 16:45

ICPG closing

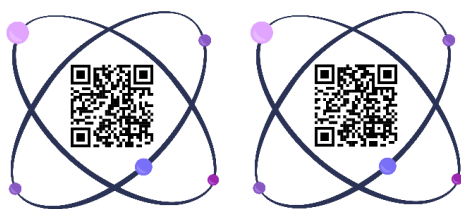
POSTERS

1. L. E. Nita*, L. E. Grigori, A. Vieru, A. G. Rusu, A. M. Serban, R. N. Darie-Nita Supramolecular hydrogels based on carrageenan and amino acids
2. L. E. Grigoriu, A. G. Rusu*, R. D. Niță, C. N. Yilmaz, A. M. Șerban, L. E. Niță Injectable GMA-modified alginate-based gels loaded with rhein-cysteine conjugate for biomedical applications
3. M. Amrani*, P. Bucki, N. S. Shimon, N. Gorohovsky, T. Sayas, M. Kleiman, S. B. Miyara, N. Lachman-Senesh, I. Braslavsky Polysaccharide-Based Biomimetic Root System for Investigating Root-Knot Nematode Behavior
4. P. Jara*, S. Salazar-Sandoval, N. Yutronic, M. Kogan Controlled drug release from a superparamagnetic β -cyclodextrin nanosponge by applying an external alternating magnetic field

5. T. Pedramrad*, P. Ferreira, P. Duarte, I. Gonçalves Upcycling Tomato Pomace into Carbon Dots for Active Thermoplastic Starch/Bentonite Composite Films
6. I. Švec, M. Havrlentová*, D. Jánoška, K. Hrčková, M. Sluková Influence of harvest year and soil protection technology on starch content in corn grain
7. I. Uhliariková*, Z. Košťálová, P. Capek Phytochemical and antioxidant profile of alkaline fractions from wild blackthorn (*Prunus spinosa* L.)
8. V Linh*, M. Mujtaba, K. Marjamaa Developing cellulose-based sustainable alternatives for titanium dioxide in paint coating
9. I. Amraoui, A. Duong*, M. Benazza, R. Abidi Glycoconjugation of PyDAT: A Platform for the Design of Heterocycle–Sugar Hybrids Using a Therapeutic “Trojan Horse” Strategy Against Cancer
10. A. Kaczmarska-Kró*, J. Matusiak, J. Cybulska, A. Zdunek, W. Franus RG-I architecture of apple-derived diluted alkali-soluble pectin (DASP) determines pH-dependent rheology and emulsion stability
11. J. E. Reyes-Calderón*, K. Cuero-Amub, N. León-Salamanca, R. Santillan, N. Farfanc, Z. J. Rivera-Monroy, J. E. García-Castañeda* Tricomponent NSAID-Glycopeptide Chimeras as Potential Dual Antibacterial and Anticancer Agents

Poster size is recommended max. width 90 cm and max. height 110 cm.

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Thank you for joining our 22nd ICPG conference. We look forward to meeting you at 23rd ICPG, which will be from

10th to 12th November 2027 in Prague.

On behalf of the Scientific and Organising Committees
Roman Bleha, Jana Čopíková, Evžen Šárka



22nd ICPG Sponsors



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