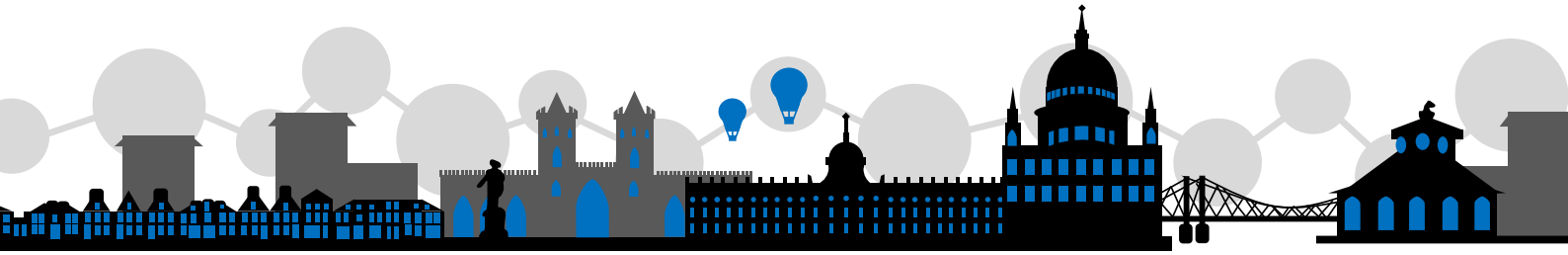
POLYDAYS 2026

Functional polymers for sustainable materials



Conference Program

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polymers

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Ein Unternehmen der Universität Potsdam

Journal of Polymer Science

Program - Polydays 2026

Wednesday - 07.10.2026

12:00 – 13:30	**Arrival & Lunch**	
13:30 – 13:45	Welcome by the Organizers	
13:45 – 15:40	**Session 1**: Polymerisation and Depolymerisation (*Chair: M. Hartlieb*)	
13:45 – 14:30	Charlotte Williams (Oxford)	Forward and Back Again: The Science of Polymer Production and Chemical Recycling to Monomer
14:30 – 15:00	Fabian Eisenreich (Eindhoven)	Light-Driven Polymer Recycling
15:00 – 15:20	Friederike Adams (Stuttgart/Munich)	Enhancing Green Metrics in Metal-Catalyzed Ring-Opening Polymerization of Lactones
15:20 – 15:40	Frederik Haase (Halle)	Crystallizing covalent organic frameworks in linear polyimine matrices: towards transparent glass-ceramic-like hybrid films
15:40 – 16:10	*Coffee break*	
16:10 – 17:20	**Session 2**: Hydrogels and Biomimetics (*Chair: R. Haag*)	
16:10 – 16:30	Marina Pigaleva (FU Berlin)	Carbonic Acid under High-Pressure CO_2 as a Green Medium for Design of Biopolymer Based Materials
16:30 – 16:50	Johanna Elter (FU Berlin)	Where Definition Matters: Sequence-Defined Polycations as a Platform for Tailor-Made Antimicrobials
16:50 – 17:20	Jens Gaitzsch (Dresden)	Multi-Functional Microfluidic Reaction Chambers Through Responsive Hydrogels and Snail Slime
17:20 – 18:20	Poster Pitches A – Chair: M. Reifarth	
18:20 – 20:15	**Poster Session A** - Snacks & Drinks	

Thursday - 08.10.2026

09:00 – 10:40	**Session 3**: Circular economy of polymer materials (*Chair: F. Eisenreich*)	
09:00 – 09:30	Katja Loos (Groningen)	Green Pathways to Functional and Renewable Polymeric Materials
09:30 – 10:00	Katrien Bernaerts (Maastricht)	Bio-Based Non-Isocyanate Polyurethane and Polyurea Coatings: From Waterborne Systems to Recyclable Dynamic Networks
10:00 – 10:20	Axel T. Neffe (Cottbus)	Aliphatic Polyesters and Iron – a Fruitful Combination
10:20 – 10:40	Jonas Debuyck (Ghent)	Benzene-1,3,5-Tricarboxamides as Topology-Directing Motifs for Robust Polyamide Hot-Melt Adhesives
10:40 – 11:00	Coffee break	

Thursday - 08.10.2026 (continued)

11:00 – 12:30	**Session 4**: Photostructured & -active materials (*Chair: J. Gurke*)	
11:00 – 11:30	Michael Kathan (Berlin)	Inventing molecular machines to explore new chemical space
11:30 – 11:50	Felix H. Schacher (Jena)	Polyphilic Graft Copolymers: Jack-of-All-Trades as Soft Matter Matrices in Light-Driven Catalysis
11:50 – 12:10	Anzhela Galstyan (Duisburg-Essen)	Designing Photoactivity: Modulating Antimicrobial Photodynamic Effects through Polymer–Photosensitizer Assembly
12:10 – 12:30	Jiayin Yuan (Stockholm)	Upcycling Wood Waste into Solar-Driven Regenerative Sorbent for Direct Air Capture
12:30 – 14:00	**Lunch**	
14:00 – 15:10	**Session 5**: Photonics (*Chair: S. Santer*)	
14:00 – 14:30	Silvia Vignolini (Potsdam)	Bio-inspired self-assembled chiral architecture for optics and plasmonics
14:30 – 14:50	Marek Bekir (Potsdam)	Unlocking High-Performance Surface-Sensitive Separations through Polymer Substrate Engineering
14:50 – 15:10	Magdalena Zdanowicz (Szczecin)	Eutectic mixtures as functional additives for bio-based polymers
15:10 – 16:00	Poster Pitches B Chair: M. Reifarth	
16:00 – 18:00	**Poster Session B**	
19:00 – 21:30	**Conference Dinner** @ El Puerto *(Lange Brücke 6, 14467 Potsdam)*	

Friday - 09.10.2026

09:00 – 10:25	**Session 6:** Electroactive and charged polymer materials (Chair: A. Laschewsky)	
09:00 – 09:45	David Mecerreyes (San Sebastián)	Design of mixed conducting Eutectogels for Bioelectronics
09:45 – 10:15	Mohsen Adeli (Berlin)	*Functional Two-Dimensional Materials with Tunable Interactions at Diverse Interfaces*
10:15 – 10:35	Rachel Yerushalmi -Rozen (Be'er Scheva)	Negatively charged polysaccharide (Gum Arabic) self-assembly of negatively charged gold nanoparticles
10:35 – 10:55	Coffee break	
10:55 – 11:40	**Session 7**: Sustainable Biomaterials (Chair: A. Böker)	
10:55 – 11:20	Sebastian Seiffert (Mainz)	Clean Water Overnight: Seawater Desalination by Thermo-Active Microgels
11:20 – 11:40	Daniel Klinger (Berlin)	Sulfonium-Based Antimicrobial Polymers: Influence of Structure and Composition on Biological Activity and Antibiotic Synergy
11:40 – 13:00	**Session 8**: Awards Session	
11:40 – 11:50	Poster Prizes	
11:50 – 12:10	BVP-Award Talk – Alain Bapolisi	Non-Amphiphilic Antimicrobial Polymers
12:10 – 12:50	Georg Manecke Award Lecture – Meike Leiske (Bayreuth)	Amino-acid-derived polyelectrolytes as an efficient tool to modulate interactions at the biointerface
12:50 – 13:00	Closing remarks by the Organizers	
13:00 – 14:00	**Lunch (to go) and departure**	

Venue

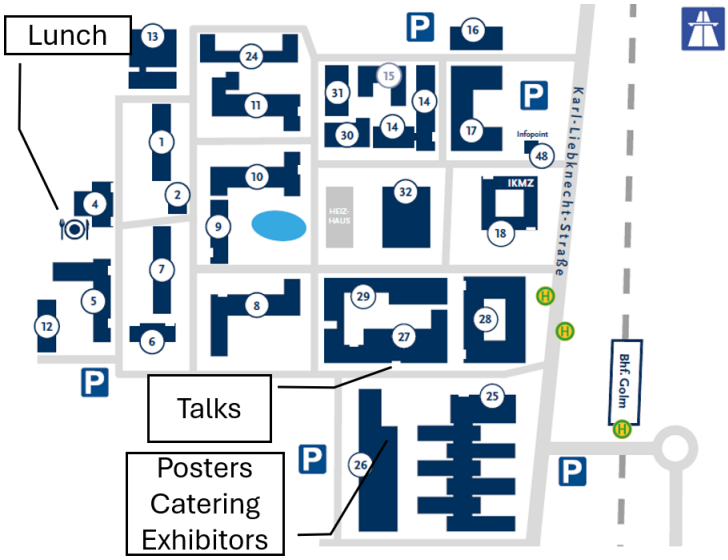
UP Science Campus – Golm

Karl-Liebknecht-Str. 24-25

14476 Potsdam (Golm)

Talks in House 27,
Lecture room 1.1

Poster, Catering, Exhibition
in House 26, Foyer



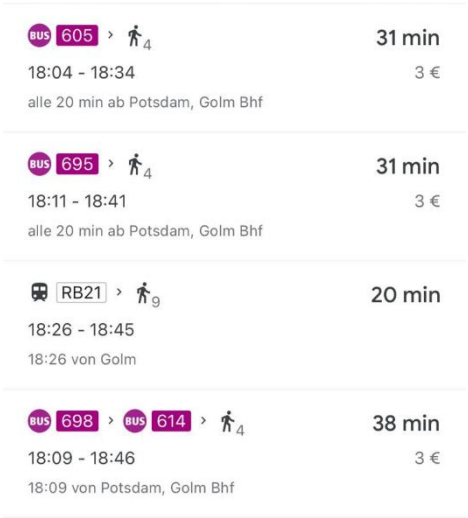
Conference Dinner

(Thursday 19:00)

Restaurant El Puerto

Lange Brücke 6,

14467 Potsdam



Poster Session A (Wednesday – Thursday 14:00)

Poster	Presenter	Institution	Title	Flash Talk
A1	Ponomareva	FU Berlin	tba	-
A2	Weingarten	LMU München	Balancing cationic and hydrophobic pH-responsive side chains in poly(β-amino ester)s for potent nucleic acid delivery	+
A3	Beier	TH Nürnberg	Acetal-Based Cross-Linking Agents for Selectively Cleavable Silicone Elastomers	+
A4	Folmert	Knauer	Co-precipitation of metal carbonate templated protein microparticles using Impingement Jets Mixing (IJM)	+
A5	Chouki	BTU Cottbus-Senftenberg	Development and Optimization of a 3D-Printable Mucin-MA-Based Bioink for Cartilage Tissue Engineering	-
A6	Moran Espinoza	Charles University in Prague	Structure–Property Relationships in Visible-Light Photocrosslinked Hydrogels Across Natural and Synthetic Polymer Platforms	+
A7	Heraji Esfahani	University of Potsdam	Plasmon-Induced RAFT Polymerization	-
A8	Nasiripour	BTU Cottbus-Senftenberg	Influence of Different Crosslinkers on the Mechanical and Biological Properties of 3DPrinted Scaffolds for Skeletal Muscle Tissue Engineering	+
A9	Gordievskaya	University of Potsdam	Patterned Photo-Responsive Microgel Surfaces for Controlled Particle Manipulation	+
A10	Izuagbe	Julius-Maximilians-Universität Würzburg	Reductive Decationizable Polyplex Systems for Targeted mRNA Delivery	+
A11	Braksch	University of Potsdam	PEDOT-based conductive films via a cationic (photo)polymerization	-
A12	Brott	University of Potsdam	Influencing activity and stability of a plastic degrading enzyme by polymer conjugation	+
A13	Fielitz	Potsdam & Melbourne	Let There Be Robots: Automated Screening and Flow Analysis of λ-Dependent Selective PI-RAFT Polymerization	+
A14	Javadi	University of Potsdam	Protease-Cleavable Branched Poly(DMA) for Antimicrobial Delivery	-
A15	Laschewsky	University of Potsdam	Biocompatible Crosslinkers for Biocide-Free Antifouling Coatings	+
A16	Strobelt	University of Potsdam	From Photoresponsive Polymers to Diffractive Optical Elements: Tools for Surface Microstructuring	+
A17	Umlandt	University of Potsdam	Optical Control of Interfacial Flows for Colloidal Transport and Assembly	-
A18	Terzioglu-Ekenler	University of Potsdam	Antibacterial Activity of Copolymers from Less Activated Monomers via PhotoIniferter RAFT Polymerization	-
A19	Thaller	FU Berlin	Sequence-Defined Polycations via Iterative Exponential Growth as Novel Candidates to Prevent Antimicrobial Resistance	+
A20	Vigogne	Otto-von-Guericke-Universität Magdeburg	Bio-based resins for DLP 3D printing: a focus on lignin valorization via fast parameter screening for enhanced resin development	+
A21	Lipka	University of Bayreuth	Manipulating Stimuli Responses of Poly(2-oxazoline)s in Solution	-
A22	Rother	University of Bayreuth	Cationic poly(2-oxazoline)s as drug delivery vectors and their effect on breast cancer cells	-

Poster Session B (Thursday 14:00 - Friday)

Poster	Presenter	Institution	Title	Flash Talk
B1	Wesolowski	Knauer	SEC for fingerprint analysis of gummy candies – ensuring product quality and process control	+
B2	Pakzad	MPI Golm	Artificial Humic Substances from Biomass as Functional Polymer Materials for Environmental Sustainability	+
B3	Kučera	Charles University in Prague	Multicompartment micelles formed by polymer-surfactant coassembly in presence of sodium dodecaborate	+
B4	Nabiyan	University of Potsdam	*"Localization versus Aggregation of Photoredox Catalysts in Water through Polypeptoid Hydrogels*	-
B5	Schubert	TH Nürnberg	Towards Circularity of RTV-1 Silicone Sealant Cartridges: Separation, Recovery, and Recycling of Silicone Elastomers and Contaminated Polyolefins	+
B6	Addoquaye	Charité – Universitätsmedizin Berlin	Impact of Inorganic Fillers on Density, Rheology, and Blood Separation in Polyacrylate-Based Separator Gels	+
B7	Heinrich	TU Berlin	IPECs formed by double hydrophilic copolymers and their stability	+
B8	Madaj	University of Potsdam	Thermoresponsive catechol-containing poly(2-isopropyl-2-oxazoline)s for metal ion complexation and nanoparticle synthesis	+
B9	Morrissey	Ghent University	Sequence-Defined Oligomers for Materials Design: Bridging Precision and Scalability	+
B10	Zdanowicz	West Pomeranian University of Technology in Szczecin	Design for Recycling: Evaluation of Industrial Mono-Material PE Pouch Films for Mechanical Recycling within the Interreg MERGE Project	-
B11	Onwuka	BTU Cottbus-Senftenberg	Functionalization of Gelatins with Electron Rich and Electron Poor Aromatics and their Influence on π-π-Interactions	+
B12	Zidar	FU Berlin	Development of Biogenic Adsorber Materials for Water Purification Applications	+
B13	Schneider	Radboud University	Hydrophilic Poly(Iminopyridinium Ylides): Defining An Unexplored Chemical Space	+
B14	Sella	BTU Cottbus-Senftenberg	Comparative Evaluation of Organocatalytic and Metal-catalyzed Routes to Star-shaped Aliphatic Oligoesters	+
B15	Shan	University of Potsdam	Peptide-Polymer Conjugates for the Selective Binding and Recovery of Lanthanides	-
B16	Spenner	FU Berlin	Titration Curves of Weak Polyacids: A Classical Problem Revisited	+
B17	van Wijk	Radboud University	RAFT-to-Click: Accessing tetrazine functionalised RAFT-polymers via TeTEx	+
B18	Mondal	University of Fribourg,	Controlled Degrading Chromogenic Polymer	-
B19	Rodriguez Ayllon	Helmholtz-Zentrum Berlin	Self-Nitriding Nanostructured Transition Metal Nitrides in Architected-Carbon Matrices: Unveiling Mechanisms and Advancing Performance in Lithium-Sulfur Pouch Cells	-
B20	Tannert	University of Applied Sciences Zittau/Görlitz	Dynamic Polymer Networks from Methacrylated Lignin – How does the Lignin Source Effect Material Properties	-
B21	Raghuraman	Helmholtz-Zentrum Berlin für Materialien und Energie	Stabilizing Lithium Anode Interfaces via In-Situ PEGDA Polymerization for High–Voltage Lithium Metal Batteries	-
B22	Jordan	Tosoh Bioscience	Synthesis and characterization of PBT-Based Thermoplastic Copolyesters Containing a Renewable Fatty-Acid-Derived Soft Block	+