MAKRO2024 Polymers for a Sustainable Future

Biennial Meeting of the Macromolecular Division of the GDCh

PRELIMINARY POSTER PROGRAM

All Posters are on display for the entire conference and presented according to the following schedule.

Poster session I

Odd numbers

MONDAY, SEPTEMBER 16TH 2024

P1	Dietmar Appelhans IPF Dresden	*Probing macrophage- and lysosome-like structures and functions by polymeric (multi)compartments*
P3	Katharina Völlmecke University Paderborn	*Redox-triggered Self-immolative Polydisulfides as Drug Delivery Systems*
P5	Johannes Kockelmann Julius-Maximilians-University Würzburg	*(Oxa-)Norbornene Derived Block Copolymers for the Preparation of Functional Nanogels with pH- and ROS-Responsive Immunodrug Delivery Properties*
P7	Souraj Mandal TU Darmstadt	*Microgels for Enhanced Adsorption of Endothelial Cells on Artificial Networks*
P9	Fabian Mehner IPF Dresden	*Exploring the preparation and application of (bio)degradable polyesters from Radical ring-opening polymerization*
P11	Florian Cramer IPF Dresden	*Towards sustainable engineering polyesters via recycling on demand*
P13	Nadiia Davydiuk IPF Dresden	*Glycogen-Heparin Hybrid Nanoparticles as Biodegradable and In-Blood Active Materials*
P15	Diana Döhler Fraunhofer ISC Würzburg	*Inorganic-organic hybrid coatings meet sustainability: Low-temperature curing and design for recycling*
P17	Arman Edalat Martin Luther University Halle-Wittenberg	*Solid-State NMR Studies of intracrystalline chain dynamics in Ketone-modified linear polyethylenes*
P19	Tim Eppler IPF Dresden	*Converting 1D Conjugated Polymers into 2D Polymers*
P21	Patricia Godermajer TU Chemnitz	*Degradable bispiperidone derivative amine networks*
P23	Annalena Groß TU Freiburg	*Exploring the Multiresponsiveness of Quinolinone Motifs for Reversible Polymerizations*
P25	Jasper Hansen University Potsdam	*Improving Mechanical Stability of Ultra-low Fouling Hydrophilic Surfaces*
P27	Carl-Christoph Höhne Fraunhofer ICT Pfinztal	*Polymer additives for safe-and-sustainable-by-design plastics*

P29	Klaudija Janic Otto-von-Guericke Universität Magdeburg	*Supragel assembly via UV-crosslinking of DMMI-functionalized microgels with a low-cost LEGO® 3D printer*
P31	Sabith Saleem Kannadipparamban University Paderborn	*Cyclodextrin based Double Crosslinked Supramolecular Hydrogel sensor for Pesticide sensing*
P33	Pia Klee Heidelberg University	*Designing Recyclable Polymers for Additive Manufacturing*
P35	Andrea Koball IPF Dresden	*Snail slime as by-product of agriculture and promising base material for nanoparticle hydrogel composites*
P37	Jiayi Liu IPF Dresden	*Biodegradable and strong underwater adhesive coatings from hybrid glycogen nanoparticles*
P39	Nina Mast University Konstanz	*High density polyethylene with in-chain photolyzable and hydrolyzable groups enabling recycling and degradation*
P41	Till Meißner IPF Dresden	*Light-induced promotion of radical ring-opening polymerisation of cyclic ketene acetals*
P43	Bercis Pektas UHA Mulhouse – FR	*From Waste to Wonder: Efficient C2-Type Molecular Unit for Synthesis of Sulfur decorated Polymers*
P45	Martina Plank KIT Karlsruhe	*Green Synthesis of Phosphorylated Surfaces: Catalyst-Free and Light-Induced Transformation from Hydrophobic to Hydrophilic Surfaces via CVD Polymerization*
P47	Mareike Schumacher IPF Dresden	*Progressing Sustainability: Tools for Investigating Microplastic Pollution*
P49	Florian Tondock Leibniz University Hannover	*Mucin-inspired Polymers for Capturing and Recovering Water Contaminants*
P51	Upenyu Muza IPF Dresden	*Unveiling Microstructural Dynamics of Biopharmaceutical Nanostructures with the Novel TGE-3DCoThFFF*
P53	Tim Oddoy IPF Dresden	*Novel ion exchange Hybrid AEM-NF-Membrane for mMCDI process*
P55	Claas-Hendrik Stamp Universität Freiburg	*Mechanically-Induced Debonding of Capsules-Based Adhesive Composites*
P57	Ziwei Zhou IPF Dresden	*Highly efficient and reversible chirality transfer between protein and achiral plasmonic assemblies*
P59	Yang Zhou IPF Dresden	*Probing the Transformation from Membrane-less Coacervates to Membranized Coacervates and Giant Vesicles*
P61	Janna Jeschke IS2M, KIT, Eggenstein-Leopoldshafen - FR, DE	*Efficient Avenues Towards Upcycling of Polybutadiene Facilitated by Metal-Free Chemoselective Approaches*

P63	Fernanda Romero FU Berlin	*Mucus-inspired hydrogels based on sulfated dendronized polyglycerol polymers*
P65	Raju Bej FU Berlin, MIT - US	*Mucus-Inspired Dynamic Hydrogels: A Protective Barriers for Cells against Viral Infection*
P67	Taylor Page FU Berlin	*Redox-Responsive Linear Polyglycerol Sulfate - Lipoic Acid-Tailored Nanoparticles as a Drug Delivery System*
P69	Huijing Li KIT Karlsruhe	*Construction and Application of Perceptive Soft Actuator*
P71	Leon Bartlewski KIT Karlsruhe	*Modification of Oligomeric Carbohydrates towards Novel Sustainable Materials*
P73	Kristin Folmert KNAUER Wissenschaftliche Geräte GmbH	*Method Development for the Analysis of Biopolymers as Polylactic Acid with Gel Permeation Chromatography*
P75	Sebastian Schwab Universität Konstanz	*Model Compounds for Short-Ultralong Polyesters*

Poster session II

even numbers

TUESDAY, SEPTEMBER 17TH 2024

P2	Yue Cai Martin Luther University Halle-Wittenberg	*Initiator-Free Synthesis of Interpenetrating Polymer Networks via Bergman Cyclization*
P4	Robert Dallinger Georg-August-University Göttingen	*Extending the Monomer Scope of Reversible Complexation Mediated Polymerization Towards Acrylates*
P6	Jonah Decker University of Siegen	*Synthesis and characterization of solvatochromic dye-gradient polymer brushes*
P8	Yiyi Deng IPF Dresden	*Cyclic Ketene Acetals Do the Trick: Preparation of Functional and Degradable Polyesters from Radical Ring-Opening Polymerization*
P10	Tom Kösterke IPF Dresden	*Synthesis and characterisation of pseudo-glycodendrimers for biomedical applications*
P12	Chenming Li Martin Luther University Halle-Wittenberg	*Pyrrolidinium-Based Polyionic Liquids with Quadruple Hydrogen Bonds as Self-Healing Electrolytes*
P14	Abdul Mannan CSIR-IICT Hyderabad – IN	*The Effect of Oxygen delignification on Mechanical, Physical, and Thermal Properties of Banana fiber and polypropylene Composite Preparation for Durable Ev Automotive Parts*
P16	Matthias Rohmer Martin Luther University Halle-Wittenberg	*Designing switchable helical polymers to modulate the chiral induced spin selectivity – a novel route to use poly(amino acids) in electronics*
P18	Nicola' Agius University of Malta – MT	*Fluorescent Cinchona Alkaloid-based Copolymers*
P20	Marah Alqaisi Martin Luther University Halle-Wittenberg	*Tuning the nanoparticles internal structure: fluorinated single-chain nanoparticles (SCNPs) generated by chain collapse of random copolymers*
P22	Lennart Arendes TU Clausthal	*Investigation into radical copolymerizations of itaconates with butyl acrylate*
P24	Ronja Bodesheimer IPF Dresden	*Bio-inspired polymer metallisation with the adhesion promoter dopamine*
P26	Gero Bramlage University Wuppertal	*Synthesis and Polymerization of Olefinic Monomers with Electron-Deficient Aromatic Side-Chains*
P28	Ching-Yi Choi HU Berlin	*Deep Dive into Mussel-Inspired and Lignin-Based Adhesives for Setting Corals under Saltwater*
P30	Tom Fielitz University Potsdam	*Designing Poly(vinylamine)-based Copolymers for Enhanced Gene Delivery*

P32	Evgeny Grigoryev IPF Dresden	*Lignin modification as basis for sustainable resins in DLP 3D printing: comparison of different acrylation strategies*
P34	Nataliya Kiriy IPF Dresden	*Thermoset resins with bio-based building blocks for use in sustainable coatings*
P36	Anne-C. Lehnen University Potsdam	*It is all about the shape: The influence of anisotropy and amphiphilic balance toward the biological activity of antimicrobial bottle brush copolymers*
P38	Andrei Mitrofanov IPF Dresden	*Narrow bandgap 1D lead iodide perovskite with bulky aminophenyl viologen for photovoltaic applications*
P40	Farahanz Navazandeh Tirkalaee Martin Luther University Halle-Wittenberg	*Highly Stable Pyrrolidinium-based Dicationic Ionic Liquid Electrolytes with Fluorinated Linkers*
P42	Torje Orlamünde Martin Luther University Halle-Wittenberg	*Polymeric Ionic Liquids: Micro-segregated Polymers as Gating Materials*
P44	Florian Praße Zittau/Görlitz University of Applied Sciences	*Dynamic Wetting on PDMS-based Elastomers for High-Voltage Applications*
P46	Sven Schäfer Johannes Gutenberg-University Mainz	*CKA based polymer networks from radical ring-opening polymerization*
P48	Katharina Scherer Universität Konstanz	*Long-Chain Aliphatic Polycondensates from Alternative Raw Materials*
P50	Clara Vazquez-Martel Heidelberg University	*Printing Green: Microalgae-based materials for 3D printing with light*
P52	Philipp Sebastian Hilgeroth Martin Luther University Halle-Wittenberg	*Additive Manufacturing of Poly-(isobutylene) Modified with Oligo Amino-Acids for Medical Applications*
P54	Christian Schmitt KIT Karlsruhe	*Novel Polymer Materials for Environmental Applications*
P56	Patrycja Brudzyńska Nicolaus Copernicus University in Torun - PL	*Physicochemical and antimicrobial properties of shikonin-incorporated chitosan-based films*
P58	Lutz Burow RWTH Aachen	*α-Ketoglutarate as a bio-based monomer for green polyester synthesis*
P60	Guoqin Liu TU Dresden	*Electronic Properties of Phthalocyanine-Based Two-Dimensional Conjugated Covalent Organic Frameworks*
P62	Celeste Libretti KIT Karlsruhe	*Fully bio-based lignin-containing non-isocyanates polyurethanes*

P64	Egor Baranovskii FU Berlin	*Mechanochemically functionalized lignin as a crosslinkable material*
P66	Fabian Nußhardt FU Berlin	*Mucolytic peptide-nanoparticles with sequence dependent activity*
P68	Qianyu Cai KIT Karlsruhe	*Tuning the Charge-Transfer Character via Oligomerization of Donor-π-Acceptor Molecules with Oligo(Phenylene Ethynylene)-Bridges*
P70	Thi Tuyet Thuy Vu KIT Karlsruhe	*Visible-light catalyzed isocyanate-free urethane linkage formation*
P72	Ronja Thümmler IPF Dresden	*Tuning Hydrogen-Bond Derived Supramolecular Assembly in Bifunctional α-Oligothiophenes*
P74	Daniel Brüggemann TU Berlin, RWTH Aachen	*Use of CO2 as a synthesis material for recyclable polymers through ring-opening polymerization from monomer to polymer*