

Program

Controlling Structure Formation in Soft Materials

Mainz, 7 – 9 October 2025



Monday, 6 October 2025 – Pre-Workshop

9:00–9:20	PW	Frederik Munko MPI-P & Johannes Gutenberg University, Mainz	Manipulating the structure of thermo-responsive polymer brushes with plasmonically heated nanoparticles
9:20–9:40	PW	Elias Hallenbach Technical University, Darmstadt	Polymer brush/gold nanoparticle composites: Effect of grafting density on particle distribution
9:40–10:00	PW	Nikolai Hempel Johannes Gutenberg University, Mainz	β -Sheet Induced Charge-Regulated Supramolecular Copolymerization for Injectable Thermoresponsive Hydrogel Scaffolds
10:00–10:20	PW	Mohit Kumar Johannes Gutenberg University, Mainz	Unveiling metastable liquid-liquid phase-separated droplet state of benzene-1,3,5-tricarboxamide (BTA) in water
10:20–10:50	Coffee break		
10:50–11:10	PW	Niels Gießelmann Johannes Gutenberg University & MPI-P, Mainz	X-ray induced structural changes in supramolecular polymer networks
11:10–11:30	PW	Surbhi Sharma Johannes Gutenberg University, Mainz	Self-Organizing Chemical Patterns from Supramolecular Assemblies
11:30–11:50	PW	Anubhav Kumar Friedrich Schiller University, Jena	Molecular engineering of naphthalene diimides for switchable assembly in neutral pH aqueous redox flow battery

11:50–12:10	PW	Tao Xu Johannes Gutenberg University, Mainz	Synthetic Aptamer Mechanoreceptors Enable Cell-Specific Force Sensing and Temporal Control via DNA Circuits
12:10–13:40	Lunch		
13:40–14:00	PW	Mira Mors University of Stuttgart	Self-Assembly of Porphyrin-Based Monomers into Supramolecular Polymers
14:00–14:20	PW	Mahesh Yadav Johannes Gutenberg University, Mainz	Efficient method for computing time correlation functions in molecular dynamics
14:20–14:40	PW	Simona Bassoli Martin Luther University, Halle-Wittenberg	Probing side chain organization across pores in amphiphilic COFs via ssNMR spectroscopy study
14:40–15:00	Coffee break		
15:00–15:30	PW	Chiara Corsini ENS, Lyon	Porosity and Stability of Porous Ionic Liquids
15:30–15:50	PW	Kamonthira Wichai Technical University, Darmstadt	Molecular Simulation of Pectin and Cellulosic Mucilage Adhesion on a Flat Substrate
15:50–16:10	PW	Isabell Zick Johannes Gutenberg University & MPI-P, Mainz	Amorphous ice and crystallization at soft interfaces
16:10	End of Pre-Workshop		

Topics:

Polymer Brushes	Multiscale Assemblies
Molecular Engineering	Fluid Interfaces
Dissipative & Non-Equilibrium Assemblies	Supramolecular Functional Materials & Hybrid Interfaces