

## Zsigmondy Colloquium 2026

### Day 1: Monday - March 16<sup>th</sup>

- 13:45 Arrival & Registration
- 14:15 Opening Ceremony
- 14:30 Plenary: Andreas Fery  
Leibniz Institute of Polymer Research Dresden
- Session 1  
Characterization of Colloids and Assemblies:  
Scattering & Correlative 3D Imaging
- 15:15 Solution Behavior of Catechol-Containing Copolymers:  
A SANS Study  
Philipp Hammers  
Heinrich Heine Univeristy Düsseldorf
- 15:35 SAXS Study of Electric Field-Induced Microstructural Evolution in a  
Polyaniline-Based Conductive Hydrogel  
Liu Tang  
Technische Universität Berlin
- 15:55 Correlative 360° HAADF-STEM Electron Tomography and Atom Probe  
Tomography for Distortion-Corrected 3D Chemistry of Complex  
Nanoparticulate Structures  
Moritz Buwen  
IMN and CENEM, FAU Erlangen-Nürnberg
- 16:15 Convolutional Neural Network-Corrected Phase-Contrast nanoCT for  
Defect Mapping in Colloidal Supraparticles  
Maik Becker  
FAU Erlangen-Nürnberg

16:35 Coffee Break

17:00 Poster Session  
At IZNF Foyer - Cauerstraße 3



RTG 2767  
Supracolloidal  
Structures



FUNCTIONAL  
PARTICLE  
SYSTEMS

09:00 Plenary: Syuji Fujii  
Osaka Institute of Technology

Session 2  
Responsive Colloids and Interfaces

09:45 PNIPAM Microgel-Stabilized Foam Films: Effect of Crosslinking  
Content  
Luca Mirau Institute for Condensed Matter Physics, TU Darmstadt

10:05 Tether-Mediated Capture of Colloids at Liquid Interfaces  
Martin Selin  
University of Gothenburg

10:25 Synthesis of Monodisperse Shape-Morphing Azopolymer Particles  
Isabel Martin  
Universität Münster

10:45 Coffee Break

Session 3  
Characterisation of Colloids and Assemblies:  
Optical Techniques

11:20 A Novel Approach to Exploring Colloidal Kinetics Using DLS  
Mohit Agarwal  
Swabian Instruments GmbH

11:40 Spatial Distribution of Gold Nanoparticles Within  
Thermoresponsive Polymer Brushes  
Elias Hallenbach  
TU Darmstadt

12:00 LS Study of Thermo-Responsive Interpolyelectrolyte Complexes (IPECs):  
Composition- and Temperature-Dependent Colloidal Structure  
Changhao Hu  
Technical University of Berlin

12:20 Temperature-Triggered Depolymerization of Dilution-Resistant  
Supramolecular Polymer Bottlebrushes  
Alina Sophie Kasberg  
Universität Bayreuth

12:40 Lunch Break

**Day 3: Wednesday - March 18<sup>th</sup>**

13:45 Plenary: Malvina Supper  
University of Tokyo

Session 4  
Characterisation of Colloids and Assemblies: Transport,  
Sedimentation and Magnetic Techniques

14:30 Interplay of Advection and Diffusion of a Tracer Particle Across Scales:  
The Mean First Passage Time Approach  
Xiaohan Huang  
Helmholtz-Institut Erlangen-Nürnberg für Erneuerbare Energien (IET-2),  
Forschungszentrum Jülich

14:50 Magnetic Particle Spectroscopy as a Non-Invasive, Non-Destructive  
Characterization Tool for Functional Magnetic Nanoparticles  
and their Assemblies  
Markus Heinlein  
Friedrich-Alexander Universität Erlangen-Nürnberg

15:10 Insights into Multidimensional Functional Properties of Nanoparticles  
via Qualitative and Quantitative Analysis of  
Analytical Ultracentrifugation Experiments  
Christina Spruck  
Friedrich-Alexander Universität Erlangen-Nürnberg

15:30 Coffee Break

Session 5  
Colloidal Self-Assembly

16:00 Simulated formation of a Primitive Icosahedral Quasicrystal  
over a Wide Density Range  
Kaijie Zhao  
Friedrich-Alexander-Universität Erlangen-Nürnberg

16:20 Helical Twisting Power and Interparticle Correlations in Aqueous  
Cholesteric Suspensions of Size-Fractionated Chitin Nanocrystals  
Damyana M. Takeva  
University of Stuttgart

16:40 From Morphology to Mesophase: How Shape Determines Cellulose  
Nanocrystal Self-Assembly  
Thomas Parton  
Max Planck Institute of Colloids and Interfaces

17:00 Entropic Trapping in Icosahedral Colloidal Clusters  
Jonathan Martín-González  
Friedrich-Alexander-Universität Erlangen-Nürnberg

17:20 Plenary: Soraya Caixeiro  
University of Bath

19:00 Conference Dinner at Kitzmann Bräuschänke   
Südliche Stadtmauerstraße 25

09:00 Plenary: Markus Retsch  
Universität Bayreuth

Session 6  
Plasmonics and Structural Colour

09:45 Programmable Printing of Chiral Plasmonic Nanorosettes  
Yingying Cai  
Leibniz Institut für Polymerforschung Dresden e.V.

10:05 Gold Nanoflower-Based Plasmonic Functional Metasurfaces:  
A Greener Approach  
Swagato Sarkar  
Helmholtz Zentrum Dresden Rossendorf (HZDR)

10:25 Surface Design of Noble Metal Nanoparticles:  
Towards Controlled Gold Nanocluster Formation  
Patricia Schmul  
Friedrich-Alexander-Universität Erlangen-Nürnberg

10:45 Scalable Synthesis of Structural Color Pigments  
Michelle Berthold  
Friedrich-Alexander-Universität Erlangen-Nürnberg

11:05 Coffee Break

Session 7  
Synthesis of Colloidal Systems

11:30 Continuous Millifluidic Synthesis of ZnO Nanostructures  
with Variable Morphology  
Lena Arndt  
Technische Universität Braunschweig

11:50 Design of Peptide Nanocapsules for Biomedical Applications  
Richard Ziegler  
Max-Planck Institute for Polymer Research

12:10 Kinetic Monte Carlo Simulations for Nanocrystal Shape Control  
Carlos L. Bassani  
Friedrich-Alexander-Universität Erlangen-Nürnberg

12:30 Synthesis of Anisotropic Bimetallic Silver-Gold Nanoparticles  
Nabi E. Traore  
Friedrich-Alexander-Universität Erlangen-Nürnberg

12:50 Short Break

13:00 Closing Ceremony & Awards