Particle-Based Materials Symposium 2025 - PARTICLE DESIGN

Tuesday, October 7

8:15 AM	**Registration**		
	Felix-Klein-Building, Lecture hall H12, 1st floor, Cauerstr. 11, 91058 Erlangen		
8:50 AM	**Welcome & Introduction to the Symposium**		
	Mandel, Vogel, Engel	*Introducing words*	
9:00 AM	**Session 1: Syntheses and Formulations #1**		**Chair: Karl Mandel**
KEYNOTE	*Bart Jan Ravoo*	*Title tbd*	
	Weitong Wang	*Tailored synthesis of uniform, size-controlled nanospheres from bio-based polyphenols*	
	Bruno Matto	*Cohesive supraparticles enabled by biobased nanofibers*	
	Lukas J. Roemling	*Control of buckling of colloidal supraparticles*	
	Laxmi M. Bodapati	*Colloidal self-assembling for the preparation of materials based on transition metals*	
10:30 AM	**Coffee Break**		
11:00 AM	**Session 2: Analysis and characterization #1**		**Chair: Robin Klupp Taylor**
KEYNOTE	*Jannika Lauth*	*Probing materials in the fast lane: innovative physical chemistry for colloidal photonics*	
	Thomas Kister	*Fluorescent sensor for the detection of elemental mercury*	
	Emma Chiavelli	*Evaluating magnetic nanoparticles for controlled induction heating in thermoplastic composite welding*	
	Tero Kämäräinen	*Magnetic particle spectroscopy of drying ferrofluid droplets*	
12:15 PM	**Lunch Break**	*Lunch is served at Cauerstraße 3, IZNF, ground floor*	
1:00 PM	**Poster Session #1**		
2:00 PM	**Session 3: Functional properties #1**		**Chair: Nicolas Vogel**
KEYNOTE	*Esther Amstad*	*Microparticles as a base of tough and fatigue resistant soft materials*	
	Markus Retsch	*Macro- and mesoscopic gradients in self-assembled colloidal systems*	
	Marcel Rey	*Responsive self-assembly of photo-deformable colloidal particles*	
	Ziwei Thou	*Highly efficient and reversible chirality transfer between protein and achiral plasmonic assemblies*	
	Susanne Wintzheimer	*Supraparticles as tailorable hybrid catalysts for photo-biocatalytic cascade reactions*	
3:30 PM	**Coffee Break**		
4:00 PM	**Session 4: Syntheses and Formulations #2**		**Chair: Doris Segets**
	Maximilian Theis	*Facile synthesis of colloidal particles with defined size and composition gradients*	
	Nicolás S. Gálvez	*Hierarchical porous silica particles*	
	Veronika Michel	*Immobilization of redox-active molecules on SiO2 – revisiting importance of surface control and covalency for cycling stability of organic batteries*	
	Philipp Schuster	*Poly(pentacenetetrone) particles as a high-capacity cathode for organic batteries*	
7:00 PM	**Networking Dinner**		
	Hotel Bayrischer Hof, Schuhstraße 31, 91502 Erlangen		

Wednesday, October 8

9:00 AM	**Session 5: Simulations and models**		**Chair: Michael Engel**
KEYNOTE	*Arash Nikoubashman*	*Title tbd*	
	Carlos L. Bassani	*Kinetic Monte Carlo simulations of nanocrystal shapes*	
	Qingguang Xie	*Evaporation-driven assembly of colloidal monolayers and multilayers*	
	Silas Wolf	*Particle segregation in spray-dried supraparticles: experimental and numerical studies*	
10:15 AM	**Coffee Break**		
10:45 AM	**Session 6: Functional properties #2**		**Chair: Georg Garnweitner**
	Samuel Hasenauer	*Polymer cubosomes as source for ordered mesoporous carbon*	
	Iman Elbalasy	*DNA-based nanofabrication of carbon nanotube and metal-based materials for nano-electronic applications*	
	Sherif Okeil	*Tailored aluminum-doped zinc oxide (AZO) nanoparticle thin films: controlling morphology and porosity for room-T gas sensing*	
	Sara Li Deuso	*Stable or reponsive? tailoring magnetite-based supraparticles for tagging and hydrogen detection via magnetic particle spectroscopy*	
11:45 AM	**Lunch break**	*Lunch is served at Cauerstraße 3, IZNF, ground floor*	
12:30 PM	**Poster Session #2**		
1:30 PM	**Session 7: Analysis & Characterization #2**		**Chair: Alexander Kühne**
	Pranay K. Chittem	*Characterization of diffusion of nanoparticles by using photon correlation spectroscopy (PCS)*	
	Evert Simons	*The multi-scale structure of photonic glasses*	
	Benjamin A. Zubiri	*Correlative X-ray and electron tomography for comprehensive, quantitative analysis of complex hierarchical particle systems across multiple scales*	
	Ahammed S. Odungat	*Mercury intrusion porosimetry: a fast, reliable technique for pore and morphological estimation of supraparticles for energy applications*	
2:30 PM	**Closing Remarks and Award Ceremony**		
3:00 PM	**End of conference**		