

## CMPC Workshop 2023

### “Advanced Nanomaterials Characterization by X-ray Diffraction and Scattering Techniques”



The CMPC workshop 2023 will be held in Hamburg, Germany from May 22 to May 23, 2023 in the FLASH seminar room.

#### Program

Monday, 22 May 2023			
12:00	Registration & sandwich		
12:55	<b>welcome</b>		
Structure and properties of single nanoparticles (Chairman: Arka Dey & Florian Bertram)			
13:00	Scanning diffraction microscopy on epitaxially grown single quantum dot	Arka B. Dey	DESY
13:30	Single nanoparticle X-ray imaging to follow structural changes during a catalytic reaction	Thomas F. Keller	DESY Nanolab
14:00	Bragg coherent diffraction imaging at P10 beamline	Fabian Westermeier	DESY
14:30	Quantum dot structures for quantum and nanophotonic applications	Ian Farrer	University of Sheffield
15:00	<b>Discussions &amp; Coffee break</b>		
Future insights into 3D nanostructure using PETRA IV (Chairman: Martin von Zimmermann & Andre Conceição)			
15:30	Watching the growth and transformation of nanoparticles in solution	Dorota Koziej	University of Hamburg
16:00	Biomaterial nano-structures and composition investigated by x-ray scattering	Ernesto Scoppola	Max-Planck-Institut für Kolloid-und Grenzflächenforschung
16:30	Operando X-ray Diffraction Studies from Model Catalysts to Industrial Systems	Andreas Stierle	DESY Nanolab
17:00	Coherent Diffraction Imaging and Angular Cross-Correlation Analysis of Mesocrystalline samples at X-ray energies	Ivan Vartanians	DESY
17:30	<b>Discussions &amp; Poster Session</b>		
18:30	<b>Conference Dinner</b>		

Tuesday, 23 May 2023

Synthesis and function of nanoparticle ensembles (Chairman: Xiao Sun)			
9:00	Small-angle X-ray scattering and diffraction for investigating highly structured biohybrid nanomaterials based on protein cages and nanoparticles	Tobias Beck	University of Hamburg
9:30	Studying Structure Formation and Transformation Processes of Nanoparticle Systems by in situ SAXS	Martin Schroer	University of Duisburg-Essen
10:00	Combining Reverse Monte Carlo Analysis of X-ray Scattering and Extended X-ray Absorption Fine Structure of Small Nanoparticles	Markus Winterer	University of Duisburg-Essen
10:30	Self-assembly Mechanism and Chiral Transfer in CuO Superstructures	Jun Zhang	DESY
<b>11:00</b>	<b>Discussions &amp; Coffee break with sandwiches</b>		
Confined condensed matter and structures at interfaces (Chairman: Oliver Seeck)			
12:00	In-situ small angle X-ray and neutron scattering from the working electrode in electric double layer capacitors	Malina Seyffertitz	Montanuniversität Leoben
12:30	Water induced strain in silica nanopores	Lars Damman	DESY & Hamburg University of Technology
13:00	Shedding X-ray light on electrochemical interfaces and interphases	Hans-Georg Steinrück	University of Paderborn
13:30	Update on the PETRA IV project, including a proposal for a new rolling access protocol	Oliver Seeck	DESY
<b>14:00</b>	<b>Summary and Closing</b>		