

SAXS/WAXS/GIWAXS@DESY Satellite Meeting

Wednesday, 24 January 2024

Location: DESY Auditorium Bldg. 5

Organizers: Florian Bertram, Sylvio Haas, Sarathlal Koyiloth Vayalil, Stephan V. Roth

Program

Session 1: Welcome

10:00-10:05 Stephan V. Roth (DESY/KTH): "Welcome"

Session 2: Hybrid Materials (10:05-11:35) Chair- Florian Bertram

10:05-10:20 Sylvio Haas (DESY): SAXSMAT beamline P62: Current Status and Perspectives

10:20-10:35 Peter Müller-Buschbaum (TUM): Multimodal in-situ probe studies during printing of hybrid films

10:35-10:50 Eric Euchler (IPF, Dresden): Process-induced Structure Formation from Polymers Melts

10:50-11:05 Anton Davydok (Hereon): P03 Nanofocus End station: Material science with a high spatial resolution

11:05-11:20 Julian E. Heger (TUM): Strain-induced deformation of quantum dot superlattices in thin films on flexible substrates revealed by in-situ GISAXS

11:20-11:35 Luke Besley: Grazing Incidence X-ray Ptychography: Ultra high surface sensitivity with large field of view

Lunch Break (11:35 to 12:45)

Session 3: Fast Time resolved studies (12:45-14:45) Chair- Sylvio Haas

12:45-13:00 Florian Bertram (DESY): The high-resolution diffraction beamline P08

13:00-13:15 Chen Shen (DESY): Single-shot reflectivity acquisition from liquid surfaces by performing GISAXS measurements

13:15-13:30 Tomas Rosén (KTH) Combining flow, SWAXS and digital twins - the key for understanding transport phenomena in material processes

13:30-13:45 Malte Storm (Hereon): Pydidax: A new tool for creating XRD analysis workflows and for batch processing of data

13:45-14:00 Sarathlal Koyiloth Vayalil (DESY): P03 The Micro and Nanofocus X ray scattering beamline

14:00-14:15 Fabian A.C. Apfelbeck (TUM): Operando observation of the polymer electrolyte in lithium metal batteries by nanofocus WAXS

14:15-14:30 Princess G. Inangha (Uni Koblenz): Visualizing the Evolution of Exsolved Nanoparticles via Anomalous X-ray Scattering Method

14:30-14:45 Daniel Schmidt (TXproducts): WaveGate x-ray pulse picker - future timing possibilities at P08 and P23

Coffee Break (14:45- 15:15)

Session 4: Biomaterials (15:15-16:30) Chair- Sarathlal Koyiloth Vayalil

15:15-15:30 Dmytro Soloviov from (EMBL): BioSAXS Beamline EMBL

15:30-15:45 Mona Kohantorabi (DESY): Photo-Induced Changes of SARS-CoV-2 Virus Like Particles on the Surface of Titanium Dioxide

15:45-16:00 Frida Nilsson (KTH): Human thrombus characterization and composition from Extracorporeal membrane oxygenation circuit devices

16:00-16:15 Anthony Hessel (Uni. Muenster): Skeletal and cardiac Muscle SAXS: Applications and barriers to data collection and standardization across beamlines

16:15-16:30 Daniel Söderberg (KTH): Exploring wood pulping by synchrotron techniques