German-Brazilian Workshop on Breaking Boundaries of In Situ Synchrotron X-ray Methods

6-10 March 2023

Institute of Chemistry – University of São Paulo

São Paulo, Brazil

PROGRAMME

Day 1 -Monday (06.03.2023) – State of art methods for in situ materials characterization

am	08.00 – 08.40	Registration Welcome Coffee	
	08.40 – 09.00	Opening	
	09.00 – 09.45	Franziska Emmerling	Combination of complementary methods for in situ studies
	09.45 – 09.55	Discussion	
	09.55 – 10.40	Amélie Rochet	X-ray synchrotron techniques for studies of catalysts.
	10.40 – 10.50	Discussion	
	10.50 – 11.10	Break	
	11.10 – 11.55	Tristan Petit	In situ X-ray spectromicroscopy of energy materials
	11.55 – 12.05	Discussion	
	12.05 – 12.50	Liane Rossi	In-situ X-ray in the studies of catalysts for CO_2 valorization
	12.50 – 13.00	Discussion	
	13.00 – 14.00	Lunch	
pm	14.00 – 14.45	Ana Flávia Nogueira	In situ experiments using Synchrotron radiation: an experience with halide perovskites.
	14.45 – 14.55	Discussion	
	14.55 – 15.40	Uwe Mueller	Trends in macromolecular crystallography.
	15.40 – 15.50	Discussion	
	15.50 – 16.10	Break	
	16.10 – 16.55	Tulio Rocha	Perspectives of Resonant Inelastic X-ray Scattering at Sirius
	16.55 – 17.05	Discussion	
	17.05 – 17.50	Gerald Falkenberg	In situ and multimodal scanning X-ray microscopy at the Hard X-ray Micro/Nano-Probe beamline P06 at DESY
	17.50 – 18.00	Discussion	

Day 2 - Tuesday (07.03.2023) – Towards the future of synchrotron experiments

am	09.00 – 09.45	Christian Bressler	FELs and their use in structural dynamics research
	09.45 – 09.55	Discussion	
	09.55 – 10.40	Anders Madsen	Ultrafast X-ray Scattering and Imaging
	10.40 – 10.50	Discussion	
	10.50 – 11.10	Break	
	11.10 – 11.55	Matthew Tucker	PDF and Total Scattering: The local view of materials discovery
	11.55 – 12.05	Discussion	
	12.05 – 12.50	Allan Pinto	High Throughput Visualization, Processing, and Analysis of Large Volumes in X-ray Microscopy Imaging.
	12.50 – 13.00	Discussion	
	13.00 – 14.00	Lunch	
pm	14.00 – 14.45	Narcizo M. Souza-Neto	X-ray techniques for studies under extreme conditions.
	14.45 – 14.55	Discussion	
	14.55 – 15.40	Andrea Lausi	SESAME – Light for the Middle East
	15.40 – 15.50	Discussion	
	15.50 – 16.10	Break	
	16.10 – 16.30	πtec	Detectors for X-rays
	16.30 – 16.40	Discussion	
	16.40 – 17.10	Funding Agencies	Marcio Weichert – The German Centre for Research and Innovation (DWIH) São Paulo – Head of Programme / Alexander von Humboldt Foundation. Francine Camelim – German Academic Exchange Service/ DAAD. Christina Peters – German Research Foundation (DFG) Director, DFG Office Latin America. Cristóvão de Albuquerque – Sao Paulo Research Foundation – FAPESP – Collaborations for Research.
	17.10 – 17.20	Discussion	
	17.20 -	Poster session	

Day 3 - Wednesday (08.03.2023) – Excursion to LNLS/CNPEM

am	08.00	Departure from São Paulo - Institute of Chemistry - USP
	10.00 – 13.00	LNLS/Sirius visit
	13.00 – 14.00	Lunch
pm	14.00 – 16.00	LNLS/Sirius visit
	16.00 – 18.00	Trip back to São Paulo

Day 4 – Thursday (09.03.2023) – Workshop/Mini-courses "Beamtime proposal + beamline design"

am	09.00 – 11.00	Franziska Emmerling Uwe Mueller	Beamtime proposal writing, and remote access – how to prepare
	11.00 – 11.20	Break	
	11.20 – 13.00	Christian Bressler	VLab: how to do your own ultrafast x-ray experiment – Part I
pm	13.00 – 14.00	Lunch	
	14.00 – 15.30	Christian Bressler	VLab: how to do your own ultrafast x-ray experiment – Part II
	15.30 – 15.50	Break	
	15.50 – 17.30	Amélie Rochet Itamar Neckel	Concepts and elements of beamline design
	19.00 – 22.00	Conference Dinner	Restaurant - Consulado Mineiro - Pinheiros

Day 5 – Friday (10.03.2023) – Workshop/Mini-course "Cell designing" + Closing

am	09.00 – 10.30	Tristan Petit Itamar Neckel	Designing cells for in situ studies
	10.30 – 10.50	Break	
	10.50 – 11.50	Tristan Petit Itamar Neckel	Designing cells for in situ studies
	11.50 – 12.10	Adam Michalchuk	Why in situ and real time? Do I need it?
	12.10 – 12.30	Poster Prize Closing remarks	