Anniversary Symposium

"SAXS on Nanosystems: current trends and perspectives"
20 years of the Austrian SAXS Beamline at Elettra-ST

Trieste, Italy, October 10th – 12th, 2016

Scientific Committee
Chair: Heinz Amenitsch (Graz University of Technology)
Sigrid Bernstorff (Elettra-Sincrotrone Trieste)
Wim Bras (Netherlands Organization for Scientific Research)
Hyotcherl Ihee (Korea Advanced Institute of Science and Technology)
Peter Müller-Buschbaum (Technical University of Munich)
Lois Pollack (Cornell University)

Plenary Speakers
Peter Fratzl (Max Planck Institute of Colloids and Interfaces)
Stephan Roth (DESY)
Jean-Baptiste Salmon (CNRS, Univ. Bordeaux)

Invited Speakers:
Maja Buljan (Ruder Bošković Institute)
Pavo Dubček (Ruder Bošković Institute)
Stephan Förster (Univ. of Bayreuth)
Oskar Paris (Montanuniversität Leoben)
Jan Skov Pedersen (Univ. of Aarhus)
Javier Perez (Synchrotron SOLEIL)
Gianluca Grenci (MBI, T-Lab)

TU Graz
Graz University of Technology

Elettra Sincrotrone Trieste

Austrian SAXS beamline
Outstation of the Institute of Inorganic Chemistry
Graz University of Technology
c/o ELETTRA Sincrotrone Trieste
Strada Statale 14, km 163.5
34149 Basovizza, (TS) Italy

Graz University of Technology
Institute of Inorganic Chemistry
Stremayrgasse 9/IV
A-8010 Graz, Austria

and
ELETTRA-Sincrotrone Trieste
Strada Statale 14, km 163.5, in Area Science Park
34149 Basovizza, (TS) Italy

VENUE

ICTP - Budinich Lecture Hall
The Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11,
34014 Trieste, Italy

	latitude	**longitude**
GD	45.703054886014236	13.71818482875824
GMS	N 45° 42' 10.998''	E 13° 43' 5.465''

Full program download at:

https://www.elettra.eu/Conferences/2016/SAXS20/Main/Program

"SAXS on Nanosystems: current trends and perspectives" - 20 years of the Austrian SAXS Beamline
Symposium program

Monday 10th				
Time		**Topic**	**Name**	**Title**
13:00	14:00	**REGISTRATION**		
14:00	14:40	opening remarks	**Alfonso Franciosi (President & CEO, ELETTRA-Sincrotrone Trieste)** **Horst Bischof (Vice Rector Research, TU Graz)** **Frank Uhlig (Dean TCVB & Head of Institute for Inorganic Chemistry, TU Graz)** **Heinz Amenitsch (Institute for Inorganic Chemistry, TU Graz)**	
14:40	15:20	**Plenary lecture**	Peter Fratzl	SAXS and complex biomaterials - Perspectives for synchrotron-based multiprobe imaging
15:20	15:50	**Invited lecture**	Peter Laggner	Structure and Change. A Personal Recollection of 50 Years with Bio-SAXS
15:50	16:10	BREAK		
				Chair: Heinz Amenitsch
16:10	16:25	NFFA	Giorgio Rossi	NFFA-EUROPE: An open access resource for experimental & theoretical science
16:25	16:40	CERIC	Jana Kolar	CERIC-ERIC: Future perspectives
16:40	17:10	**Invited lecture** SAXS	Jan Skov Pedersen	The new laboratory SAXS instrument at Aarhus University: Optimization, implementation and application to studies of low density lipoprotein (LDL) particles including a newly developed model
17:10	17:30	SAXS	Herwig Peterlik	In-situ X-ray scattering of single carbon fibers
17:30	17:50	SAXS	Michael Rappolt	The Art of Filling Space: Towards Understanding of Lipid Polymorphism
17:50	18:10	SAXS	Aldo Craievich	Size dependent melting and freezing temperatures and other properties of Bi nanoparticles confined in a glass matrix. Study by combined use of SAXS and WAXS
18:10	21:00	POSTER SESSION		

Tuesday 11th	MORNING SESSION

Time		Topic	Speaker	Title	Chair: Benedetta Marmiroli
9:00	9:40	**Plenary lecture** µfluidics	Jean-Baptiste Salmon	Pervaporation at the nanoliter scale: Microfluidic tools to investigate complex fluids and engineer micro-materials	
9:40	10:10	**Invited lecture** µfluidics	Stephan Förster	Flow induced assembly processes in microchannels and microjets	
10:10	10:30	µfluidics	Jens Meissner	Eutectic Crystallization of Salt Solutions in Nanopores: Accessing the Properties of the Crystallites by in-situ SAXS/WAXS	
10:30	10:50	BREAK			
					Chair: Manfred Kriechbaum
10:50	11:20	**Invited lecture** GISAXS	Pavo Dubceck	Annealing Induced Evolution of Germanium Quantum Dots	
11:20	11:40	chemistry	Christian Doonan	MOFs at the Biointerface	
11:40	12:00	chemistry	Paolo Falcaro	Metal-Organic Frameworks from ceramics	
12:00	12:20	chemistry	Ana Torvisco	From Aryltin Trihydrides to Nanosized Polymers- Solvent and Residue Effects on Material Morphology	
12:20	12:40	chemistry	Attilio Cesaro	Nanoscale fractal aggregates of caffeine in hot-coffee conditions	
12:40	13:00	pharmacy	Alexander Pichler	Structure Analysis of Drug Delivery Systems with SAXS in the Laboratory	
13:00	14:00	LUNCH			

Tuesday 11th	AFTERNOON SESSION			
Time		**Topic**	**Speaker**	**Title** **Chair: Marcell Wolf**
14:00	14:30	**Invited lecture** chemistry	Oskar Paris	In-operando SAXS for Energy Applications
14:30	14:50	bioSAXS	Tobias Madl	Structural Characterization of Challenging Biomolecular Complexes by Integration of SAXS with Complementary Techniques
14:50	15:10	bioSAXS	Maria Grazia Ortore	From protein-protein interactions to amyloid aggregation: SAXS plays as an outsider
15:10	15:30	BREAK		
15:30	16:00	**Invited lecture** bioSAXS	Javier Perez	Synchrotron SEC – SAXS data as EXPERIMENTAL CONSTRAINTS to model the detergent corona around a membrane protein
16:00	19:00	VISIT AT THE AUSTROSAXS BEAMLINE AT ELETTRA-SINCROTRONE TRIESTE		
20:00	open	SYMPOSIUM DINNER, Antica Trattoria Menarosti, Via del Toro 12, 34125 Trieste		

Wednesday 12th	MORNING SESSION			
Time		**Topic**	**Speaker**	**Title** **Chair: Sigrid Bernstorff**
9:00	9:40	**plenary lecture** GISAXS	Stephan Roth	Investigating rapid technological coating processes in real-time and in situ
9:40	10:00	GISAXS	Fernando Cacho-Nerin	µGISAXS on curved fluid-fluid interfaces: Following particle rearrangement and ejection upon surface compression
10:10	10:40	**Invited lecture** GISAXS	Maja Buljan	Application of GISAXS on study of three-dimensional quantum dot lattices
10:40	11:00	BREAK		

				Chair: Michael Rappolt
11:00	11:20	SAXS	Milos Steinhart	The performance of the High Pressure SWAXS System designed for the Austro-SAXS Beamline
11:20	11:40	bioSAXS	Michal Belička	Biomembrane Complexity at the Sub-Nanometer Level
11:40	12:00	bioSAXS	Domenico Lombardo	Interaction of Charged Dendrimers with Model Lipid Membrane: a SAXS Study
12:00	12:20	bioSAXS	Stefan Salentinig	In-situ small angle X-ray scattering reveals formation of highly organised nanostructures during digestion of milk fat
12:20	12:50	**Invited lecture** µfluidics	Gianluca Grenci	Easy and fast fabrication of a free-jet micromixer for SAXS
12:50	13:00	concluding remarks	Heinz Amenitsch	

Poster Presentations

Starting 18:10, Monday 10th

	Presenter		Title
p1	Carducci	Federica	Tunability of Anisotropic Properties of Guan(os)ine enriched GMP Wires
p2	Digiacomo	Luca	Structure of liposomes in biological media: a synchrotron SAXS study
p3	Ghazal	Aghiad	Direct Monitoring of Calcium-Triggered Phase Transitions in Cubosomes Using SAXS Combined with Microfluidics
p4	Kornmuller	Karin	Supramolecular self-assembled peptide double helices revealed by Synchrotron SAXS
p5	Wolf	Marcell	Effective interactions in protein-salt solutions approaching liquid-liquid phase separation
p6	Hodzic	Aden	Monitoring of Pentoxifylline Thermal Behavior by Novel Simultaneous Laboratory Small and Wide X-Ray Scattering (SWAXS) and Differential Scanning Calorimetry (DSC)
p7	Juraić	Krunoslav	Simultaneous grazing incidence small and wide angle X-ray scattering on titania nanotube arrays
p8	Koczwara	Christian	Ion electrosorption in hierarchically ordered carbon studied by in-situ small angle X-ray scattering
p9	Naumenko	Denys	Laser-induced aggregation of gold nanoparticles: Multi-technique analysis for SERS applications
p10	Rigodanza	Francesco	Perylene Bisimides: new synthesis and applications to bring an old material into a new era
p11	Syrgiannis	Zois	Ruthenium based photosensitizer/catalyst supramolecular architectures in light driven water oxidation
p12	Tawfilas	Massimo	Mimetization of TiO2 Nanocrystals into polymer matrix through grafting surface modification
p13	Zhigunov	Alexander	Aggregation behaviour of boron clusters inside polymeric nanoparticles in aqueous solution
p14	Haider	Richard	Development of a 3D Mixing Device for Small Angle X-Ray Scattering Measurements
p15	Hill	Christian	Optofluidic Force Induction: Platform-technology for particle characterization and manipulation
p16	Marmiroli	Benedetta	Synchrotron SAXS study of the interaction of silica nanoparticles with lysozyme using a free jet micromixer
p17	Burian	Max	Towards a pump-probe x-ray scattering setup at the Austrian SAXS beamline
p18	Chemelli	Angela	Small angle X-ray and dynamic light scattering investigations of nanosheets
p19	Kriechbaum	Manfred	20 years High-Pressure Cell for the SAXS-Beamline at ELETTRA
p20	Sartori	Barbara	Tuning the structure of silica mesoporous materials by precursors composition: solvents effect studied in situ with SAXS

p21	Zidansek	Aleksander	Small-angle X-ray scattering studies of confined smectic liquid crystals
p22	Bernstorff	Sigrid	Formation and properties of Cu nanoparticles
p23	Rath	Thomas	Time resolved GISAXS and GIWAXS investigations of precursor based formation routes towards metal sulfide nanocrystals
p24	Karlušić	Marko	Observation of ion tracks on GaN and TiO2 surfaces by AFM and GISAXS
p25	Naughton	Kyle L.	Self-Assembly of the Cephalopod Structural Protein Reflectin

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