

A banner image for the 22nd International Congress on X-ray Optics and Microanalysis. It features a blue background on the left with white text, and a photograph of a laboratory instrument with red laser lines on the right. The text '22nd International Congress on X-ray Optics and Microanalysis' is in white. Below it, '2-6 September 2013' is in red and 'Hamburg, Germany' is in yellow. On the right, 'ICXOM22' is written in white over a blue silhouette of a city skyline.

**22nd International Congress on
X-ray Optics and Microanalysis**

2-6 September 2013
Hamburg, Germany

ICXOM22

Programme

Floor plan

Conference Information

International Conference on X-ray Optics and Microanalysis

2-6. September 2013

Monday, 2. September 2013

08:30 Registration and Refreshments

10:00 Welcome (Hörsaal B)
K. Janssens (Uni Antwerpen); H. Franz (DESY); G. Falkenberg (DESY); Chr. Schroer (TU Dresden)

10:30 Keynote talk (Hörsaal B)
Nutrients and contaminants in plants: state of the art and artefacts
E. Lombi (Univ. South Australia)

11:30 Plenary talk (Hörsaal B)
X-ray nano-diffraction from individual nanowires
R. Feidenhans'l (Univ. Copenhagen)

12:10 Lunch break

13:30	Parallel session I „Tomography“ (Hörsaal B)	Parallel session II „(GI-)diffraction“ (Hörsaal M)
	<i>Invited talk</i> <i>Recent Developments in X-ray Grating Interferometry</i> <i>A. Momose (Tohoku University)</i>	<i>Invited talk</i> <i>Grazing Incidence X-ray Scattering Techniques for the Investigation of Organic Solar Cells</i> <i>P. Müller-Buschbaum (TU München)</i>
14:10	Edge Illumination X-ray Phase-Contrast Imaging: Nanoradian Sensitivity at Synchrotrons and Translation to Conventional Sources <i>P.C. Diemoz (University College London)</i>	Real-time and in situ μ GISAXS and x-ray growth oscillations during multi-layer growth of the fullerene C60 <i>S. Bommel (DESY)</i>
14:30	X-ray Microlaminography with Polycapillary Optics <i>P. Korecki (Institute of Physics, Jagiellonian University)</i>	Microfluidics at high-intensity X-ray sources: from microflow chips to microfluidic liquid jet systems <i>M. Trebbin (University of Bayreuth)</i>
14:50	Ageing Effects on Exhaust Gas Catalyst: Microscopic changes captured by X-Ray Tomography <i>G. Hofmann (ITCP KIT)</i>	Colloidal Self-assembly during Fast Solvent Evaporation Based on Combination of Spray Deposition and μ GISAXS <i>P. Zhang (DESY)</i>

15:00 Coffee break

15:30	Parallel session III “Spectroscopy” (Hörsaal B)	Parallel session IV “Detector development I” (Hörsaal M)
	<i>Invited talk</i> <i>Micro beam absorption spectroscopy for the investigation of fluid inclusions</i> <i>J. Cauzid (University Lorraine)</i>	<i>Invited talk</i> <i>Full-field versus scanning Micro-XRF Imaging using Synchrotron radiation</i> <i>L. Vincze (University Ghent)</i>
16:10	Environmental and Biological Applications of X-ray Spectromicroscopy from 2-5 keV <i>S. Webb (SLAC)</i>	A new methodology towards 3D micro-XRF imaging using a novel energy-dispersive CCD detector <i>J. Garreoet (Ghent University)</i>
16:30	Micro-XANES analysis of metal accumulation in plants on sub-cellular level <i>I. Arcon (University of Nova Gorica)</i>	A compact, spatially highly resolving X-ray pnCCD camera <i>S. Ihle (PNSensor GmbH)</i>
16:50	Quick XAFS: New Possibilities for Microanalysis <i>R. Frahm (Bergische Universität Wuppertal)</i>	Performance and capabilities of DEPFET based SDD detectors <i>J. Treis (PNDetector GmbH)</i>

17:15 Poster session I

19:00 End of Day 1

Tuesday, 3. September 2013

Hörsaal B

08:30	Keynote talk <i>Planetary und Extraterrestrial Processes at the Nanoscale</i> F.E. Brenker (Univ. Frankfurt)	
09:30	Plenary session "Detector development II"	
	Plenary talk <i>MAIA X-ray microprobe detector array system</i> P. Siddons (Brookhaven National Lab)	
10:10	Coffee break	
10:40	Plenary talk <i>Imaging systems developed and being developed at PSI</i> B. Schmitt (PSI)	
11:20	LAMBDA pixel detector with silicon and high-Z sensors D. Pennicard (DESY)	
11:40	Advances in Hybrid Pixel Detectors T. Donath (Dectris Ltd.)	
12:00	Lunch break	
13:30	Parallel session V "Bioimaging I" (Hörsaal B)	Parallel session VI "ML-optics" (Hörsaal M)
	Invited talk <i>Combined full-field and hard X-ray microscopy approach for the investigation of Malaria</i> S. Kapishnikov (Weizmann Institute of Science)	Invited talk <i>Development of linear and circular type MoSi₂/Si multilayer Laue lenses</i> T. Koyama (Spring-8)
14:10	Differential accumulation of S, Ca, Fe and Zn in human osteosarcoma tissue C. Strelj (ATI, TU Wien)	Two-dimensional X-ray Focusing with Large Aperture Multilayer Laue Lenses A. Kubec (TU Dresden, Fraunhofer IWS Dresden)
14:30	Ptychography of frozen-hydrated biological cells K. Giewekemeyer (European X-FEL)	The development of multilayer-Laue-Lens based scanning microscope for hard x-ray nanoprobe at NSLS-II H. Yan (Brookhaven National Laboratory)
14:50	Exploring the activity of anti-cancer metallodrugs in cells using a synchrotron microprobe K. Geraki (Diamond Light Source)	Sub-5nm hard X-ray point focusing by Kirkpatrick-Baez mirrors and a multilayer zone plate M. Osterhoff
15:10	Coffee break	
15:40	Parallel session VII „Fullfield-imaging“ (Hörsaal B)	Parallel session VIII „Lab source applications“ (Hörsaal M)
	Invited talk <i>Three-dimensional imaging of chemical phase transformations at the nanoscale with full-field transmission X-ray microscopy</i> F. Meirer (Fondatione Bruno Kessler)	Invited talk <i>MAIA driven X-ray fluorescence imaging</i> C. Ryan (CSIRO)
16:20	X-ray Full Field Microscopy at 30 keV F. Marschall (KIT)	A Laser-Produced Plasma Source for soft X-ray applications I. Mantouvalou (TU Berlin)
16:40	High Energy Full-field Zernike Phase Microscopy R. Mokso (PSI)	NEXAFS Spectrometer based on a Lab-scale Soft X-ray Source K. Mann (Laser-Laboratorium Göttingen)
17:00	Chemical imaging applied to artistic materials using full-field X-ray spectroscopy E. Pouyet (ESRF)	New approaches for hard x-ray phase contrast with laboratory sources D. Pelliccia (Monash University)
17:20	Poster session II	

Wednesday, 4. September 2013

Hörsaal B

- 08:30 Keynote talk
Introduction to DESY Photon Science
E. Weckert (DESY)
- 09:30 Keynote talk
Structural imaging at x-ray free-electron lasers
H. Chapman (DESY-CFEL)
- 10:30 Transfer to DESY
- 11:00 DESY and European XFEL guided tours and lunch buffet at CFEL
- 14:30 Keynote talk (Auditorium DESY)
Micro- and nanoanalysis at SPring-8 and SACLA
T. Ishikawa (RIKEN Spring-8)
- 15:30 Keynote talk (Auditorium DESY)
Micro- and nanoanalysis at the Advanced Photon Source
J. Maser (ANL/APS)
- 16:30 *Coffee break*
- 17:00 Keynote talk (Auditorium DESY)
Micro- and nanoanalysis at ESRF including future upgrade
P. Cloetens (ESRF)
- 19:00 *Conference dinner at Sagebiehl's Fährhaus (Hamburg-Blankenese)*

Thursday, 5. September 2013

Hörsaal B

- 08:30 Keynote talk
Atomic-resolution environmental transmission electron microscopy for quantitative in-situ microscopy in catalyst chemistry
S. Takeda (University Osaka)
- 09:30 Plenary talk
Making use of dynamical scattering of fast electrons in the TEM for retrieving 3D atom positions in nanoparticles
Chr. Koch (University Ulm)
- 10:10 *Coffee break*
- 10:50 Plenary talk
Recent Results in Ptychographic Coherent diffractive imaging
M. Dierolf (TU Munich)
- 11:30 In situ Materials Science Studies with X-ray Ptychography
J. BØ FLØYSTAD (Norwegian University of Science and Technology)
- 11:50 High-resolution dose-efficient in-line holography of biological samples using x-ray waveguides
M. Bartels (University of Göttingen)
- 12:10 *Lunch break*
- | | Parallel session VIII
"Spectroscopy" (Hörsaal B) | Parallel session IX
"Coherence II" (Hörsaal M) |
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| 13:30 | Invited talk
<i>Hard X-ray full-field μ-spectroscopy and μ-XRF imaging applications to Earth and Planetary Sciences</i>
<i>V. De Andrade (Brookhaven National Lab)</i> | Invited talk
<i>High-resolution ptychographic imaging</i>
<i>Y. Takahashi (University Osaka)</i> |
| 14:10 | Study of Sr incorporation in aragonite in archaeological otoliths with micro-X-ray fluorescence and absorption spectroscopies
<i>P. Cook (IPANEMA / Synchrotron SOLEIL)</i> | Cellular Imaging with phase-diverse Fresnel Coherent Diffraction
<i>M. Jones (La Trobe University, ARC Centre of Excellence for Coherent X-ray Science)</i> |

14:30	Microscopic X-ray fluorescence and diffraction investigation of clay-rich rock thin sections after sorption experiment <i>J. Osan (Hungarian Academy of Sciences)</i>	High-Resolution Imaging with Chemical Contrast Using Hard X-Ray Ptychography <i>J. Reinhardt (DESY)</i>
14:50	Understanding the toxicity of arsenic, cadmium and copper in the model plant <i>Ceratophyllum demersum</i> using μ XRF tomography and μ -XANES <i>H. Küpper (University Konstanz)</i>	Imaging of Nano- and Mesoscale Objects with Coherent X-rays <i>I. Vartanians (DESY)</i>
15:10	Coffee break	
15:30	Parallel session X "Nanodiffraction" (Hörsaal B)	Parallel session XI "Instrumentation" (Hörsaal M)
	Invited talk <i>Applications of X-ray nanodiffraction</i> <i>M. Burghammer (ESRF)</i>	Invited talk <i>Towards Picometry ? - Achievements and Future Requirements on Reflective X-Ray Optics, Metrology and Deterministic Surface Finishing</i> <i>F. Siewert (Helmholtz Zentrum Berlin)</i>
16:10	Visualize defects ordering and nanoscale phase separation by scanning nano X-ray diffraction <i>A. Ricci (DESY)</i>	X-ray Refractive Optics: present status and new developments <i>A. Snigirev (ESRF)</i>
16:30	Nanodiffraction on Softwood Cells at MiNaXS <i>S. Storm (Helmholz Zentrum Geesthacht)</i>	Nanofabrication of diffractive elements for EUV and soft xray applications using ion beam lithography <i>J. Overbuschbaum (Forschungszentrum caesar)</i>
16:50	Cross-Sectional X-ray Nanodiffraction Reveals Gradients of Microstructure, Stresses and Phases in Thin Films <i>J. Todt (Montanuniversität Leoben)</i>	Recent Developments in Parallel X-Ray Spectroscopy at HZB <i>H. Löchel (Helmholtz Zentrum Berlin)</i>
17:10	Poster session III	

6. September 2013

09:00	Keynote talk (Hörsaal B) <i>X-ray Micro- and nanoprobe for the Characterization of Artists' Pigments and Paintings</i> <i>K. Janssens (University Antwerpen)</i>	
10:00	Plenary talk (Hörsaal B) <i>Transmission X-ray microscopy for full-field spectro-microscopy at the nanoscale</i> <i>J.C. Andrews (SLAC)</i>	
10:40	Coffee break	
11:10	Plenary session XII "Bio-Imaging II" (Hörsaal B)	Plenary session XIII "Cultural heritage" (Hörsaal M)
	Study of Inhibitory Influence of Copper on Biofilm Clusters with Full-field Transmission Hard X-ray Microscopy <i>Y. Yang (Karlsruhe Institute of Technology)</i>	Van Gogh and alteration of chrome yellow pigments: new Crspeciation studies by using the Maia X-ray detector <i>L. Monico(Perugia University)</i>
11:30	Tissue contamination with implant components after metal-on-metal hip resurfacing arthroplasty. <i>G. Buzanich (Federal Institute for Materials Research and Testing BAM)</i>	The processing of large, heterogeneous data sets acquired for XRF imaging <i>M. Alfeld(Univ. Antwerp, now DESY)</i>
11:50	X-ray fluorescence imaging of biological model organisms trapped by laser-based optical tweezers <i>E. Vergucht (Univ. Ghent)</i>	Characterization of the new confocal micro X-ray fluorescence (CXRF) system for non-destructive cultural heritage analysis at the CNA: μ XRF-CONCHA <i>K. Laclavetine (University of Seville)</i>
12:10	Life Science Applications of the TwinMic soft X-ray spectromicroscopy station at Elettra <i>A. Gianoncelli (ELETTRA)</i>	Non destructive synchrotron radiation based investigation of Neolithic and Early Bronze Age axes <i>L. Glaser (DESY)</i>
12:30	Close out	

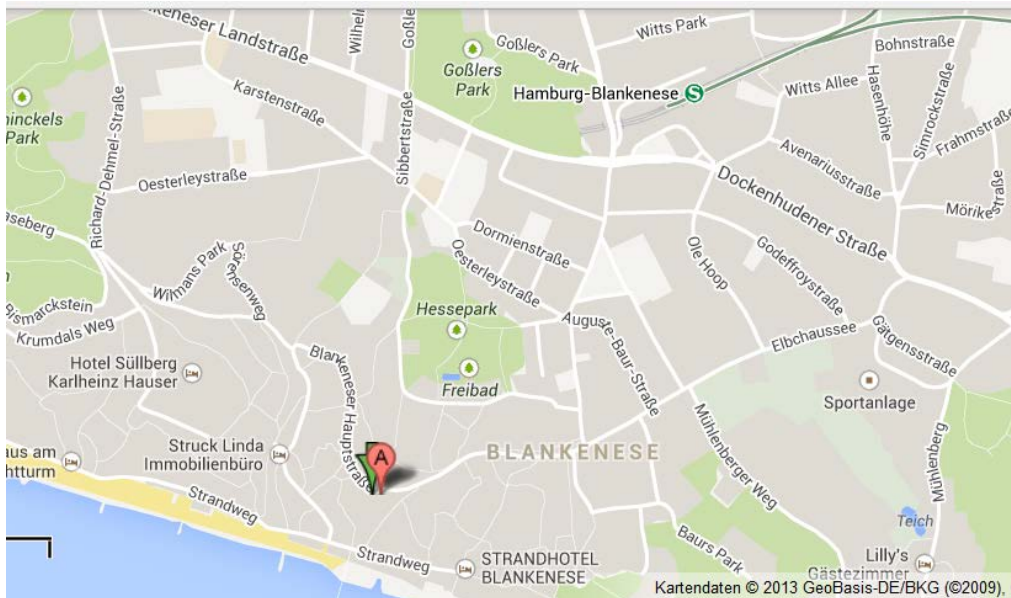
Conference Information:**WLAN:**

There is a special W-LAN for this conference. You will receive your key at the registration desk.

Conference Dinner:

The conference dinner will take place on 4.9. 2013 at 19.00h at Sagebiehls Fährhaus. There will be a shuttle from DESY premises at 18:00h. A shuttle back will be provided at 22.00h

Address: Blankeneser Hauptstraße 107, 22587 Hamburg

**DESY excursions :**

DESY excursion will take place on 4.9. 2013. There will be a shuttle from the University to DESY at 10:30h.

Food/Beverages:

In the surrounding of the conference venue there are a lot of restaurants/bars/cafes. For example you will find restaurants at Grindelallee. In addition you may have lunch at the MENSA at the University.

Conference Phone:

You might reach the conference team at +49 40 8998 9 4130

FLOOR PLAN

