

Scope of the Workshop

After introductory overview talks in the different research areas using Tender X-rays, topical sessions will allow intense exchange of ideas and will be completed by a common discussion on needs and expectations concerning photon beam, instrumentation, and sample environment. A poster session, a facility visit and a get-together dinner are also part of the programme.

Confirmed Invited Speakers

Rolf Jürgen Behm, Universität Ulm
Artur Braun, EMPA
Holger Dau, FUB
Serena deBeer, MPI CEC
Reinhard Denecke, Universität Leipzig
Claudia Felser, MPI Dresden
Frank de Groot, Utrecht University
Wolfram Jägermann, Universität Darmstadt
Andreas Jankowiak, HZB
Sergey Kapishnikow, HZB
Janina Kneipp, HUB
Axel Knop-Gericke, FHI
Roel van de Krol, HZB
Klaus Lips, HZB
Hans Joachim Lewerenz, Caltech
Ingo Salzmänn, HUB
Rutger Schlattmann, PVcomB
Robert Schlögl, FHI
Frank Schreiber, Universität Tübingen
Jörg Stempfer, DESY
Esteban Veiga, CNB-CSIC
Manfred Weiss, HZB

Meeting Venue

Helmholtz-Zentrum Berlin für
Materialien und Energie GmbH

Albert-Einstein-Strasse 15
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BESSY II TENDER X-RAY WORKSHOP

December 1-2, 2014
Berlin-Adlershof

CONTACT

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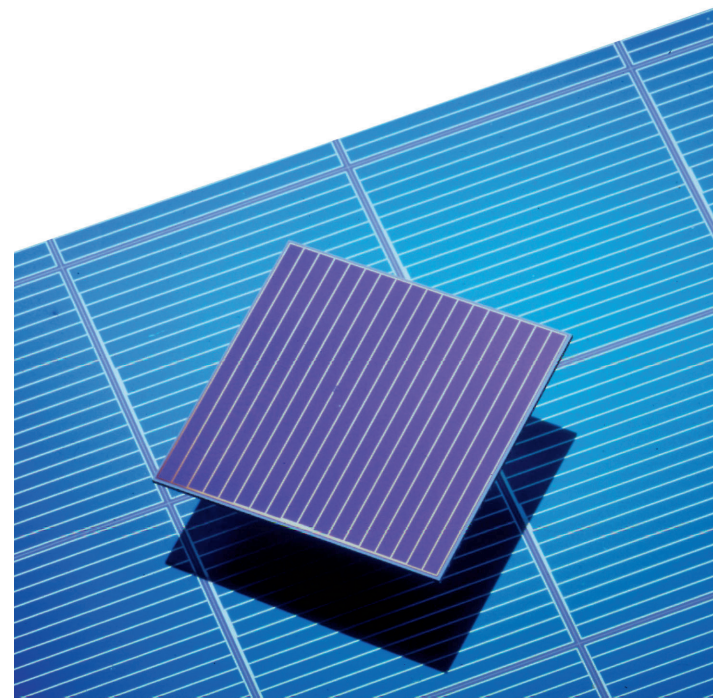
Further information and updates can be found at
[http://www.helmholtz-berlin.de/user/workshops/
tender-x-ray-workshop/index_en.html](http://www.helmholtz-berlin.de/user/workshops/tender-x-ray-workshop/index_en.html)

SYNCHROTRON RADIATION FROM TERAHERTZ...

... to hard X-rays is a very powerful tool in various fields of modern science. However, many scientific questions addressing the grand challenges of today's society indicate a growing demand in experimental infrastructure, particularly in the photon energy range between 1.5 keV and 8 keV – the Tender X-ray Regime.

These excitation energies allow in-air or high-pressure experiments as well as depth-resolved analysis of (buried) interfaces in UHV.

Examples are spectroscopic investigations of modern catalytic and solar energy conversion materials, i.e., lighter transition metals for solar fuels production as well as in-situ studies of electrochemical or biological processes. An increasing demand for Tender X-rays might also be expected from scientists in life science, renewable energies, and battery research.



In a series of foresight workshops, HZB wishes to establish a discussion on future projects and research activities in strong interaction with current and future users from universities, research institutes, and industry. Aim of the dialogue is to discuss future scientific fields and expectations, needs and requirements for cutting edge science with synchrotron radiation.

HZB kindly invites you to join our workshop on Tender X-rays and to start or intensify a vivid dialogue with us about future science as well as your expectations and requirements for successful experiments at our facility.

Programme

1 December, 2014		
Welcome	Anke Kaysser-Pyzalla	09:15 - 09:30
Overview Talks		09:30 - 12:30
Catalysis	Robert Schlögl (FHI)	09:30 - 10:00
Solar Fuels	Roel van de Krol (HZB)	10:00 - 10:30
Material Science, XSW	Frank Schreiber (Universität Tübingen)	10:30 - 11:00
Coffee Break		11:00 - 11:30
Electrochemistry	Hans Joachim Lewerenz (Caltech)	11:30 - 12:00
Life Sciences/Biological Systems	Serena deBeer (MPI CEC)	12:00 - 12:30
Lunch Break		12:30 - 13:30
Visit of the Experimental Hall		13:30 - 14:30
Topical Sessions (talks 25 + 5 minutes) followed by „Requirements and Discussion“		14:30 - 18:30
Catalysis	Reinhard Denecke (Universität Leipzig) Frank de Groot (Universiteit Utrecht) Axel Knop-Gericke (FHI)	14:30 - 16:00
Ideas, Suggestions and Requirements		16:00 - 16:15
Coffee Break		16:15 - 16:40
Renewable Energies	Artur Braun (EMPA) Holger Dau (FUB) Rutger Schlattmann (PVcomB)	16:40 - 18:10
Ideas, Suggestions and Requirements		18:10 - 18:30
Dinner - Poster Session		

2 December, 2014		
Material Science, XSW	Jörg Strepfer (DESY) Claudia Felser (MPI Dresden) Ingo Salzmann (HUB)	08:30 - 10:00
Ideas, Suggestions and Requirements		10:00 - 10:20
Coffee Break		10:20 - 10:50
Electrochemistry	Jürgen Behm (Universität Ulm) Wolfram Jägermann (Universität Darmstadt)	10:50 - 11:50
Ideas, Suggestions, and Requirements		11:50 - 12:10
Lunch Break		12:10 - 13:10
Life Sciences	Janina Kneipp (HUB) Sergey Kapishnikow (HZB) Esteban Veiga (CNB-CSIC) Manfred Weiss (HZB)	13:10 - 15:10
Ideas, Suggestions and Requirements		15:10 - 15:30
Coffee Break		15:30 - 16:00
Into the Future		16:00 - 17:30
BESSY II Photon Science and Instrumentation at EMIL	Klaus Lips (HZB)	16:00 - 16:30
BESSY II Accelerator and Storage Ring Instrumentation	Andreas Jankowiak (HZB)	16:30 - 17:00
General Discussion and Summary		17:00 - 17:30
End of the Workshop		
Afterwards: Possibility to visit the Experimental Hall		

