PRORA®

Conference contributions / registration

To register for PRORA 2022 is only possible using the online form at **iap-adlershof.com.**

Please submit your abstracts for lectures and posters before August 31, 2022. You have the option of placing an ad in the abstract book. Other support and sponsorships are welcome. Talk to our organization team.

We look forward to your registration.

Attendance fee	Early Bird until 31th July 2022	Regular
Regular attendee	300,00 €	500,00 €
Speakers	150,00 €	300,00 €
Students	25,00 €	50,00 €
Student speakers	0,00 €	0,00 €

Exhibition space	200,00 €/m²

Hotel rooms can be booked by October 26th. or 09th November 2022 at a special price (see table).

Accommodation	Airporthotel Berlin Adlershof bookable until 26th October 2022	Essential by Dorint Berlin bookable until 9th November 2022.
Single room	89,00 € / night	103,00 € / night
Double room	95,00 € / night	122,00 € / night
Breakfast	included	included

Organization and correspondence address

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Organizers

IAP – Institut für angewandte Photonik e.V., Berlin
BAM – Bundesanstalt für Materialforschung und –prüfung, Berlin
Bruker Nano GmbH, Berlin
Helmut Fischer Stiftung, Sindelfingen
OpTecBB – OpTec-Berlin-Brandenburg e.V.
PTB – Physikalisch-Technische Bundesanstalt, Braunschweig und Berlin
Arbeitskreis Prozessanalytik
SPECTRO Analytical Instruments GmbH, Kleve
TU – Technische Universität Berlin
WISTA Management GmbH
Berlin Partner für Wirtschaft und Technologie GmbH
Verein Deutscher Ingenieure, Berlin

Program committee

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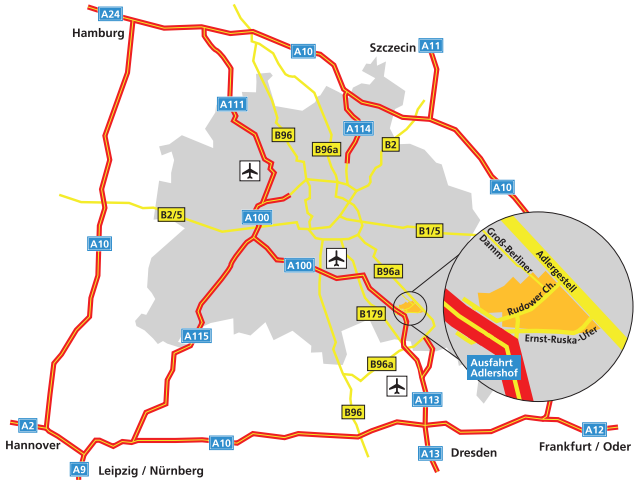
H. Stiel, MBI, Berlin
R. Wedell, IAP e.V., Berlin
J. Wiesmann, Incoatec GmbH, Geesthacht



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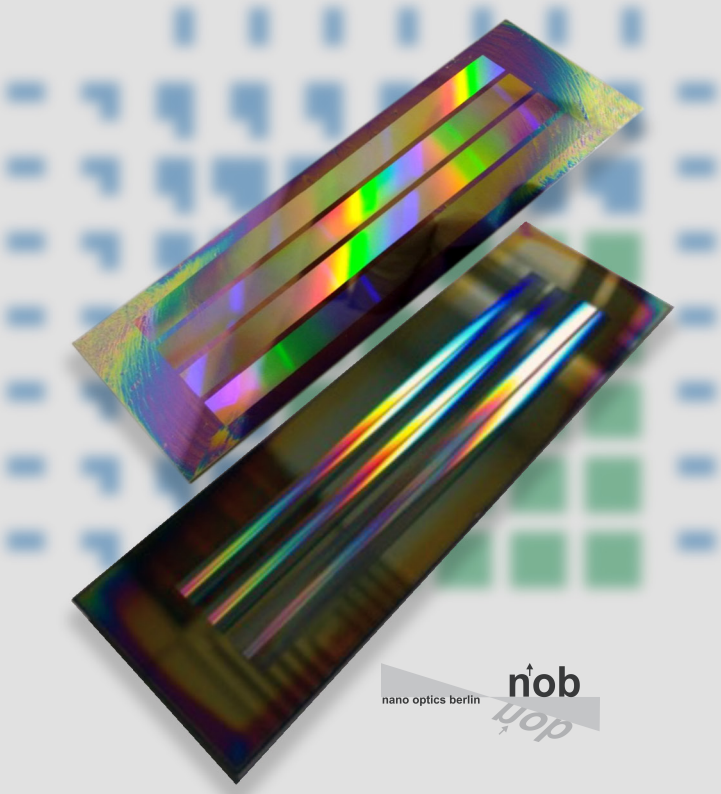
Conference Announcement

11th Expert Conference Process-oriented X-ray Analytics

November 24–25, 2022
Berlin–Adlershof



nano optics berlin nob

HZB Helmholtz Zentrum Berlin

BAM Bundesanstalt für Materialforschung und -prüfung

IAP

Helmut Fischer STIFTUNG

WISTA we get ideas done

SPECTRO

AMETEK MATERIALS ANALYSIS DIVISION

BRUKER

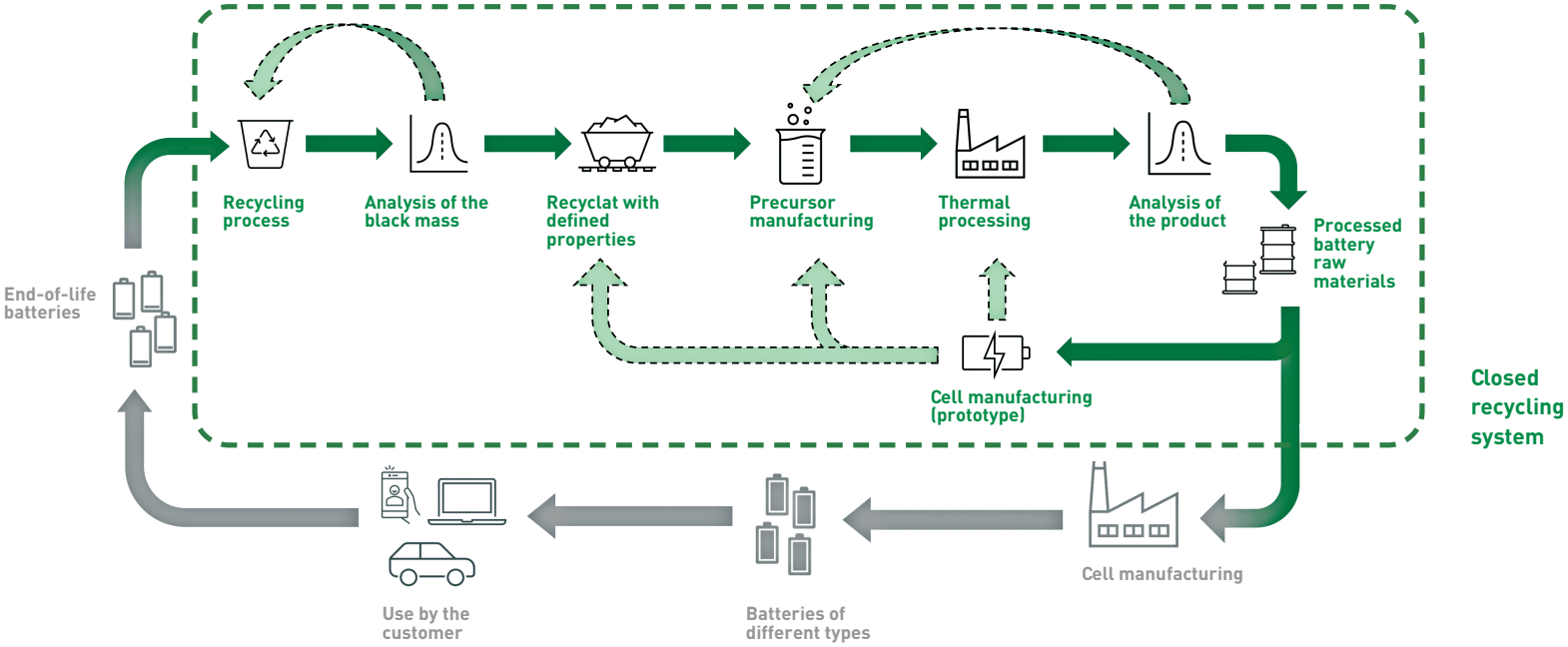
Technische Universität Berlin

BLiX Berlin Laboratory for innovative X-ray Technologies

OpTecBB

PTB

EXSA



After the traditional conference "Process-oriented X-ray Analytics" PRORA could not take place in the last two years, it will be held from November 24 to 25, 2022 as a face-to-face event again in the Science and Technology Park Berlin-Adlershof. This year, for the first time, the premises of the Helmholtz Center Berlin for Materials and Energy – BESSY II will be available for the conference and the accompanying industrial exhibition.

The special feature of this conference is, among other things, the excellent opportunity of a direct exchange of information between representatives of research and industry, which result both from the discussions between the experts in the plenary session and from the visit of the industrial exhibition. For this reason, companies that either manufacture X-ray technology, including individual components and tools, or use them for their technological processes, are particularly invited to take part. Another important concern is the promotion of young scientists and technicians. For this reason, special conditions are granted for the participation of students and they are encouraged for submitting abstracts of lectures and poster contributions.
The main topics for this year's conference include, on the one hand, new developments in analytical devices, components, methods and measurement procedures, and, on the other hand, contributions to solutions for the major challenges of our time, such as the scarcity of raw materials and storage of renewable energies.
For this reason, X-ray analytical applications, but also combinations with other measurement methods in the sense of a method interlinking, in methods of recycling valuable materials and in battery development should obtain special attention. Furthermore, artificial intelligence plays a role in control and monitoring of technological processes in connection with the use of process analysis plays a rapidly growing role. Among other things, it secures a resource- and energy-saving production of different products in high quality, so that this main topic will have an important place during the conference.

The awarding of the Helmut Fischer Poster Prize during PRORA became now already a tradition. The prize, endowed with 500 €, should recognize the achievements of the authors of the best poster in the field of applied research and development. Exhibitors also have the opportunity to present their product portfolio. The presentations will take place before the poster session on 11/24/2022 in the boardroom. Please register your contributions of a maximum of 5 minutes.

The exhibition stands can already be set up on Wednesday, November 23, 2022, from 1 pm in the foyer of the Helmholtz Center Berlin for Materials and Energy BESSY II, Albert-Einstein-Str. 15, 12489 Berlin-Adlershof.

PRORA®

Subjects / Topics

Methods and measurement procedures

- Method-combination analytics
- New approaches to using X-ray analysis under industrial conditions
- Electronics and software for applications in research and industry
- Software for evaluating the measurement data and spectra in hard (5 keV) and soft (30 eV– 5 keV) X-ray range
- Challenge in qualitative and quantitative analysis of light elements and new materials and their sample handling.
- X-ray microanalysis of light elements and M and L lines of heavier elements
- Time-resolved X-ray spectroscopic methods and special grating X-ray spectrometers

Applications in industry and science

- Process analytics for recycling processes (e.g. lithium ion batteries), in food processing, in environmental monitoring and in layer thickness measurement
- Distributed systems (microservices) and AI (deep learning, machine learning, neural networks)
- X-ray examinations (tomography, microscopy)
- Method interlinking (X-Ray, UV/VIS, IR, LIBS) in the monitoring and control of technological processes

Component development in industry and science

- State of the art and recent developments for
  - X-ray optics (capillary optics, gratings, multilayer, reflection zone plates)
  - X-ray sources and detectors (e.g. pixelated detectors)
  - Vacuum technology (vacuum materials, design of innovative components (e.g. vacuum feedthroughs, actuators, sensors, etc.))