## Facets of Electron Crystallography

The Joint Laboratory for Electron Microscopy Adlershof of the Humboldt University Berlin (HUB) and the Leibniz Institute for Crystal Growth (IKZ) organizes a three day workshop

JULY 7-9 2010 at the Institute of Physics of HUB and IKZ, Berlin Adlershof **Participation in the** workshop is limited to 45 200 nm people, do check with the local coordinator for availability after June 15!

#### **Speakers and hands-on Demonstrators:**

Jan Pieter Abrahams (Leiden), Martin Albrecht (IKZ Berlin), Daniel Bultreys (Brussels), Carmelo Giacovazzo (Bari), Sven Hovmöller (Stockholm), Ute Kolb (Mainz), Holm Kirmse (HUB Berlin), Stephan Kujawa (Eindhoven), Peter Moeck (Portland, USA), Jean-Paul Morniroli (Villeneuve d'Ascq), Wolfgang Neumann (HUB Berlin), Stavros Nicolopoulos (Brussels), Lukas Palatinus (Prague), Edgar Rauch (Grenoble), Muriel Véron (Grenoble), Stephan Zaefferer (Duesseldorf)

Mandatory pre-registration and all other inquiries per email <u>pmoeck@pdx.edu</u> to the local coordinator, Prof. Peter Moeck, Tel.: +049 30 2093 8044.

### **Topics of the workshop**

Fundamentals of electron crystallography

New developments in precession electron diffraction

High resolution crystallite orientation and phase mapping (HRCOPM - very loosely speaking "EBSD like mapping") in the TEM

Automated Crystallography for the TEM (ACT)

3D Diffraction tomography

Rotation/precession diffraction methods for the collection of 3D data sets

HRTEM image-based electron crystallography

Objective-lens corrected TEM (including aberration-corrected precession diffraction)

Direct methods & charge flipping for electron crystallography

#### Hands-on activities in small groups

- HRCOPM at an analytical JEOL - JEM 2200F

- HRTEM at an objective-lens corrected FEI Titan 80-300
- Software for electron crystallography (SIR 2008 Superflip CRISP/ELD)

#### The whole workshop will be conducted in English!

All participants are encouraged to present one poster (in English) that gives an introduction to their work. The best poster, as judged by a committee, will win a prize of 100 Euro.

The organizers will invite selected participants of our workshop to submit either a research or a review paper for a special issue on "*New developments in electron diffraction*" of the journal *Crystal Research and Technology* (<u>http://www.crystalresearch.com</u>), guest editors: Peter Moeck and Stavros Nicolopoulos. This special issue is planned to appear in December 2010. The **submission deadline** is, therefore, **October 1, 2010**. Workshop participation fees (to be paid at the workshop venue on arrival in cash), <u>after pre-registration with the local</u> <u>coordinator</u> (Peter Moeck, <u>pmoeck@pdx.edu</u>)

Students: 50 Euros (one day), 125 Euros (all three days)

Senior Researches: 100 Euros (one day), 250 Euros (all three days)

# Workshop venues: **IKZ, Max-Born-Straße 2, 12489 Berlin** & **HUB, Institute of Physics, Newtonstrasse 15, 12489 Berlin** (5 minutes walking distance)

Accommodation: Airport Hotel Berlin-Adlershof, prices (per night) range from 62 Euro for a single room, over 73 Euro for two people sharing a double room, to 81 Euro for 3 people sharing a "family room", and 108 Euro for 4 people sharing such a room, breakfast buffet: 12 Euro (per day), <u>http://www.airporthotel-berlin-adlershof.de/;</u> (all prices are inclusive of VAT, wireless internet access is available in this hotel, but not included in the room rate. There will, however, be access to email for the participants during the workshop in the physics-department computer-cluster.) Direct booking at these rates is guaranteed (for up to 45 participants) until June 15, do mention the two keywords "*Electron crystallography*" in your email or telephone inquiry/booking. Please download the respective registration forms in English (or German) fill them out and fax or email them back to the hotel.

Alternatively, the **Dorit Berlin-Adlershof**, <u>http://hotel-berlin-adlershof.dorint.com/</u>, is across the street and offers single rooms starting at 63 Euro and double rooms starting at 73 Euro (including VAT), breakfast buffet: 13 Euro; keywords "facets of electron crystallography".

Both hotels are located within a short walk of 5 minutes from the workshop venues. There is a stop of **bus 162** in front of these hotels. This bus comes from (and goes to) Schoenefeld Airport directly within less than 20 minutes (three times per hour during the day). Participants arriving at Tegel Airport need to either take a taxi (45 – 90 minutes depending on the time of day) or the **bus TXL** to a(n) S-Bahn/U-Bahn station and from there to Aldershof (about 1 hour). If you want to use public transportation (for 2.10 Euro), the recommendation is: take the bus TXL bus to S-Bahn station Beusselstrasse, walk down the stairs, step into train 41 (it only goes into one direction, the other direction has a different number), change at S-Bahn station Ostkreuz to train S8, step out at S-Bahn station Adlershof, walk some 10 minutes towards the South down the street "Rudower Chaussee".

Participants arriving at any of the Berlin railway stations should take the S-Bahn to Adlershof. Public transportation within Berlin **can be planned ahead** at <u>http://www.fahrinfo-berlin.de/Fahrinfo/bin/query.bin/en?ld=0.1&</u>.

Sponsored by







www.nanomegas.com