COST Training School

Advanced Experimental Methods for Energy Materials Characterization

Delmenhorst, September 7 – 12, 2014

Organizers:
Jan Ingo Flege, Universität Bremen
Niklas Nilius, Carl von Ossietzky Universität Oldenburg
Michael Reichling, Universität Osnabrück

Venue:
Hanse-Wissenschaftskolleg
Institute for Advanced Study
Lehmkuhlenbusch 4
27753 Delmenhorst
Germany
www.h-w-k.de
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td><strong>Sunday, September 7, 2014</strong></td>
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<tr>
<td>16:00</td>
<td>Arrival, Get-together</td>
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<tr>
<td><strong>18:00</strong></td>
<td>Welcome Dinner</td>
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<tr>
<td><strong>Monday, September 8, 2014</strong></td>
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<tr>
<td>9:00</td>
<td>Photoelectron spectroscopy: history, development and application (David Payne)</td>
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<td><strong>10:30</strong></td>
<td><strong>Coffee break</strong></td>
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<td>11:00</td>
<td>Angle-resolved photoelectron spectroscopy: from millielectron volts and millireciprocal angstroms to femtoseconds and nanometers (Kai Rossnagel)</td>
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<td><strong>12:30</strong></td>
<td><strong>Lunch</strong></td>
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<td>14:00</td>
<td>The scanning tunneling microscope: a spectroscopic toolbox for surface science research (Niklas Nilius)</td>
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<td><strong>15:30</strong></td>
<td><strong>Coffee break</strong></td>
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<td>16:00</td>
<td>Poster session</td>
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<td><strong>18:00</strong></td>
<td>Dinner</td>
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<td><strong>Tuesday, September 9, 2014</strong></td>
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<td>9:00</td>
<td>Ambient pressure X-ray photoelectron spectroscopy: applications and future directions (David Starr)</td>
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<td><strong>10:30</strong></td>
<td><strong>Coffee break</strong></td>
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<tr>
<td>11:00</td>
<td>Non-contact atomic force microscopy (Michael Reichling)</td>
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<td><strong>12:30</strong></td>
<td><strong>Lunch</strong></td>
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<tr>
<td>14:00</td>
<td>Electrostatic force microscopy/spectroscopy and Kelvin probe force microscopy (Clemens Barth)</td>
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<td><strong>15:30</strong></td>
<td><strong>Coffee break</strong></td>
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16:00 Scanning electrochemical microscopy as a tool for local investigation of surface reactivities
(Gunther Wittstock)

17:30 Excursion to Bremen

Wednesday, September 10, 2014

9:00 Fundamentals and applications of (surface) X-ray diffraction
(Johan Gustafson)

10:30 Coffee break

11:00 Grazing incidence X-ray scattering from nanoparticles
(Rémi Lazzari)

12.30 Lunch

14:00 Basic principles and applications of X-ray absorption fine structure spectroscopy
(Dirk Lützenkirchen-Hecht)

15:30 Coffee break

16:00 Poster session

17:30 Excursion to Bremen

Thursday, September 11, 2014

9:00 Low-energy electron diffraction
(Thomas Schmidt)

10:30 Coffee break

11:00 Low-energy electron microscopy and spectroscopic photoemission microscopy
(Jan Ingo Flege)

12.30 Lunch

14:00 Vibrational spectroscopy: Fundamentals and applications in the field of energy-related materials
(Jörg Libuda)

15:30 Coffee break

16:00 Closing remarks and
BBQ Dinner
Friday, September 12, 2014

9:00   Optional practical demonstrations
       LEEM (Bremen), AFM (Osnabrück)

12:30  Lunch

14:00  Departure