COST Training School on Advanced Experimental Methods for Energy Materials Characterization

Delmenhorst 8. - 12.09.2014

The summer was over, the days were getting shorter, but there was still one highlight to come before sliding into autumn feelings, the ‘COST Training School for Advanced Experimental Methods’. As part of the COST Action CM1104 on reducible oxides, the school was organized in the small town of Delmenhorst, located in between the three university cities of Bremen, Osnabrück and Oldenburg in north western Germany. At first glance, the city might not appear to be the best place for an international school. However, it turned out to be an almost perfect choice, because of the familiar and intimate atmosphere created by the Hanse Wissenschaftskolleg hosting the five-day event. Most of the organization duties were taken by Ingo Flege from Bremen University, who invited 14 experts from partner countries of the COST action, namely France, United Kingdom, Sweden and Germany. Each of the mostly younger scientists represented a major research field of surface science, and the training team was thus able to offer a comprehensive trip through the fascinating world of surface science studies related to the Training School topic. Almost 50 students from 8 countries followed the invitation, traveled to Delmenhorst and would dive in the universe of atoms, molecules, and nanostructures.

Each training day was devoted to a specific methodology. While Monday was reserved to electron spectroscopy, Tuesday and Wednesday went to the scanning probe and diffraction techniques, respectively, and the vibrational techniques were discussed on Thursday. Due to a clever stacking of the talks, each day started with a basic lecture to lay a foundation for the following lectures. In the course of the day, the complexity of the topics increased, aiming to demonstrate the relevance of a given methodology in different fields of physics and chemistry. The students were actively embedded into the training program. Two poster sessions, being initiated by a series of mini talks, gave room for presenting own experimental results and discussing the data with trainers and fellow students. Moreover, long coffee breaks in between the lectures could be used to approach the speakers, to clarify open questions and to discuss scientific phenomena with the experts.

Besides all science, the school took care of the social and touristic needs of the participants. In a groovy night tour, the students learned about the history of the nearby city of Bremen, being since centuries powerful member of the Hanseatic League. A barbeque party on Thursday night offered the ultimate chance to strengthen initial contacts between the participants and to plan projects for the future.

All in all, the COST Training School turned out to be an efficient pathway to obtain a basic idea on numerous surface science techniques, to broaden pre-existing knowledge, but also to learn advanced details and to discuss scientific problems on a high level. Although primarily focused on the needs of experimentalists, it was well suited for theoreticians as well to get a glance on the world behind models and numbers. The school was made possible by the seamless working together of the organisers and by the great support and smooth handling by the Hanse Wissenschaftskolleg. Many thanks to all organisers and contributors.

If you missed it, you missed a great event!

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