

11th Central European Meeting on Molecular Electrochemistry

The 11th „Central European Meeting on Molecular Electrochemistry“ (CEMME) took place at the Center for Materials, Architectures and Integration of Nanomembranes (MAIN) at the campus of the Chemnitz University of Technology. The organizers, Prof. Dr. Heinrich Lang, Prof. Dr. Jiří Ludvík and Dr. Alexander Hildebrandt, thereby continued a longstanding tradition of German-Czech cooperation and scientific exchange within the electrochemistry community and expanded it to include electrochemists from central Europe.

The first of the formerly called “Prague-Dresden” Symposia took place 1995 in the Czech natural reserve Prachovské skály (Prachov Rocks) and was initiated by Dr. Pavel Janda and Prof. Dr. Ladislav Kavan (J. Heyrovský Institute, Prague) as well as Prof. Dr. Lothar Dunsch and Prof. Dr. Waldfried Plieth (Leibniz-IFW Dresden) for the exchange of knowledge and networking ability for young scientists from Czech Republic and Germany. This year’s event was dedicated to Prof. Dr. Lothar Dunsch, who decisively conducted the CEMME-Symposia until 2011. It has been the first after an interruption for seven years.

The 11th CEMME conference 2019 was attended by approximately 60 scientists from Central Europe, who reported in six sessions over three days on current trends in electro-catalysis, spectroelectrochemistry, charge storage materials, electro-analysis, redox properties of bio- and nanomaterials as well as molecular electrochemistry.

The 1st day of the conference was opened by a 45 min plenary lecture of Prof. Dr. Wolfgang Kaim on the opportunities and application of spectroelectrochemical methods especially in the analysis of complexes with “non-innocent” ligands. Subsequently, the topics of electron transfer processes and mechanistical studies using electrochemical analytics were elaborated in three more presentations. In conclusion of the first day a poster session offered the possibilities to have lively scientific discussions as well as networking opportunities within the electrochemical community.

On the second day, 16 lecturers reported in three sessions on the latest developments in the fields of electro-catalysis, energy storage materials, electro-analysis of inorganic and organometallic systems, and basic electrochemical research. In addition, the facilities of the new MAIN Center were visited. In this new research building, which was handed over in 2018, the TU Chemnitz bundles the competences in the field of nanomembrane-based materials, one of the most modern fields of material sciences. Nanomembranes are the basis for novel devices that are extremely adaptable and can be fabricated using established and novel processes and processes developed among others, in MAIN. About 100 researchers from the disciplines of physics, chemistry, electrical engineering and microsystems technology find state-of-the-art research and working conditions in the transdisciplinary scientific Institute MAIN. Established methods of molecular electrochemistry, such as those discussed during CEMME-11, can provide valuable input for the structure elucidation and surface analysis of ultrathin functional layers such as nano-membranes. This is also the reason for choosing the MAIN building as the conference venue.

During an evening BBQ on the second day of the conference, the participants once again had the opportunity to exchange their experiences in a relaxed atmosphere and to discuss cross-regional new project ideas in an inter- and transdisciplinary manner.

On the final day of the conference, attendees learned about the electrochemistry of biomaterials, the electrochemical properties of nanomaterials and surfaces in eleven talks, and gained insights into theoretical electrochemistry.

Overall, CEMME-11 provided an excellent platform for junior scientists, postdoctoral researchers, and professors in the field of modern molecular electrochemistry. Inspiration for future collaborative projects was acquired and many contacts were made.

The organizers' gratitude goes to the GDCh (German Chemical Society) and its Department of Electrochemistry, as well as to the International Society of Electrochemistry (ISE) and the "Freunde der TU Chemnitz e.V.", who have made a decisive contribution to the extraordinary success of CEMME-11.

The 12th CEMME conference 2021 will be organized by Prof. Dr. Jiří Ludvík (J. Heyrovský Institute, Prague) in the Czech Republic.

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