

The 26th ABAF International Conference

Final Report for the International Society of Electrochemistry

For more than five decades, the Faculty of Electrical Engineering and Communication at Brno University of Technology has maintained a strong research tradition in materials for electrochemical power sources. Building on this expertise, the Department of Electrical and Electronic Technology has, since 2000, hosted the annual ABAF ("Advanced Batteries, Accumulators and Fuel Cells") conference series, providing a forum for presenting current developments in electrochemical power sources and processes, energy storage, renewable energy, photovoltaic systems, nanomaterials, and corrosion science.



The 26th edition of the conference took place in Brno, Czech Republic, from August 31 to September 3, 2025, with ninety-one participants representing countries including Austria, Belgium, Bulgaria, the Czech Republic, Ireland, Italy, Japan, Poland, Slovakia, Spain, Sweden, Turkey, Ukraine, and the UK. The event continued to provide an opportunity for researchers, particularly from Central Europe, to establish contacts and build collaborations that support ongoing scientific cooperation in the region.

Alongside the academic program, participants took part in a cultural and social program that included a visit to the Museum of Industrial Railways in Zastávka u Brna, complete with a ride on a mini train pulled by a steam locomotive, as well as a laser show featuring Tesla coils. As in previous years, evenings included dinners at notable local venues, offering further opportunities for networking and informal discussion among participants.

One of the highlights of the conference was once again the "Best Poster of Young Scientists" competition, sponsored by ISE. First prize went to David Trochta from Brno University of Technology for his work on "Multiscale Structural Evolution in Lithium-ion Batteries Investigated." Second place was awarded to Daniel Budac from the University of Chemistry and Technology Prague for his research on "The Effect of Electrolyte Structure on the ORR and OER Kinetics in Solid Oxide Cells," while Jere Hokkanen from the Austrian Institute of Technology took third place with his study "Compatibility of High-Voltage Cathodes with Ionic Liquids." The winners received prizes including external hard drives, power banks, multifunctional pens, executive stationery sets, and confectionery.



The publication of a special issue of Monatshefte für Chemie – Chemical Monthly in June 2026 marked the conclusion of last year's conference proceedings. The issue comprises 14 peer-reviewed papers selected from the conference submissions, presenting the latest research showcased at the 26th International Conference on Advanced Batteries, Accumulators and Fuel Cells.

The organizers wish to thank the sponsors of the 26th ABAF conference: Pragolab, ChromSpec, Škoda, Agile Europe, BioLogic, Czech Battery Cluster, EVC Group, EV Battery, Kovohutě Příbram, and Verkon, whose support was instrumental in ensuring the event's smooth running.