## **EDITORIAL**

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## **International meetings on Advanced Batteries and Accumulators**

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Chemical power sources are one of the oldest means for electricity production. Despite that, their importance has gained a kind of a renaissance in last 20 years. Microelectronics, communications, mobile phones and other hand-held or even implanted devices are typical representatives of such a development. Another application field is electric traction — electromobiles — the demand for which has now reappeared. We could continue, with back-up power sources, batteries in thermal and atomic power plants or cosmonautics.

Undoubtedly, the search for new power sources is bound to the search for new materials. So a close connection between material chemistry and electrochemistry has appeared and many excellent laboratories have started to investigate this field.

The Czech Republic has almost a century-long tradition in electrochemistry. Therefore it is not surprising that modern power sources (accumulators and batteries) have been the subjects of extended studies there, utilizing the progress of inorganic chemistry and other branches of chemical knowledge. We cannot forget, as an example, what progress in chemistry there was with the introduction of intercalation compounds into lithium batteries.

There are several scientific centres in the Czech Republic involved with "battery science". They have organized as many as 22 meetings dealing with batteries of all kinds. Four years ago the authors and guest editors of this issue decided to prepare a new series of meetings, with Prof. Vondrák and Dr. Sedlaříková as chairman and chairwoman. The title "Advanced Batteries and Accumulators" was chosen for them and they are held at the Technical University of Brno.

The scope of these meetings is anything connected with batteries and related topics. So, intercalation electrochemistry, the scientific background of lithium and lithium-ion batteries and electrochemical supercapacitors should interest their participants. Further, aprotic electrolytes, including gel polymer electrolytes and membrane fuel cells, have become an important part of the program.

This special issue of the *Journal of Solid State Electrochemistry* is dedicated to selected contributions from the program of the third meeting, which took place from 16 to 21 June 2002.

Further meetings will be held in the future. All readers will be accepted heartily; details as well as application forms can be found on the www.aba-brno.cz web site.

The city of Brno is the second largest city of the Czech Republic and it has many cultural and historical traditions (see www.brno.cz). The organizers believe that the visitors and their accompanying persons will find a lot of interesting things there.

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