

Foreword

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This special issue of the Journal of Applied Electrochemistry summarizes the selection of papers presented during the specialized Symposium on Electrochemical Engineering organized within the framework of the 19th International Congress of Chemical and Process Engineering (also known as CHISA) in conjunction with the 7th European Congress of Chemical Engineering. This event took place in Prague, Czech Republic, from August 28 to September 1, 2010. The history of the CHISA Congress can trace its roots back to 1962, when the Congress was first launched. From the beginning, CHISA emphasized bridging the gap between Eastern and Western Europe. In time, however, it has become significantly more far-reaching from a geographical point of view. The Symposium on Electrochemical Engineering represents an integral part of the Congress. The main reason is that it is organized under the auspices of the Working Party on Electrochemical Engineering of the European Federation of Chemical Engineering (EFCE). The CHISA Congress ranks among the most important EFCE activities in the context of scientific congresses.

In the year 2010 the Symposium on Electrochemical Engineering comprised almost 30 oral presentations and a slightly higher number of posters. A significant share of the contributions dealt with the issue of energy-related processes, including fuel cells, water electrolysis and batteries. However, electrochemical engineers are recently increasingly focusing again on the topic of drinking and waste water treatment. This is clearly connected with the increasing shortage of fresh water in numerous industrially developed as well as underdeveloped countries.

Mathematical modeling has also retained its position as a powerful tool for a better understanding of electrochemical processes and for the efficient design and optimization of industrial-scale processes and technologies. And last but not least, surface treatment technologies play an important part in applied electrochemistry.

This special issue has only a limited extent and it can only provide a limited number of examples of the topics discussed during the Symposium. Nevertheless, it provides a representative impression of the topics solved in the community of electrochemical engineers, although it makes no claim to be exhaustive. In my opinion, it is an important task of a scientific journal bearing the words ‘Applied Electrochemistry’ as its title to provide a forum for such a presentation. I am, therefore, extremely grateful to the editor of the journal, Professor Gerardine Botte, for her support, which made it possible to prepare this Special Issue.

At this juncture, I would like to thank the authors for preparing the manuscripts based on their contributions presented during the Symposium and for their receptive reactions to the comments and suggestions made by the referees. I would also like to express my appreciation of the work performed by the referees of the individual manuscripts. Their efforts have contributed greatly to the quality of the papers and have helped to maintain the high standard both of this issue and of the journal in general. Last but not least, I am grateful once more to Professor Botte for taking over the editorship of the manuscripts co-authored by myself, which has made it possible to include them in the list of articles published in this issue.

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