Foreword

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This special issue of the Journal of Applied Electrochemistry is devoted to the contributions presented during the 11th European Symposium on Electrochemical Engineering (11th ESEE) that was held from June 4 to 8, 2017 in the City of Prague, Czech Republic. This triannual conference is recognized as one of the most important scientific events organized by the Working Party of Electrochemical Engineering of the European Federation of Chemical Engineering.

The 11th symposium offered an overview of ongoing activities in the field of electrochemical engineering represented by prominent scientists from most of the continents, including: Europe, Asia, North America, South America, and Australia. Participation of delegations from most of the continents in the world are an indication that electrochemical technologies are of strong interest for the solution of global grand challenges and societal problems. The 11th European Symposium on Electrochemical Engineering organized under the motto *Today's research for tomorrow's technologies* was devoted to the discussing of the newest development in a wide field of currently developed electrochemical technologies.

The 11th ESEE program included 82 oral and 31 poster presentations, including 4 plenary lectures and 6 keynote lectures. The plenary lectures covered relevant topics such as the electrochemical treatment of effluents from phosphate mines, electrochemical micro and nano fabrication, and application of gas diffusion electrodes in industrial electrochemical processes. As usual, an inseparable part of the Symposium was the presentation of the Carl Wagner

Medal of Excellence, sponsored by the Working Party on Electrochemical Engineering of the European Federation of Chemical Engineering. In 2017, the winners were João Tedim (University of Aveiro) and Carlo Santoro (University of New Mexico), two highly promising scientists who are already contributing towards raising the research standards of electrochemical technology (see Figs. 1, 2).

The 11th symposium also honored Professor Anthony A. Wragg (University of Exeter) in recognition of his lifetime contribution to the field of electrochemical engineering and applied electrochemistry. Tony Wragg has been recognized as one of the world leaders in electrochemical engineering who made significant contributions to the field, particularly in the area of mass and heat transfer at the surfaces of complex geometry by free convection. In addition, Prof. Wragg served as editor-in-chief of the Journal of Applied Electrochemistry for almost 30 years. As a part of award ceremony Professor Wragg delivered a plenary lecture entitled *Electrochemical Engineering—time-travel* (see Fig. 3).

A close look at the conference program makes it clear that it is dominated by two major world challenges: environmental protection and energy conversion and storage. This remains unchanged since the previous conferences. These two topics represent two of the main challenges facing modern society on its way to its further development. The research papers discussed at the conference and some of the selected published in this special issue demonstrate the fact that electrochemical engineering is a vital discipline, able to contribute towards solving societal challenges. In conclusion, on behalf of the organizing committee, we would like to thank all participants for making this event so interesting and fruitful. We sincerely thank all the sponsors for their continuous help and promotional support. And finally, we would like to thank our partners for their financial support and for making our event even more interesting through their exhibits.

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Fig. 1 Dr. João Tedim receives Carl Wagner Medal of Excellence award

Fig. 2 Dr. Carlo Santoro receives his Carl Wagner Medal of Excellence award

Fig. 3 Professor A. A. Wragg delivers his award lecture