



Preface

5th International Symposium on Electrochemical Impedance Spectroscopy Marilleva (Trento), Italy, June 2001

Electrochemical Impedance Spectroscopy (EIS) is a vital technique for the characterisation of electrochemical processes for technological applications, and is a rapidly developing experimental method for many technical fields such as corrosion protection, fuel cells, surface characterisation, solid electrolytes, and others.

Despite the widespread use of EIS in many scientific laboratories, more work needs to be done to transfer existing understanding of data acquisition and analysis to significant areas of application in order to establish EIS as a standard characterisation technique in applied research.

Continuing the tradition of the four previous successful Symposia held in Bombannes (1989), Santa Barbara (1992), Ysermonde (1995) and Agra dos Reis (1998), the 5th International Symposium on Electrochemical Impedance Spectroscopy was held at Marilleva, Trento, Italy 17-22 June 2001. About 160 papers dealing with theoretical aspects and with applications of EIS were presented by a world-wide spectrum of participants from 36 different countries. Scientific discussion was always very open and thorough after the oral presentation and during the successful poster discussion sessions.

At the conference particular attention was focused on papers dealing with EIS in applied research, especially in two very important and topical fields: corrosion protection by coatings and fuel cells. Selected papers in these areas are published in this Special Issue of the *Journal of Applied Electrochemistry*.

In these fields, the development of models explaining the underlying electrochemical processes is possible through the application of EIS. Using information obtained from EIS characterisation it is also possible, in many cases, to optimise the technical performance of applied systems.

I hope that these papers presented in Marilleva will be a useful tool for scientists working with Electrochemical Impedance Spectroscopy in applied research, showing examples of the use of EIS as a "bridge" between science and technology.

Finally, I would like to express my gratitude to the local organising committee and, in particular, to Prof. Pier Luigi Bonora, Chairman of the conference, and would also like to take this opportunity to invite all readers interested in EIS to the next edition of the Symposium organised by Mark E. Orazem in 2004 in Florida.

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