## EDITORIAL

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## **3rd International Symposium on Electrochemical Processing of Tailored Materials**

Published online: 14 January 2004 © Springer-Verlag 2004

This special issue of JOSSEC contains the papers presented at the third International Symposium on Electrochemical Processing of Tailored Materials (53rd International Society of Electrochemistry (ISE) Meeting in Dusseldorf). This series of symposia goes back to the Kyoto meeting in 1989, which was held as a satellite meeting of the 40th ISE Meeting. The second meeting was organized in the 183rd ECS Hawaii Meeting in 1993.

The tradition of these meetings is to emphasize the role of surface science and technology in material science. The advanced materials technology in microelectronics has been sustained by tailoring non-equilibrium materials with controlled atomic structure and stoichiometry. Many applied studies to create unique performance have been required frequently because the user usually makes demands to an unlimited extent. Little fundamental research has been done to clarify the reaction and deposition mechanisms involved in processing. However, it is time for another approach since electrochemical processing has obtained its recognition like the Damascene Process. Systematic interdisciplinary research in "Electrochemical Processing for Tailored Materials" is highly desirable.

The 3rd symposium was organized with a large number of contributions comprising 46 oral and 62 poster presentations. It was not only the largest in size, but also the most stimulating in science among the three symposiums. Thus, the publication of a special issue was proposed in the *Journal of Solid State Electrochemistry*. Since the volume space is limited, the electrochemical techniques are the main focus in this issue.

When the meeting was planned, Professor Dr. Rolf Schumacher, Atotech Deutschland GmbH, became a member of the organising committee. He was most active on many topics of our programme and gave us a lot of suggestions. He died in a tragic accident some months before the meeting. We devote the present special edition to this outstanding scientist. He was really a man of character.

For the organizing committee and editorial board, Waldfried Plieth

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