# **Preface**

This collection of papers results from contributions made at ELECTROCERAMICS VI '98 which itself forms part of the joint triple meeting held in Montreux, Switzerland from 24 to 27 August 1998. The larger meeting covered recent advances in the broad and rapidly progressing field of electroceramics, ferroelectrics and polar dielectrics. It united the 11th International Symposium on Applications of Ferroelectrics (ISAF), the 4th European Conference on Applications of Polar Dielectrics (ECAPD), and the 6th International Conference on Electroceramics and their Applications (ELECTROCERAMICS). The host of the joint meeting was the Laboratory of Ceramics, Swiss Federal Institute of Technology-EPFL, Lausanne.

More than 550 papers were presented. The backbone of the joint meeting was a series of plenary lectures highlighting research areas of strong current and emerging interests. The plenary and invited lectures and the topic papers presented both orally and as posters during the meeting demonstrated the wide variety of new applications being developed, based in particular on ferroelectrics, polar dielectrics, ionic conductors and other functional ceramics.

The central contribution provided by increased understanding of the science of electroceramics on the one hand, together with the development of a wide range of fabrication technologies on the other, was clearly evident in promoting the utilization of ceramics in new devices. In comparison with previous meetings, the present one showed the growing importance of surfaces, interfaces and other boundaries, e.g. domain walls. Size effects and questions related to nanotechnology were comprehensively discussed both on the academic level and for device realizations. Microdevices and their integration problems (and solutions) were at the heart of many reports.

Over 650 participants, researchers, scientists and engineers, made the meeting a showcase for the current state of the art of the field. The papers reflected the extensive activities in this interdisciplinary area, while the balance between presentations from academic laboratories and from industrial R&D laboratories was a testimony to its vitality. The complementarity in domains of interest of the three conferences is what made the joint meeting a single and highly effective conference.

We would like to thank all speakers, contributors, session chairs and paper referees for their efforts in making the Montreux meeting a hugely successful one. We are indebted to the International Advisory Committee and the Local Advisory Board for their advice and help in planning the conferences. We are especially grateful for grants from the Swiss National Science Foundation and from the European Community that allowed extended financial support to a number of participants. We warmly acknowledge additional sponsorship from The Japanese Foundation for Promotion of Materials Science and from many companies that financed a large part of the Conference activities. We are thankful also to the EPFL—the Swiss Federal Institute of Technology in Lausanne—for a generous contribution of additional financial help. Finally, we are most grateful to all our colleagues and guests at the Ceramics Laboratory, EPFL, who were ever so helpful and ready to invest much of their time before and during the conference: the success of the Conference was wholly due to them.

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