

Journal of Electroceramics 4:S1, 5, 1999 © 2000 Kluwer Academic Publishers, Boston. Manufactured in The Netherlands.

## **Guest Editorial**

This special issue of the *Journal of Electro-ceramics* contains the collected papers of the "Workshop on Functional Interface in Ceramic Materials (Frontier Ceramics)" This workshop was held at the Auditorium of AIST, Tsukuba, Japan, during March 13–14, 1997. It mainly addressed fruits of a project on Frontier Ceramics (Froc project), promoted by the Science and Technology Agency of Japan.

The key objective of Froc is to provide an improved understanding of boundaries or interfaces. The approach to be taken is to develop improved means for tailoring ceramic interfaces through control of structure and composition by use of novel processing techniques and thereby to achieve desired properties. Following a feasibility study in 1994, Froc was initiated and organized on a five-year basis in 1995 and the chair of the Froc is Dr. Yanagida, head of the Japan Fine Ceramics Center. The detail of the Froc is described in this issue.

This workshop gave an excellent opportunity to present and discuss the latest fruits in the field of the interface in ceramic materials. Frontiers of materials are interfaces including surfaces. The topical areas, especially relating to electrically active ceramic interfaces, were as follows; ferroelectric, dielectric and piezoelectric materials, varistor, thermistors and chemical sensor materials, optical and photosensitive ceramics, magnetic materials, electrode materials, solid state electrochemical cells, gas separation membranes, theoretical calculations related to the above materials and phenomena. During the meeting six oral lectures were presented, i.e., two invited lectures by Professor Brook, Oxford University and Professor Tuller, MIT and four keynote lectures and 35 poster presentations were contributed. Seventeen collected contributions are contained in this issue.

I wish to express my appreciation to the members of the Promoting Committee of the Froc. It is my pleasure to acknowledge the support of the Science and Technology Agency of Japan for this meeting.

N. Ichinose Waseda University