

## PREFACE

The International Symposium on Advanced Ceramics (ISAC'90) was organised by the Indian Ceramic Society as part of its 54th Annual Session and was held at the Bhabha Atomic Research Centre, Bombay during November 26-28, 1990. The highlights of ISAC'90 were:

- o Advanced Engineering Ceramics - fabrication, characterisation, property evaluation, standardisation, application and market of high performance ceramics and composites based on alumina, partially stabilized zirconia, silicon carbide, silicon nitride, boron carbide, titanium carbide etc.
- o Nuclear Ceramics - fabrication, property evaluation and performance of ceramic nuclear fuels and fixation and immobilisation of highly radioactive nuclear wastes with glass, ceramics and Synroc.

The Proceedings contain 32 invited papers contributed by eminent experts from USA, UK, USSR, Germany, France, Italy, Hungary, Japan, Australia and India on advanced engineering and nuclear ceramics in the following 6 chapters:

- Application & Market
- Review
- Synthesis and Processing
- Microstructure, Thermal Analysis, Mechanical properties & NDT
- Standardisation and Certification
- Nuclear Fuels and Radioactive Waste Fixation

On behalf of the organizers of ISAC'90, we wish to acknowledge the kind support extended by the Indian National Science Academy (INSA), Department of Atomic Energy (DAE), India and Australian International Development Assistance Bureau (AIDAB) for arranging the visit of invited speakers from UK, Germany and Australia respectively. We thank Dr. R. Chidambaram, Director, Bhabha Atomic Research Centre (BARC) and the staff members of BARC, Bombay for the all round infrastructural support provided in hosting ISAC'90. We sincerely thank the authors for their valuable contribution.

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