

Symposium 13: Engineering Ceramics: Processing and Characterization

Engineering ceramics offer unique combinations of properties that have the potential to fulfill the demanding material needs in structural and functional applications, such as components in aerospace, automotive, energy, manufacturing, environmental, and microelectronics industries. Globally, significant progress has been made in the material development and manufacturing technologies pertaining to these materials. However, challenges remain with regard to increasing the extent of penetration of these materials into the marketplace. The successful entry of engineering ceramics into the marketplace strongly depends on the consistent development of materials with improved properties, thus providing solutions for application conditions with special requirements. The purpose of this symposium is to provide a broader forum to scientists and engineers from around the world to present and discuss their recent advances and developments in the areas of processing, characterization, and applications of engineering ceramics.

<PROPOSED SESSION TOPICS>

- Innovative Processing Routes and Synthesis Methods
- Sintering and Microstructure Control
- Mechanical Properties
- Thermal Properties
- Electrical and Optical Properties
- Corrosion and Oxidation Behavior
- Reliability and lifetime prediction and modelling
- Applications

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<INVITED LECTURES>

Tentative invited lecture information is posted in the following URL;
http://www.ceramic.or.jp/pacrim13/list_of_invited_speakers.html#13