

Symposium 32: Crystalline Materials for Electrical, Optical and Medical Applications

This session will provide a forum for the presentation and discussion of recent research and development activities on crystalline materials. The session will cover all aspects, from basic research and material characterization, through physicochemical aspects of growth, synthesis and deposition techniques, to the technological development of industrialized materials. For this purpose, world-wide experts in the different topics will be invited to introduce their most recent activities. The broad scope of the session assures a wide overview of the state-of-the-art issues on crystalline materials, aiming to stimulate interdisciplinary discussions and collaborations in a wide range of fields. Session topics include, semiconductors, optical and scintillation materials, pieze/ferro-electric materials, transparent material, and fundamentals such as phase diagrams and defect chemistry, crystalline quality.

<PROPOSED SESSION TOPICS>

- Semiconductors for LED/LD, power device, sensor
- Optical materials for laser, nonlinear optics, optical isolator, phosphor
- Scintillators for X-, gamma- and neutron detection
- Piezo-, ferro- and magneto-electric materials
- Transparent ceramics and nanocrystals
- Phase diagrams, defect chemistry, crystalline quality

<ORGANIZERS>

Kiyoshi Shimamura, National Institute for Materials Science, Japan, email: SHIMAMURA.Kiyoshi@nims.go.jp

Noboru Ichinose, Waseda University, Japan

Nerine J. Cherepy, Lawrence Livermore National Laboratory, USA

Victoria Blair, U.S. Army Research Laboratory, USA

Yoshihiko Imanaka, Fujitsu Laboratories Ltd., Japan

Joanna McKittrick, University of California San Diego, USA

Takayuki Yanagida, Nara Institute of Science and Technology, Japan

Yiquan Wu, Alfred University, USA

Inka Manek-Honninger, Bordeaux University, France

<INVITED LECTURES>

Tentative invited lecture information is posted in the following URL;

http://www.ceramic.or.jp/pacrim13/list_of_invited_speakers.html#32