

S5-2 “Green Materials” and Green Processing for a Sustainable Society

SHORT DESCRIPTION:

"This session delves into the critical role of ""Green Materials"" and ""Green Processing"" techniques in fostering a sustainable society. We'll explore ideas for designing "Green Materials"—sustainable, non-toxic, recyclable, and often renewable resource-based—to minimize ecological impact at each stage, from their materials to disposal. Concurrently, we will examine "Green Processing", focusing on manufacturing methods that conserve resources, reduce waste, and minimize energy consumption during material synthesis and product fabrication. These approaches are vital for lessening environmental footprints, promoting energy efficiency, and reducing waste.

Achieving these goals necessitates interdisciplinary collaboration among scientists, engineers, and policymakers. This session welcomes submissions and participation from experts, researchers, and industry stakeholders to exchange insights on innovative advancements in ""Green Materials"" and ""Green Processing"" for a sustainable society, particularly through the application of ""advanced ceramics"" and ""ceramic composites"".

SESSION TOPICS:

- ☐ Functional and structural ceramics
- ☐ Advanced ceramic composites
- ☐ Miniaturization and nanomaterials
- ☐ Biocompatible materials and medical ceramics
- ☐ Recyclable ceramics and natural materials"
- ☐ Energy-efficient manufacturing
- ☐ Laser and plasma processing
- ☐ Green chemistry and catalysis
- ☐ Renewable energy applications
- ☐ Life cycle assessment for materials"

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SYMPOSIUM AWARD INFORMATION:

Our symposium (S5-2) offers the "Outstanding Presentation Award for Young Researchers". Students and

researchers who are 36 years of age or younger (as of September 6, 2026)* and who indicate their intention to apply at the time of abstract submission are eligible for this award. Applicants must be the first authors and the presenting authors of their abstracts. The selection will be made by the symposium organizers from the abstracts accepted for oral and poster presentations. The Platinum, Gold, and Silver Award recipients will be selected from the eligible candidates and will be presented with their certificates on the final day of the symposium.