

EUROMAT 2021

EUROPEAN CONGRESS AND EXHIBITION
ON ADVANCED MATERIALS AND PROCESSES

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12. - 16. SEPTEMBER 2021

GRAZ, AUSTRIA

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Area A

Symposium A10

Title - Flexible functional composite materials		
Organizer	Institution	Contact email
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Abstract		
<p>Scope: Structure, properties and potential applications of composite materials in flexible devices</p> <p>Description: Composites are being proposed and designed to address limitations found in traditional materials in advanced applications, while offering an opportunity to reduce environmental and cost impacts. The full control of structure and composition of composites to tailor the physical-chemical and functional properties have been under active research for potential application to electronics, sensors, energy, environmental, healthcare and information devices. This symposium will provide a unique platform to facilitate the sharing of the recent advances and the challenges in technological development of flexible functional composite materials and their applications.</p> <p>The following topics will be included:</p> <p>Sub-topics</p> <ul style="list-style-type: none">• Bio and green (nano)composites• Bio-inspired design of composites• Carbon- and ceramic-based flexible composites• Polymeric/porous/cellular composite materials• Design, characterization and application of flexible composites• Multifunctional (dielectric, ferroelectric, piezoelectric, magnetic and thermoelectric) composites• Durability and ageing of composite materials and structures• Functionally graded composite materials and structures• Industrial applications of composite materials• Multiscale modeling in composites• Processing and manufacturing technologies• Recycling and sustainability of composite materials• Smart flexible composites		

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