

# EUROMAT 2019 / Area A

## SYMPOSIUM: A8

Title: Advanced Materials for Aerospace		
Organizer	Institution	Contact email
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<b>Abstract</b>		
<p>The science of flight and Space explorations continues to open new challenging scenarios for humanity. The development of new and enhanced materials plays an important role into design and building of new aircrafts with ever higher performances (e.g. for suborbital flights), spacecrafts for interplanetary missions, structures for new satellites and constellation. Materials used in aerospace structures are subjected to high thermal and mechanical loads in harsh environment for long times. These materials have to combine unique functional properties and incomparable reliability in comparison with traditional materials. They have to be light, stiff, strong, damage tolerant and durable also in extreme environmental conditions. In this scenario, evolutionary and revolutionary advances in material technology are on-going for next generation of aerospace vehicles and structures. The symposium aims to bring together materials scientists, engineers, researchers and students to present the most up-to-date research results on innovative materials and manufacturing processes in the aerospace field.</p> <p>The topics include, but are not limited to:</p> <ul style="list-style-type: none"><li>✓ Advanced structural materials for Aerospace</li><li>✓ Advanced materials for Space vehicles and structures</li><li>✓ Functional and Smart materials for Space environment</li><li>✓ Advanced materials for human protection</li><li>✓ High performance materials for Space exploration</li><li>✓ Performance issues with aerospace materials</li><li>✓ Design, production and properties of advanced materials and parts for Aerospace.</li></ul>		