

## **Symposium Title: Mechanics of Cellular Solids and Sandwich Structures**

The aim of the "Mechanics of Cellular Solids and Sandwich Structures" mini-symposium is to recognize the increasing interest in development and application of cellular solids and sandwich panels. Cellular solids provide new opportunities for development of novel multifunctional structures and have found broad range of applications in various industries ranging from aerospace and car industry to tissue engineering and regenerative medicine. Sandwich panels with low density core constructions are being used in development of lightweight structures and threat-resistant systems. This mini-symposium will bring together engineers and scientists working in these area and provide a unique platform for scientific discussions and exchanging ideas.

Topics of interest include (but are not limited to) the following:

- Novel multifunctional cellular structures
- Ultra lightweight composite sandwich panels
- Computation-assisted design optimization of sandwich panels
- Experimental techniques for measurement of cellular structures response
- Constitutive modeling and homogenization methods
- Impact mechanics of cellular solids and sandwich panels
- Cellular solids and sandwich panels under environmental conditions
- Development of new protective structures
- Dynamic buckling and post-buckling analysis of cellular structures under impact
- Failure mechanisms of sandwich structures under quasi-static and blast loading
- New approaches in dynamic failure simulations of sandwich panels

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