

## **Structural Design Through Computational And Optimization Methods**

Scientific area: Scientific Computing

The possibility of implementing automated design methodologies has drawn the attention of several industries, promoting further research in fields related to optimization and computational science, among others.

The symposium here proposed will focus on research related to the development of novel design methodologies based on computational methods and optimization strategies, as well as their application to case studies of industrial relevance. Topics and case studies of interest include, but are not limited to, experimental and numerical research related to:

- 1) Advanced materials and structures;
- 2) Materials with extreme properties (meta-materials);
- 3) Multi-functionality and multi-stability;
- 4) Topology optimization;
- 5) Artificial intelligence.

### **Organizers:**

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