

Fatigue of additive manufacturing metals

1. Symposium title

FATIGUE OF ADDITIVE MANUFACTURING METALS

2. Organizers, including affiliations

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4. Short description of the symposium including the scope and target public

Metallic additive manufacturing (AM) processes are being intensively developed and investigated because they are opening new possibilities for the design and fabrication of complex mechanical components in industrial sectors such as aerospace, biomedical, energy production, motorsports, among others. The fatigue behaviour of AM metals and components is attracting a lot of attention from both the research community and industry because the specific features of the AM materials and the disruptive design freedom granted by the AM process require a reassessment of the existing knowledge based on conventional materials and processes. Standard testing procedures and behavioural models need to be re-assessed and adapted to AM metals. The present symposium intends to engage researchers in a technical discussion aimed at establishing the current understanding of the fatigue behaviour of AM metals and identifying future trends. The participants of this thematic symposium will also benefit from interactions with ICMFM XIX, which is a well-established and focused colloquium on metal fatigue.