

Session description

Chairpersons

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names: Affiliation:

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Title of the session: Kinetic and thermal deposition for additive manufacturing and coating

Objectives:

This special session is planned to cover the latest advancements in the field of additive manufacturing (AM) of structural components, focusing not only on technologies that are based on thermal energy and material fusion but also those inducing bonding by means of kinetic energy and plastic deformation. The multidisciplinary subject requires considering the effects of process parameters, material response, surface characteristics as well as microstructural aspects and geometrical features. Applications range from aerospace and automotive to building and biomedical sectors. The aim of this session is to provide an international forum that brings together academic and industrial contributors to exchange ideas on recent innovations and developments of various AM technologies and to discuss the future opportunities and applications. Contributions covering either experimental studies or numerical developments are welcome. In particular, the subjects include but are not limited to:

- * Cold spray additive manufacturing (CS-AM)
- * Laser powder bed additive manufacturing (LPB-AM)
- * Post-processing technologies for additive manufacturing
- * Cold spray coating
- * Repair and geometrical restorations
- * Related applications