

EUROMAT 2021

EUROPEAN CONGRESS AND EXHIBITION
ON ADVANCED MATERIALS AND PROCESSES

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12. - 16. SEPTEMBER 2021

GRAZ, AUSTRIA

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THE AUSTRIAN SOCIETY FOR
METALLURGY AND MATERIALS

FEMS 30
FEDERATION OF EUROPEAN
MATERIALS SOCIETIES
1987 - 2017
www.FEMS.org

Area C

Symposium C. 12

Title: Joining		
Organizer	Institution	Contact email
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Abstract

This symposium considers all kind of research in the field of similar and dissimilar joining and welding techniques. Conventional, advanced and new processes as well as hybrid processes are of interest. Process development & simulation, microstructure, properties and performance of the weld/joint and the thermo-mechanically affected zone shall be covered for all kind of materials.

Considered processes and topics include, but are not limited to, the following:

- welding techniques and phenomena
- post weld heat treatment
- mechanical joining
- brazing and soldering
- ceramic joining
- plastic joining
- nanomaterials in joining
- physical properties controlling joining (wetting, diffusion, dissolution)
- microstructure and properties
- residual stresses and distortion
- modeling of welding and joining
- ecological and economical aspects of joining

Contributions to this symposium are supposed to be published in the Journal of Materials Engineering and Performance after peer review.

