

FEMS EUROMAT 23

03 - 07 Sep 2023 (Frankfurt am Main)

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FEMS EUROMAT is the most important international congress in materials science and technology in Europe. It continues a successful congress series promoting the transfer of knowledge and the exchange of experience between academia and industry. **Extended submission deadline: 15 March 2023**

Area C: Processing

C04: Advances in Metal Powder Technologies

Metal powder technologies allow the production of an increasing number of materials providing advantages such as: unique microstructures and efficient microstructural control, cost reduction and increased productivity, procurement of complex shapes, etc. Furthermore, the efficiency in energy and material consumption positions this technology as a sustainable manufacturing route.

This symposium will cover the latest advances in powder production and consolidation technologies, as well as the progress in processing different groups of materials and the opportunities and challenges in metal powder processing. The topics considered include (but are not limited to):

- Green and Energy Efficient Processing
- Tailored and unique microstructures developed by PM
- Advances in Powder production and conditioning
- Mechanical Alloying and High Energy Milling.
- Shaping of porous materials
- Shaping of complex micro- and nanostructures
- Sintering and Liquid Phase sintering
- Sintering-based AM techniques: advances in powder production, conditioning, consolidation, and characterization
- Non-conventional and fast sintering techniques (SPS, Flash sintering, microwaves sintering, etc.)
- Mechanical characterization
- Modeling, Simulation, and Digitalization strategies
- Secondary and Finishing Operations

Selected contributions will be invited to publish in a Special Issue of the journals "Powder Metallurgy" or "European Journal of Materials".

Symposium Organizer



Prof. Dr.-Ing. Thomas Weißgärber
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