

Session Program

26-28 Sept 2022

**Metal Additive Manufacturing Conference -
MAMC 2022**

***Laser Melting, Electron Beam Melting &
Direct Energy Deposition Processes***

TU Graz
Inffeldgasse 25d 8010 Graz

Tuesday 27 September

10:00

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

Session | **Location:** Room i3 | **Convener:** Marco Mitterlehner

10:00–10:20

Microstructural design of self-lubricating metals for forming processes and aerospace applications using laser metal deposition (invited)

Speaker

Dr Manel Rodriguez Ripoll

10:20–10:40

Printing and repair of AA7xxx components with a novel Al composition using Laser Metal Deposition

Speaker

Norberto Jimenez Mena

10:40–11:00

Investigations of Plasma Metal Deposition (PMD) of 6061 and 7075 aluminum alloys for aerospace and automotive applications

Speaker

Christopher Wallis

11:00

13:00

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

Session | **Location:** Room i3 | **Convener:** Manel Rodriguez Ripoll

13:00–13:20

Rapid material multiparameter optimization for small scale series productions in PBF-LB/M

Speaker

Lasse Haahr-Lillevang

13:20–13:40

Laser powder bed fusion of Ni-rich NiTi by in situ alloying: an exploratory study on the printing of defect-free parts

Speaker

Rafael Paiotti Marcondes Guimaraes

13:40–14:00

Influence of laser power and scan speed on the formation of hot cracks during the processing of high-speed steel HS2-2-2 by laser powder bed fusion

Speaker

Tim Gerrit Lücke

14:00–14:20

Microstructure and texture development during printing of Fe-Ni alloy on a ductile cast iron substrate by Wire and Arc Additive Manufacturing

14:20

Speaker
Mahdi Mahmoudiniya

Wednesday 28 September

09:30

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

Session | **Location:** Room i3 | **Convener:** Alexander Aigner

09:30–09:50

High Temperature Tensile Strength of Ti6Al4V Processed by L-PBF - Influence of Microstructure and Heat Treatment

Speaker

Benjamin Meier

09:50–10:10

Effects of layer thickness and laser energy input on the solution annealing behavior of a laser powder bed fusion processed 316L stainless steel

Speaker

Dr Kamran Saeidi

10:10–10:30

Novel process approach for additive manufacturing using inductive wire melting by forced droplet detachment

Speaker

Jonas Kimme

10:30

11:00

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

Session | **Location:** Room i3 | **Convener:** Rudolf Gradinger

11:00–11:20

Effect of minor alloying additions on the stress-rupture properties of a modified Hastelloy X fabricated by additive manufacturing

Speaker

Kamran Saeidi

11:20–11:40

Surface refinement of additively manufactured components: microstructure and mechanical properties

Speaker

Agata Kulig

11:40–12:00

Electron Beam Based Additive Manufacturing of Highly Alloyed Tool Steels and Tungsten Carbide Metal Matrix Composites: - From Research to Industrialization -

Speaker

Dr Markus Ramsperger

12:00–12:20

Wire-based electron beam additive manufacturing of Ni-rich NiTi Shape Memory Alloy

12:20

Speaker

Rafael Paiotti Marcondes Guimaraes