

Session Program

17-19 Oct 2023

Metal Additive Manufacturing Conference - MAMC 2023

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

WKO Vienna
Wiedner Hauptstraße 63, 1040 Vienna, Austria

Wednesday 18 October

14:00

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

Session | **Location:** WKO, 1. Julius Raab Saal | **Convener:** Herbert Danninger

14:00–14:20

Quality improvement of additively manufactured Ti64-samples by addition of Boron.

Speaker

Richard Görgl

14:20–14:40

Processing of metallic materials by laser powder bed fusion at elevated temperatures

Speaker

Mr Martin Malý

14:40–15:00

Effect of extensive preheating on hot cracking susceptibility of gamma' - strengthened Ni-based superalloy processed by Laser powder bed fusion

Speaker

Maurizio Vedani

15:00–15:20

L-PBF of the metastable beta Titanium Alloy Ti-5553: Microstructure and mechanical properties

Speaker

Benjamin Meier

15:20–15:40

Numerical modeling of distortions and residual stresses during wire arc additive manufacturing of an Al-5083 alloy with weaving deposition

Speaker

Mr Hugo Drexler

15:40

16:40

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

Session | **Location:** WKO, 1. Julius Raab Saal | **Convener:** Nader Asnafi

16:40–17:00

Wire based DED processes for large scale industrial applications

Speaker

Dr Rainer Beccard

17:00–17:20

Experimental investigation of the Interfacial Properties of Hybrid Aluminium Alloys Manufactured using Wire-DED Plasma Arc Process

Speaker

Mr Ziad Mohamed

17:20–17:40

Bidirectional Thermo-Capillary-Gravity Modeling for Analyzing the Wire-Based Directed Energy Deposition

Speaker

Alireza Mosalman Haghighi

17:40–18:00

Harnessing Advanced Laser Beam Shaping to Enhance the Laser Powder Bed Fusion Process

Speaker

Dr Hossein Ghasemi

18:00

Thursday 19 October

10:30

Laser Melting, Electron Beam Melting & Direct Energy Deposition Processes

Session | **Location:** WKO, 1. Julius Raab Saal | **Convener:** Raphael Tiefnig

10:30–10:50

Microstructure of deposited AISI M4 high speed steel on AISI D2 tool steel substrate using L-DED process

Speaker

Dr Mário Boccalini Júnior

10:50–11:10

Aluminium Wire and Arc Additive Manufacturing for the aerospace sector

Speaker

Eloise Eimer

11:10–11:30

Real-time Modelling and ML Data Training for Digital Twinning of Additive Manufacturing Processes

Speaker

Dr Amir Horr

11:30