



# MLZ User Meeting 2024

## Thursday 5 December 2024

### Material Science: MS I (13:00 - 14:30)

time	[id] title	presenter
13:00	Welcome by Science Group	
13:05	[142] Utilizing in-situ characterization techniques to probe the heat treatment response and micromechanical performance of LPBF processed and heat-treated Ti-6Al-4V	VANMEENSEL, Kim
13:40	[16] Influence of hydrogen on the $\gamma$ -matrix lattice parameters of a Ni-based superalloy - a diffraction study	Dr MUTSCHKE, Alexander
14:05	[65] Macroscopic and microscopic residual stresses in nickel-aluminum bronze matrix composite surface deposits manufactured via laser melt injection	WALZ, Erik

### Material Science: MS II (15:00 - 16:40)

time	[id] title	presenter
15:00	[143] Investigating the ageing of multi-layer 5 Ah pouch cells with NCA cathodes and silicon anodes	PHAM, Thien An
15:25	[34] In-situ interface film forming on the high-voltage LiCoO <sub>2</sub> cathode by a tiny amount of nanoporous polymer additives	QI, Ruoxuan
15:50	[133] Targeted residual stress in electrical steel – Towards novel electric drives	NEUWIRTH, Tobias
16:15	[48] Perovskite Nanocrystal Nucleation Seeds for Improved Microstructure and Faster Crystallization in Organic-Inorganic Halide Perovskite Thin Films	Mr BUYAN-ARIVJIKH, Altantulga

### Material Science: MS III (17:10 - 18:00)

time	[id] title	presenter
17:10	[127] 3D Hydrogen mapping in oil-filled porous steel gears for self-lubrication	SEBOLD, Simon
17:35	[68] Alkaline and enzymatic hydrolysis of poly-(ethylene terephthalate) plastics: kinetics and mechanistic insights obtained through Neutron Reflectometry	MANGIAPIA, Gaetano