




January 28–29, 2025 in Aachen

LSE'25 – Laser Symposium Electromobility

Program Day 1 – January 28, 2025

- 8:00** **Check-in**
- 9:00** **Welcome**
Dr. Alexander Olowinsky, Fraunhofer ILT, Aachen (D)
- 9:15** **Lab tour**
Fraunhofer ILT, Aachen (D)
RWTH Aachen University – ISEA, Aachen (D)
- 11:00** **Coffee break**
- 11:30** **Murphy's Law for laser processing in EM applications**
Lars-Sören Ott, Reis Robotics GmbH & Co. KG, Würselen (D)
- 12:00** **Laser technologies for the energy transition: a funded ZIM innovation network to boost scalability and sustainability in production and recycling**
Dr. Hamza Messaoudi, Eura AG, Ellwangen (D)
- 12:30** **Laser meets synchrotron – next level of synchrotron experiments**
Christoph Spurk, RWTH Aachen University – LLT, Aachen (D)
- 13:00** **Lunch break** (Restaurant LuCa)
- 14:15** **VERSAPRINT – Improving the safety, performance, recyclability and CO₂ footprint of battery packs in automotive engineering**
Dr. Johanna Helm, FEV Europe GmbH, Aachen (D)
- 14:45** **Laser welding of mixed materials with TruFiber laser: single mode vs. brightline mode**
Alessia Riccio, TRUMPF Laser- und Systemtechnik SE, Ditzingen (D)
- 15:15** **Lifetime of Lithium-Ion batteries – fundamentals and perspectives**
Dr. Florian Ringbeck, RWTH Aachen University – ISEA, Aachen (D)
- 15:45** **Coffee break**
- 16:15** **Innovative copper solutions in cell connections of EV battery packs**
Tomas Jezdinsky, ICA – International Copper Association Europe, Woluwe-Saint-Pierre (B)
- 16:45** **High-speed laser welding of aluminum battery coolers using dynamic beam shaping**
Hannes Büttner, Civan Lasers Europe GmbH, Hannover (D)
- 17:15** **Résumé of the 1st day**
Dr. Alexander Olowinsky, Fraunhofer ILT, Aachen (D)
- 17:30** **Marketplace – Battery LAB with demonstrations, expert talks, and snacks**
DPP – Forschungscampus Digital Photonic Production Aachen (D)
- 22:00** **End of 1st day**



January 28–29, 2025 in Aachen

LSE'25 – Laser Symposium Electromobility

Program Day 2 – January 29, 2025

- 8:45** **Check-in**
- 9:05** **Application of laser technology in electrode production and cell assembly**
Dr. Michael Deutmeyer, EAS Batteries GmbH, Nordhausen (D)
- 9:35** **The future of Solid-State batteries: challenges and opportunities for laser technology**
Prof. Arnold Gillner, RWTH Aachen University – LLT, Aachen (D)
- 10:05** **Advancements in laser drying of Lithium-Ion battery electrode**
Delil Idris Demir, Fraunhofer ILT, Aachen (D)
- 10:35** **Coffee break**
- 11:05** **Safety and CE marking in laser-based battery production /
processing systems – overview and outlook**
Alexander Wille, CE-Kompetenz, Stolberg (D)
- 11:35** **Ramping up battery pack production – Requirements, challenges, and innovations**
Alexander Dörr, KION Battery Systems GmbH, Karlstein am Main (D)
- 12:05** **Fast compact scanners for e-Mobility applications with a focus on welding contacts
for cylindrical batteries**
Dr. Axel Luft, Scansonic MI GmbH, Berlin (D)
Uwe Bergmann, Bergmann & Steffen GmbH, Spenge (D)
- 12:35** **Lunch break** (Restaurant LuCa)
- 13:50** **Laser beam welding of aluminum-copper material combinations
for the 800V vehicle electrical system**
Benedikt Gerhards, LaVa-X GmbH, Herzogenrath (D)
- 14:20** **Detection and classification of welding faults with multi-spectral
sensor technology**
Dr. Sören Hollatz, 4D Photonics GmbH, Isenhagen (D)
- 14:50** **Smart welding – Using AI and deep learning to optimize
the welding of aluminum battery cases**
Julius Neuß, Fraunhofer ILT, Aachen (D)
- 15:20** **Panel discussion and outlook**
Dr. Alexander Olowinsky, Fraunhofer ILT, Aachen (D)
- 16:00** **End of Symposium**