

WORKSHOP
Innovative Product Development by Additive Manufacturing
September 24, 2024

PROGRAM

08.30	Registration
09.00	Welcome Prof. Dr.-Ing. R. Lachmayer, Leibniz Universität Hannover, IPeG Prof. Dr.-Ing. S. Kaierle, Laser Zentrum Hannover e.V.
09.15 – 10.35	Innovations in Processes and Materials Electrochemical metallization of stochastic polymer lattices for the production of bionic cell structures Marco Noack, TU Darmstadt Characterization of additive manufactured structures for the development of foam-replacement cushions using PBF/LB-P Carl Steinnagel, Leibniz University Hannover, IPeG Suitability study of the Lattice Boltzmann Method for simulating the additive manufacturing build process Maximilian Pohling, TU Dresden Heat and Surface Treatment of Copper Specimen Manufactured with a 532 nm Solid State Laser Moritz Schäfle, TU Darmstadt
10.35 – 11.05	Break
11.05 – 12.25	Geometry-dependent process strategy for support-free manufacturing of hydrogen swirl burner by laser-based powder bed fusion Jan-Philipp Wahl, Laser Zentrum Hannover e.V. Design of a wire nozzle unit for a coaxial deposition welding head to manufacture wire bridges Marvin Spengler, Hochschule Hannover Assessment of the suitability of printing vats with diffuser layers for additive manufacturing of optical surfaces Simon Teves, Leibniz University Hannover, IPeG From Design to Reality: The Role of CT Scanning in Verifying 3D Printed Objects Adrian de Riz, Royma Tech (Suzhou) Precision Co., Ltd
12.25 – 13.40	Lunch Break and Demonstration and tour in the LZH test field
13.40 – 15.00	Design Methods for Additive Manufacturing Comparative Design Catalogue for powder bed and wire arc Metal Additive Manufacturing Nadja Siller, TU Berlin

	<p>Investigation of the adhesion behavior of calcium phosphate cement depending on geometric parameters Martin Pendzik, TU Dresden</p> <p>Comprehensive Life Cycle Assessment for Powder Bed and Wire Arc Additive Manufacturing Based on Inventory Data Collection Rasool Okhovat, TU Berlin</p> <p>tba tba, Laser Zentrum Hannover e.V. / IPeG</p>
15.00 – 15.30	Break
15.30 – 16.50	<p>Additive manufacturing of components made from high-viscosity rubbers Sebastian Leineweber, Leibniz University Hannover, ITA</p> <p>Streamlining Endoscope Production: A Comparative Study of Additive Manufacturing Techniques Felix Weigand, Fraunhofer IAPT</p> <p>Evaluating Long-Term Performance of PLA and TPU Connecting Elements in Additive Manufacturing Markus Ehrlenbach, FH Kufstein</p> <p>Baker Hughes Additive Manufacturing – A roadmap to its industrialization Kevin Krueger, Baker Hughes GmbH</p>
16.50	Farwell