

Laser Symposium and ISAM 2023: Detailed Program (as of December 1, 2023)

THURSDAY November 30, 2023	
08:00	Registration GREAT HALL
(C.E.T.)	OPENING PLENARY: Emerging Technologies Chair: Christoph Leyens Fraunhofer IWS
09:00	Welcome and Opening Christoph Leyens Fraunhofer IWS
09:15	Plenary Talk: Laser as a secondary source Hagen Zimer TRUMPF SE + Co. KG
09:45	Plenary Talk: The ESA Advanced Manufacturing Initiative as Innovation Driver for the European Space Community Thomas Rohr European Space Agency (ESA)
	EXHIBITOR PITCHES
10:15	Laserline GmbH: Sustainable high power Laser applications Thomas Molitor
10:20	Asphericon GmbH: Democratization of Laser Technology Alex Ponomarew
10:25	Laservision GmbH & Co. KG GmbH: Active Laser Safety Window for NIR and blue Lasers Jürgen Palkoska
10:30	Fiber Bridge Photonics GmbH: High Power Fiber Arrays for Beam Shaping in Material Processing Thomas Theeg
10:35	Coffee Break & Exhibition
	GREAT HALL MARTA-FRAENKEL-SAAL
	LASER 1: Advanced Laser Sources Chair: Andreas Wetzig Fraunhofer IWS
	ISAM 1: Design and Simulation Chair: Frank Brückner Fraunhofer IWS
11:10	Superior Gas Lasers for Advanced Material Applications Stephan Falke Coherent
11:30	Development Trends for Fiber Lasers Jens Limpert Friedrich-Schiller-Universität Jena, Fraunhofer IOF
11:50	Potential for high power femtosecond lasers in battery production Rainer Kling ALPHANOV
12:10	Lunch Break & Exhibition
	LASER 2: Welding Chair: Axel Jahn Fraunhofer IWS
	ISAM 2: Trends in AM Chair: Christoph Wilsnack Fraunhofer IWS
13:20	Thermoplastic Composites in Aerospace – An Insight into Development of the Largest Full Thermoplastic Aircraft Structure in the World Alexei Vichniakov Airbus Operations GmbH
13:40	Laser Welding of Copper – Opportunities, Challenges and Fascinating Insights Andreas Heider Bosch GmbH
14:00	Ultra-short Pulsed Laser Welding: Glasses, Crystals and Metals Duncan P. Hand Heriot Watt University
14:20	Coffee Break & Exhibition
	LASER 3: Cutting Chair: Jan Hauptmann Fraunhofer IWS
	ISAM 3: Materials Chair: Martina Zimmermann Fraunhofer IWS
14:50	Under Water Laser Cutting Patrick Herwig Fraunhofer IWS
15:10	Advantages and Challenges of Sheet Metal Cutting with Increased Laser Power and Mixed Gas Andreas Lüdi Bystronic
15:30	Continuous Cutting of Airbag Fabric with Superposed Axes Systems Karsten Zenger HELD SYSTEMS GmbH
15:50	LOUNGE POSTER SESSION
	LASER 4: Process Monitoring & Control Chair: Christopher Taudt Fraunhofer IWS
	ISAM 4: Future Technologies and Processing Chair: Lukas Stepien Fraunhofer IWS
17:00	Spatial and Time-resolved Temperature Measurement and Control in Laser Material Processing Marko Seifert Fraunhofer IWS
17:20	Are you Measuring the Right Stuff? Roy Orbon Van Halteren Technologies Boxel BV
17:40	A Thermographic Inspection of Welds Using Surrounding Laser Excitation Lukáš Muzika University of West Bohemia
18:30 - 22:30	RECEPTION HALL NETWORKING SESSION Dinner Speech: "Laser Processing – An Evident Idea? And what's next?" Joost Dufloy KU Leuven

FRIDAY December 1, 2023	
08:30	Registration GREAT HALL
(C.E.T.)	JOINT PLENARY: New Frontiers in Material Processing Chair: Frank Brückner Fraunhofer IWS
09:00	Welcome Note Frank Brückner Fraunhofer IWS
09:05	Plenary Talk: Laser goes Hydrogen Christoph Leyens Fraunhofer IWS
09:35	Plenary Talk: Laser goes Battery Klaus Löffler Precitec GmbH
	EXHIBITOR PITCHES
10:05	ALOTec Dresden GmbH: Laser hardening and cladding systems by ALOTec Dresden Lukas Olawsky
10:10	COAXworks GmbH: Innovations for Laser Wire Deposition Sebastian Thieme
10:15	DIVE imaging systems GmbH: Comprehending the Invisible Wulf Grählerlert
10:20	TRUMPF Laser- und Systemtechnik GmbH : The Answer to your Manufacturing Needs Ralf Kimmel
10:25	Coffee Break & Exhibition
	GREAT HALL MARTA-FRAENKEL-SAAL
	LASER 5: Beam Shaping Chair: Dirk Dittrich Fraunhofer IWS
	ISAM 5: Digitalization Chair: Mirko Riede Fraunhofer IWS
11:00	Fast Beam Shaping through Coherent Beam Combining Karen Schwarzkopf Civan Lasers
11:20	Freeform Beam Shaping for Laser Material Processing Natalia Trela-McDonald PowerPhonic Ltd UK
11:40	Laser Beam Shaping and Melt Pool Thermal Flow Isabelle Choquet University West, Sweden
12:00	Lunch Break & Exhibition
	LASER 6: Micro Processing Chair: Andrés Lasagni Fraunhofer IWS
	ISAM 6: Surface Treatment in AM Chair: Anne-Katrin Leopold Fraunhofer IWS
13:00	Inspired by Nature, Powered by Laser: Advancements in Functional Surface Engineering Using Laser-based Biomimicry Tim Kunze Fusion Bionic GmbH
13:20	Flexible Production of Organic Photovoltaic Modules with Laser Systems – Productive Usage and Opportunities Irma Slowik Heliatek GmbH
13:40	Tackling Microprocessing Challenges with Beam Shaping Gwenn Pallier CAILABS
14:00	Short Break
	LASER 7: Cladding and Thermal Coating Chair: Marko Seifert Fraunhofer IWS
	ISAM 7: Business Cases and Industrialization Chair: Frank Brückner Fraunhofer IWS
14:10	External and Internal Laser Cladding of Tin Bronze for Sliding Bearings Hannes Freisse Kugler Bimetal SA
14:30	High-Speed Laser Cladding in Brake Disc Coating: Technical and Production Aspects Hossein Najafi Oerlikon Metco AG
14:50	Latest Developments in Cladding and Additive Manufacturing with Diode Lasers Sörn Ocylok Laserline GmbH
15:10	Coffee Break & Exhibition
	GREAT HALL
	CLOSING PLENARY Chair: Christoph Leyens Fraunhofer IWS
15:40	Plenary Talk: Laser-driven Inertial Confinement Fusion – Technology and Potential Constantin Häfner Fraunhofer ILT
16:10	Best Poster Award Concluding Remarks Christoph Leyens Fraunhofer IWS
16:30	End of the Conference