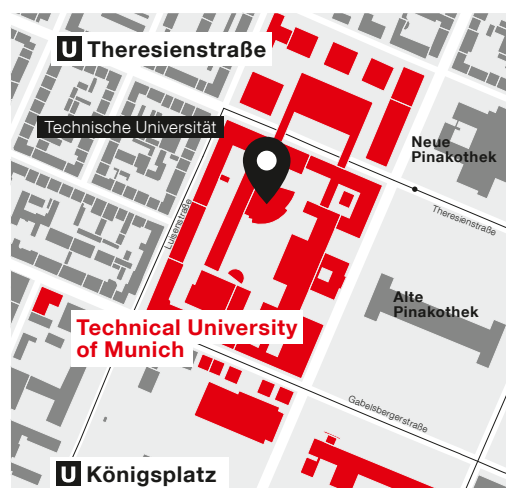


Speakers

With top speakers from specific markets, academia and politics.

 Prof. Dr.-Ing. Nikolaus A. Adams TU Munich Professor	 Hanan Gothait XJet Founder	 Raphael Lienau LMT Fette Werkzeugtechnik Development Engineer & R&D Project Head thread rolling systems	 Prof. Dr.-Ing. Axel Stepken TUV SÜD CEO
 Dr.-Ing. Christian Bruch Linde Member of the Executive Board	 Volker Hammes BASF 3D Printing Solutions Managing Director	 Florian Mauerer Oerlikon Group Head of BU Additive Manufacturing	 Prof. Dr. Michael Süß Oerlikon Group Chairman of the Board of Directors
 Gero Corman Volkswagen Group Digitalization Head of 3D-Printing/Additive Manufacturing	 Maximilian Hauk BMW Group Vice President Production Pilot Plant	 Dr. Jan M. Mrosik Siemens CEO Division Digital Factory	 Dr. Charles Tomonto Johnson & Johnson Engineering Fellow, Material Characterization Lead, 3D Printing Center of Excellence
 Dr. Melinda Crane Journalist and Moderator	 Dr.-Ing. Gereon W. Heinemann SLM Solutions Group Chief Technology Officer	 Dr. Naomi Murray Stryker Orthopaedics Director Advanced Operations	 Lars Wagner MTU Aero Engines Chief Operating Officer
 Prof. Dr.-Ing. Welf-Guntram Drossel Fraunhofer IWU Head of Institute	 Prof. Dr. Wolfgang A. Herrmann TU Munich President	 Jason Oliver GE Additive President & CEO	 Dr. Tim Weber HP GM of Metal 3D Printing
 Dr. John Dunkley Atomising Systems Chairman	 Frank Herzog Concept Laser Chairman & CEO	 Dr. Jérôme Rascol Airbus Head of the Additive Layer Manufacturing Platform	 Prof. Dr. Konrad Wegener ETH Zurich Professor
 Dr. Thomas Fehn General Manager Sales, Marketing & Finance for TRUMPF Additive Manufacturing	 Vyomesh Joshi 3D Systems CEO & President	 Ralph Resnick America Makes Founding Director NCDMM President and Executive Director	 Univ.-Prof. Dr. Dr. h.c. mult. Horst Wildemann TCW Managing Director
 Dr.-Ing. Roland Fischer Oerlikon Group CEO	 David Joyce Vice Chair, GE, and President & CEO, GE Aviation	 José Enrique Román Boeing Managing Director Boeing Research and Technology Europe	 Mathias Wolpiansky Realizer Managing Director
 Ric Fulop Desktop Metal CEO and Co-founder	 Dr. Hans J. Langer EOS Group CEO & Chairman	 Prof. Dr.-Ing. Johannes H. Schleifenbaum RWTH Aachen Professor	 Dr. Xu Xiaoshu Farsoon Technologies Founder & CEO






Location



Contact

Technical University of Munich
Audimax, Arcisstr. 21
80333 Munich, Germany

Get there by public transportation

-  Train: München Hauptbahnhof (+U2)
-  Underground (U2): Theresienstraße
-  Tram (27/28): Pinakothek
-  Bus (100): Technische Universität
-  There are limited, paid parking options in Theresienstraße and Luisenstraße.



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Additive Manufacturing Driving Industrialization



Strength in partnerships: AM requires collaboration

Additive manufacturing (AM) is a cutting-edge technology that has already changed the manufacturing landscape and is increasingly important in industrial production processes. However, AM's potential can be utilized only through the pooling of knowledge and exchanging of ideas.

Oerlikon used its years of experience in advanced materials, technology integration and expertise in AM materials and processes to kick off the Munich Technology Conference (MTC) one year ago. As a platform for the entire AM ecosystem, the MTC enables scientists, manufacturers and governments to discuss the ongoing integration of AM technology into production across various sectors.

The first MTC was a great success. It helped us to attract world-leading industry partners such as GE, Linde, Siemens and TÜV SÜD. Furthermore, we will be supported by the Technical University Munich (TUM) and Bayern Innovativ. In line with our slogan "Industrialize AM", we will work together on transferring additive manufacturing to industrial settings. The second day of the conference will, largely for this reason, feature nine workshops that encourage specialists to discuss various topics.

We and our partners look forward to seeing you and learning how we can accelerate the industrialization together!

Prof. Dr. Michael Süß
Chairman of the Board of Directors,
Oerlikon Group

Top-Level Participants

C-Suite Executives, Academics, State Officials

Conference Workshops

2 Days
30+ Speakers

600+ Visitors

oerlikon



bayern innovativ

SIEMENS
Ingenuity for life





Photo credit: Oerlikon



Prof. Dr. Wolfgang A. Herrmann,
President of the Technical University of Munich

“Additive manufacturing is revolutionizing production technology at all levels – from the construction industry to medical technology. As a result, German engineering has secured international appeal.”

TUM workshop, AM4.0: IoT, smart data management and AI as accelerators for industrializing Additive Manufacturing, October 11

GE Additive



Jason Oliver, President & CEO, GE Additive

Additive continues to exceed expectations. April 2018 marked the third anniversary of FAA certification of GE Aviation’s first additively manufactured part. Around a quarter of the components on GE Catalyst turbo-prop engines are now 3D-printed. By combining 855 parts to just 12, we have been able to reduce engine

weight by 5% and fuel burn by 20%. The new GE9X engine also incorporates additively manufactured turbine blades and fuel nozzles. Fuel nozzles are highly complex parts that are the size of a walnut. Here, additive has helped us reduce the number of components from 20 to 1. We currently manufacture around 600 nozzles a week.

GE Additive workshop, Hardware: printers, powder and people, October 11



Photo credit: GE Additive

Bayern Innovativ



Dr. Matthias Konrad,
Member of the Executive Board, Bayern Innovativ GmbH, Nuremberg

Bavaria has established itself as a leading location for innovation in additive manufacturing (AM). In fact, AM is a key topic in the Bavarian state government’s Masterplan Bayern Digital II, and the Bavarian State Ministry of Economic Affairs is funding collaborative research into AM industrialization. Bayern Innovativ, a think tank and innovation facilitator, is fostering technology cooperations and applica-

tions in the field of AM. With the Additive Manufacturing Coordination Centre, Bayern Innovativ serves as a central point of contact for all parties involved in 3D printing. The Additive Manufacturing Coordination Centre gives Bavaria’s AM companies, institutes and newcomers access to technology partners and to network and cluster initiatives that facilitate collaboration and maximize visibility. Platforms such as the MTC further support our engagement at the forefront of AM trends and developments.

Bayern Innovativ workshop, How to facilitate the entry of SMEs and newcomers into Additive Manufacturing?, October 11



Photo credit: Bayern Innovativ

Linde

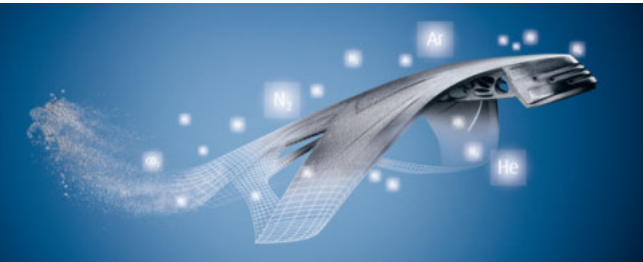


Photo credit: Linde



Pierre Forêt, GDC Coordinator Additive Manufacturing, Linde Gas

Atmospheric gases play an important role in AM core printing and pre- and post-production processes. Impurities can remain within a closed chamber even when filled with high purity inert gases, and extremely small variations in oxygen content can still impair the end product’s mechanical properties or chemical composition. Linde is developing solutions such as

ADDvance® O₂ precision, which gives manufacturers more reproducible printing conditions and continuous oxygen level analysis and control. As we continue to create gas-based solutions that help our AM customers overcome the challenges they face, we are also exploring ways to integrate AM into production of our traditional product lines. For example, we are testing our first AM-printed LINDOFLAMM® burners, and we have printed a new CARBOTHAN® heat treatment lance, whose integrated sensors measure key parameters to enable predictive maintenance.

Linde workshop, Industrialization of the AM value chain through gas-enabled innovation, October 11

Oerlikon



Florian Mauerer,
Head of BU Additive Manufacturing, Oerlikon Group

In our eyes, regular advances in AM are paving a key path to the future. AM customers in various sectors are already leveraging our excellence in materials science, component design and process expertise. In partnership with top-notch companies such as GE, Boeing, Lufthansa Technik and RUAG, we are continuing to develop the entire AM value-added chain, research new materials such as metal

powder alloys, create additional large-scale opportunities for AM and drive forward AM research and development. If AM is to revolutionize industrial production, a new mindset is needed that enables a closer examination of existing approaches and creates new markets. We are convinced that the full potential of AM will be realized only if specialists, businesses and sector representatives work closely together. By harnessing precisely this spirit of collaboration, the MTC in Munich will provide a platform for decision-making scientists, manufacturers and researchers to exchange ideas and identify the next steps on the way to industrializing AM.



Photo credit: Oerlikon AM

Oerlikon workshop, AM as a service – building an integrated AM supply chain, October 11

Oerlikon workshop, Advances in materials for Additive Manufacturing, October 11

Siemens

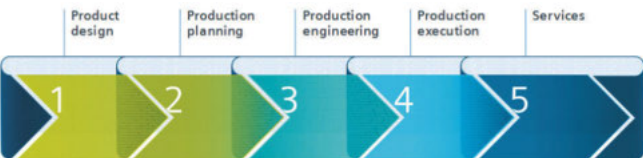


Photo credit: Siemens



Dr. Karsten Heuser, VP of Additive Manufacturing, Siemens Digital Factory

Prototyping and first-use cases tend to capture the spotlight in AM — at Siemens, we are focusing on seamlessly integrating the process and data chains to master the shift to mainstream industrial production. One notable example: demonstrating the value of our Digital Enterprise with end-to-end software, automation and digitalization solutions yielded the reduction of 13 parts to a single, printed component in the production of hot gas burner fronts in Finspång. As a result, production lead time fell from 26 weeks to just 3. We also achieved a 22% weight reduction. This is just one illustration of how AM augments traditional technologies to reimagine products, reinvent manufacturing and rethink business models. With our Siemens AM network, we are building a collaboration platform designed to digitalize global knowledge and capabilities of an industrial AM ecosystem.

Siemens workshop, Exploring the key questions to shape the future of our shared AM eco-system to speed up the industrialization, October 11

TÜV SÜD



Photo credit: TÜV SÜD



Gregor Reischle, Head of Additive Manufacturing, TÜV SÜD

To achieve repeatable, consistently satisfactory quality in performance, AM industrial solutions require clearly defined, properly implemented manufacturing standards and a commitment to compliance. TÜV SÜD is contributing to AM’s commercialization and readiness for industrial-grade manufacturing purpose by collaborating with global players on these standards.

Our training programs prepare individuals and corporations to gain certifications recognized in their sectors and implement state-of-the-art AM know-how and skills. Through certification, companies can qualify suppliers in accordance with standardized criteria and suppliers can achieve a market differentiator. This is a natural extension of TÜV SÜD’s focus on making technical innovations such as Industry 4.0, autonomous driving and renewable energy safe and reliable. We look forward to meeting the market’s requirements for testing, inspection and certification services and in that manner to support the manufacturing readiness level of the entire AM industry.

TÜV SÜD workshop, The roadmap to a solid and AM-compatible business model, October 11