

Level 0 **Central Stage** Exhibition Area

10:30 AM **Opening and Welcome**

Panel Discussion - Key Technologies for the Future of Manufacturing

1:00 PM - 2:00 PM
Chair: **Dr. Rainer Seßner**
CEO, Bayern Innovativ GmbH

- Dr. Hans J. Langer**, CEO, EOS GmbH
- Prof. Dr. Sonja Zillner**
Senior Key Expert, Corporate Technology, Siemens AG
- Prof. Dr. Jens Grubert**
Fakultät Elektrotechnik und Informatik, Hochschule Coburg

Public Funding Opportunities for Bavaria

2:30 PM - 4:30 PM
Chair: **Michael Holland-Moritz**
Bayern Innovativ GmbH

- 2:30 PM **Innovationservices – IMP³rove**
Michael Holland-Moritz, Enterprise Europe Network
- 2:45 PM **Zentrale Anlaufstelle für Technologieförderung – der Projektträger Bayern**
Dr. Urs Bernhard, Projektträger Bayern
- 3:00 PM **Bayerische Forschungsstiftung – das Förderangebot**
Dagmar Williams, Bayerische Forschungsstiftung
- 3:15 PM **Bavarian Research Alliance and Enterprise Europe Network, Support for funding on EU-Projects**
Dr. Panteleimon Panagiotou
Bayerische Forschungsallianz
- 3:30 PM **Neue Werkstoffe und Patentschutz**
Dr. Tobia Mancabelli, Bayerische Patentallianz
- 3:45 PM **Programm Neue Werkstoffe in Bayern**
Dr. Carsten Wadewitz, Projektträger Jülich
- 4:00 PM **Das Zentrale Innovationsprogramm Mittelstand (ZIM) des BMWi – Innovationsförderung für KMU**
André Glück, AiF Projekt GmbH
- 4:15 PM **Kompetenzzentrum Usability startet in Bayern – Erfolgsfaktor für Innovation und Zukunft der Arbeit**
Dr. Katharina Zeiner & Anne Elisabeth Krüger
Mittelstand 4.0-Kompetenzzentrum Usability

Tech2you
4:30 PM - 6:00 PM

- 4:30 PM **Technologies from a Space R&D Centre**
Joseph Bernier
Centre Spatial Liège, Université de Liège
- 4:40 PM **Additive4Industrie: Partnersuche für F&E-Projekte**
Rüdiger Busch
Cluster Mechatronik & Automation e.V.
- 4:50 PM **Bringing Materials Sourcing into the Digital Age**
Richard Huber, Matmatch GmbH
- 5:00 PM **Die Zukunft der Mobilität braucht die besten Materialien**
Hannah Dettmer, imat uve GmbH
- 5:10 PM **Plasma-assisted surface modifications from nanopowders to 3D complex parts**
Dr. Julien Amadou, ICS, Université de Namur
- 5:20 PM **3D Thermal simulation in Additive Manufacturing processes with microstructure validation**
Jérôme Tchoufang Tchouindjang, Université de Liège

Level 2 **Amsterdam**

The New Machine Age

11:00 AM - 12:30 PM
Chair: **Dr. Blanka Lenczowski**
Senior Expert Materials Technology, Airbus Group

- 11:00 AM **Artificial Intelligence in Industry**
Prof. Dr. Sonja Zillner
Senior Key Expert, Corporate Technology, Research and Development for Digitalization and Automation, Siemens AG
- 11:25 AM **Machine learning for material testing**
Mario Dib
Data Scientist Consultant/Unit Manager, Ancud IT GmbH
- 11:50 AM **FutureCRAFT 4D - Innovation for Creators**
Dr. Christopher Holmes
Director Materials Engineering FUTURE Team, adidas AG

Advanced energy materials
2:30 PM - 4:00 PM
Chair: **Dr. Robert Bartl**
Bayern Innovativ GmbH

- 2:30 PM **Technical photosynthesis, employing single step direct electrocatalytic reduction of CO₂ toward CO and hydrocarbons**
Günter Schmid
Principal Key Expert Research Scientist, Corporate Technology, Siemens AG
- 2:55 PM **A fully automated platform for materials research - accelerating materials innovation**
Dr. Tobias Stubhan
Gruppenleiter Erneuerbare Energien, ZAE Bayern
- 3:20 PM **Schwungradspeicher – alter Hut oder innovative Technologie für die Energiewende?**
Achim Hobl
Bilfinger Noell GmbH

Level 2 **Side Events**

Mix'n'Match Zürich
2:30 PM - 3:30 PM

Meet material experts from Wallonia, Belgium during the speed dating:
Dr. Julien Amadou, ICS/LARN, Université Namur **Jérôme Tchoufang Tchouindjang**, MMS Université Liège **Joseph Bernier**, Centre Spatial Liège -ULiège
Dr. Nathalie Gerlach, Haute Ecole de la Province de Liège
Dr. Hervé Brequel, Centre Terre & Pierre CTP
Dr. Ahmed Rassili, CRM Group
Fabrizio Maseri, Materia Nova
Thomas Godfroid, Materia Nova
Dr. Dinh Nguyen, Multitel
Jacques Halleux, Sirris

B2B Partnering Lounge
2:30 PM - 6:00 PM

Level 2 **London**

Materials for New Mobility Concepts

11:00 AM - 12:30 PM
Chair: **Prof. Dr. Rudolf Stauber**
Fraunhofer ISC, Projektgruppe IWKS

- 11:00 AM **Lightweight solutions for the next generation of mobility – Novel polymer based materials and processing concepts**
Dr. Thomas Neumeyer
Leiter Geschäftsbereich Kunststoffe, Neue Materialien Bayreuth GmbH
- 11:25 AM **Surface solutions for future mobility**
Marten Wermers
Market Development Manager Coatings/Future Mobility Innovations, Merck KGaA
- 11:50 AM **Industrialized Joining of Hybrid Materials**
Dr. Frank Breitenbach
EDAG Production Solutions GmbH & Co. KG

Level 2 **London**

Workshop: Materials for reliable energy supply

4:00 PM - 6:00 PM
Chair: **Dr. Marcus Rauch**
Bayern Innovativ GmbH
Simon Reichenwallner,
ENERGIEregion Nürnberg e.V.

- Overview on materials for the energy transition**
Dr. Alexander Buchele
Managing Director, Energie Campus Nürnberg

The objective of the workshop is to identify materials and applications in a renewable energy system. Participants generate ideas for novel applications of energy materials and address specific questions regarding the energy transition. The ideas will be recorded in an idea profiling board available to all participants.

Level 0 **Side Events** Exhibition Area

Exhibition „Material World“
10:00 AM - 6:00 PM

Poster Session
4:00 PM - 5:30 PM

Level 0 **Evening Event**

6:00 PM Networking, drinks & snacks

7:00 PM Die Physikanten – a thrilling and amusing science show

Level 2 **Dublin**

Future Energy Generation

11:00 AM - 12:30 PM
Chair: **Dr. Bastian Devrient**
Manager of Corrosion Laboratory, Framatome GmbH

- 11:00 AM **Chancen für Unternehmen durch die disruptiven Veränderungen im Energiesektor**
Andreas Engelhardt
Leitung Vertrieb, M. Münch Elektrotechnik GmbH Co. KG
- 11:25 AM **Nuclear Fusion Materials – Innovative technologies and possible spin-off applications**
Dr. Michael Rieth
Leiter Metallische Werkstoffe, KIT-Institut für Angewandte Materialien
- 11:50 AM **Supraleitende Magnetsysteme – Kernstück in der Forschung und Impulsgeber für industrielle Anwendungen**
Dr. Ronald Hepper
Managing Director, Engineering & Technologies, Bilfinger Noell GmbH

Level 2 **Dublin**

Workshop: Future of Hybrid Materials

2:30 PM - 4:30 PM
Chair: **Tanja Flügel**
Bayern Innovativ GmbH
Dr. Thomas Müller-Lenhardt
Head R&D, Gubesch Group

- Hybrid Structures - The Big Picture**
Michael Begert
Innovationsmanager, EDAG Engineering GmbH

In this workshop participants will discuss with the partners of the EU project FlexHyJoin what kind of future applications and products can be realized with hybrid materials and how to overcome existing challenges.



Level 0 **Central Stage** Exhibition Area

Startup-Battle
10:00 AM - 12:00 PM
Chair: Sebastian Engel
ZOLLHOF TechIncubator, Nürnberg

10:00 AM **Introduction to the Startup-Battle**
Sebastian Engel
ZOLLHOF TechIncubator, Nürnberg

10:15 AM **Investing in Startups – Success Factors and Conditions**
Dr. Georg Ried, Geschäftsführer, Bayern Kapital GmbH

10:30 AM **Investing in Startups – viewpoints from a strategic investor**
Dr. Mathias Glasmacher
Head of Corporate Technology, Diehl Stiftung & Co. KG

10:45 AM **Visualisierung von Simulations- und Messergebnissen durch Augmented Reality**
Dr. Michael Lechner
CEO & Founder, HOLOneering GmbH

Supplementing carbon sources with residues
Dr. Friedrich Streffer
CTO, LXP Group GmbH

Connect the human worker to the IIoT
Matthias Kirchner, Industrie Designer, ProGlove

Parking Pilot - Die Lösung für die Parkplatzsuche
Lukas Marx, Vertrieb, Smart City System GmbH

Neue Wertschöpfung für Bauteile und Ersatzteile durch additive Fertigungsmethoden (3D-Druck) in Metall und Reverse Engineering
Dr. Roman Lengsdorf
Abteilungsleiter Additive Fertigung, JP3DTecVision GmbH

11:15 AM **Voting for the best Startup idea at MatX**

11:30 AM **Interview with Dr. Georg Ried and Dr. Mathias Glasmacher**

Tech2you
1:00 PM - 3:00 PM

1:00 PM **Innovative Recycling of Rare-Earth Permanent Magnets**
Karsten Rachut, Fraunhofer-Projektgruppe IWKS

1:10 PM **3D Printing with carbon and ceramic powders for industrial applications**
Dr Arash Rashidi, SGL Carbon GmbH

1:20 PM **Advanced Steels for Building and Energy Solutions**
Dr Ahmed Rassili, CRM Group

1:30 PM **Ion beam implantation ... Small objects for great effects**
Fabrizio Maseri, Materia Nova

1:40 PM **Innovative product solutions at Sirris**
Jacques Halleux, Sirris

1:50 PM **Silver nanowires – conductive and transparent functionalization**
Dr. Oliver Zech
Leiter Geschäftsfeld ECOS®, RAS AG

2:00 PM **Flexible Production Cell for Hybrid Joining – FlexHyJoin**
Dr. Martina Hümbert & Nora Feiden
Institut für Verbundwerkstoffe GmbH (IVW)

Level 0 **Side Events**

Exhibition „Material World“
9:00 AM - 5:00 PM

Poster Session
12:30 PM - 2:00 PM

Level 2 **Amsterdam**

Renewable resources for future materials
11:00 AM - 12:30 PM
Chair: Dr. Tobias Schwarzmüller
Bayern Innovativ GmbH

11:00 AM **Renewable resources for novel materials**
Michael Carus
Managing Director, nova-Institut GmbH

11:25 AM **Sustainability trends in polymer science - CO₂- and bio-based materials**
Dr. Gerhard Langstein
Head of New Technologies, Covestro AG

11:50 AM **Evolution of wood utilization: From pulp and paper to fuels, composites and chemicals**
Dr. Okko Ringena
Senior Manager Sales & Marketing, UPM Biochemicals

Circular Economy and Novel Recycling Concepts
1:30 PM - 3:00 PM
Chair: Alfred Mayr
Managing Director, UmweltCluster Bayern

1:30 PM **Exploitation of alternative resources by Urban Mining**
Dr. Gert Homm
Head Urban Mining,
Fraunhofer ISC/Projektgruppe IWKS

1:55 PM **Innovatives Recycling von Styrol-Kunststoffen**
Dr. Norbert Niessner
Director Global R&D/Intellectual Property,
INEOS Styrolution Group GmbH

2:20 PM **Web Based Composites – defining a new material class with high potential for recycled carbon fibers (rCF)**
Prof. Dr. Stefan Schlichter
Geschäftsführer, Institut für Textiltechnik Augsburg gGmbH

Human Machine Interface – Advances in Industry and R&D
3:30 PM - 5:00 PM
Chair: Dr. Thomas Sowa
VDI Verein Deutscher Ingenieure e.V.

3:30 PM **Einsatz von Exoskeletten in der Automobilfertigung**
Damir Bajrami, BMW Group

3:55 PM **Materials and Technologies in the XoSoft project, a soft exoskeleton to assist people with mobility impairments**
Massimo Totaro, PhD
Center for Micro-BioRobotics, Istituto Italiano di Tecnologia

4:20 PM **Digitale Informationsplattform für effiziente Mensch-Maschine Interaktionen**
Daniel Grobe, CEO, Sicony GmbH

Level 2 **Side Events**

B2B Partnering
9:00 AM - 5:00 PM Lounge

Level 2 **London**

Additive Manufacturing
9:00 AM - 10:30 AM
Chair: Dr. Heinz Neubert
Corporate Technology, Research In Energy and Electronics, Materials Design & Manufacturing Technologies, Siemens AG

9:00 AM **Additive Fertigung – Fertigungstechnologie von heute oder der Zukunft**
Prof. Dr. Dietmar Drummer
Lehrstuhl für Kunststofftechnik,
FAU Erlangen-Nürnberg

9:25 AM **Accelerating 3D metal printing by integrated additive manufacturing with MetalFAB1**
Harry Kleijnen
Manager Process & Application Development,
Additive Industries B.V., Netherlands

9:50 AM **3D Printing Materials & Applications with HP Multi-Jet Fusion 3D**
Bastian Weimer
3D Printing Channel Manager, HP Deutschland GmbH

Level 2 **London**

Workshop: 3D Printing – From Data to Products and Business Models
11:00 AM - 1:00 PM
Chair: Dr. Andreas Leupold
Leupold Legal

Legal Issues of Additive Manufacturing
Dr. Andreas Leupold, Attorney, Leupold Legal

Business Models with Additive Manufacturing
Ingolf Brauner, CEO, CAVISSO Consulting GmbH & Co. KG

Cybersecurity and Additive Manufacturing
Markus Geier, CEO, ComCode GmbH

The workshop aims to increase awareness that the digitization of design and production is no longer just a topic of the future. Participants will discuss with the experts about: datafication, product liability in digital-production, cyber risks, 3D printing business models etc.

Additive Manufacturing in Every Day Life
3:30 PM - 5:00 PM
Chair: Harald Eibisch
Technologieentwicklung Gießen / Additive Fertigung, AUDI AG

3:30 PM **Just do it! Trends, use cases and an outlook in the future of industrial additive manufacturing**
Oliver Cynamon
Head of Business Development, FIT AG

3:55 PM **Individualisierung von Schreibutensilien – Umsetzung der Additiven Fertigung für schnelle und flexible Produktvarianten ab Losgröße 1**
Dr. Alexander Vyhnal
Head R&D, Staedtler Mars GmbH & Co. KG

4:20 PM **Eigenproduktion von Drohnen und Quadrocopter mittels 3D Druck für den Rettungseinsatz**
Thomas Griesbeck
Deputy Managing Director, Bergwacht Bayern

Level 2 **Dublin**

Future City - Construction Materials
10:00 AM - 11:30 AM
Chair: Caspar Freiherr von Weichs
Weichs Management Consultants

10:00 AM **Urban Living – Konzepte für die Stadt von morgen**
Prof. Kristien Ring
AA PROJECTS & University of South Florida,
School of Architecture & Community Design

10:25 AM **Perspektiven für energieeffiziente Gebäude – Chancen durch das Zusammenspiel von Material, Digitalisierung und Forschung**
Dr. Hans-Peter Ebert
Bereichsleiter Energieeffizienz, ZAE Bayern

10:50 AM **Wie Materialien und Entwicklungen aus unterschiedlichen Industrien zu einem neuen intelligenten Produkt führen am Beispiel des LightStone**
Alexander Haider, CEO LCT GmbH, Austria

Dublin

Workshop: Industrial Design for AM
1:30 PM - 3:30 PM
Chair: Dr. Marcus Rauch
Bayern Innovativ GmbH

Design 4.0
Christian Colceriu
Industrial Design, suma Film GmbH

Methodical solving of use cases with additive manufacturing
Harald Schmid, CEO, Gramm UG

Design for Additive – Insights and standardization activities
Christine Anstätt
Fraunhofer IGCV

With additive manufacturing, designers need to learn new design rules for product design. In this workshop participants will discuss with experts about mutual benefits of industrial design and AM, suitable combinations for materials and processes, and potential future applications.

Level 2 **Side Events**

Mix'n'Match
11:00 AM - 12:00 PM Zürich

Meet experts for additive manufacturing during the speed dating:

Harald Schmid, CEO, Gramm UG
Oliver Cynamon, Head of Business Development, FIT AG
Harry Kleijnen, Additive Industries B.V.
Dr. Georg Schlick, Head of Additive Manufacturing, Fraunhofer IGCV