

AMTC

Advanced Manufacturing Technology Conference

The most influential C-level event on Additive Manufacturing.

Program

October 12-14, 2021

Hybrid event - Virtual // Aachen, Germany

Program

Day 1 – October 12

17:00 CEST	Arrival	Registration of participants
17:30 CEST	Introduction	Dr. Melinda Crane & Sven Krause
17:45 CEST	Lessons learned from 2.000+ Startups in AM	Arno Held, AM Ventures
18:00 CEST	How to scale up a startup in the AM industry	Felix Ewald, DyeMansion
18:15 CEST	Our Exit – How to be successful in Planning and Execution	Frank Herzog, HZG Group Management GmbH & Co.KG
18:30 CEST	How disruptive technology platforms like additive manufacturing and AI will transform our industries	Frank Thelen, Freigeist
19:15 CEST	7 Startup-Pitches	
20:40 CEST	Formnext/Mesago Booth Drawing	
21:00 CEST	Networking & Startup Area	



Speakers Day 1 – Startup Night



Caroline Albert

nebumind GmbH

Co-Founder and CEO



Philipp Arnold

Additive Drives
Chief Financial Officer



Dr. Ali Forsyth

Alloy Enterprises
Co-Founder & CEO



Frank Herzog

HZG Group

Founding Partner



Sharvil Nanavati
Bralco Advanced Materials
Pte Ltd
Co-Founder & Director



Christian Staudigel
Headmade Materials
CEO



Andrey Alekseev

Spectroplast AG

Head of Sales & Marketing



Felix Ewald

DyeMansion
CEO & Co-Founder



Arno Held

AM Ventures

Managing Partner



Sven Krause Moderator



Thomas Roth
InnoSurge AC
Co-Founder & CEO



Frank Thelen
Freigeist
Founder/Investor/Author

Block A

09:00 - 10:00 CEST



WELCOME

Participants:

- Dr. Melinda Crane, Moderator
- Prof. Johannes Henrich Schleifenbaum, RWTH Aachen University, Professor and Director DAP RWTH, Managing Director ACAM
- Prof. Michael Süß, Oerlikon, Chairman
- Prof. Nikolaus A. Adams, TU Munich, Chair of Aerodynamics and Flow Mechanics Dean of the Faculty of Mechanical Engineering
- Armin Laschet, State chancellery of the state of North Rhine-Westphalia, Prime Minister North Rhine-Westphalia
- Achim Peltz, Siemens AG, CEO Motion Control

Block B

10:00-11:00 CEST



UPDATES & PRIORITIES: A STATUS QUO ANALYSIS OF

ADDITIVE MANUFACTURING

What has happened since MTC3? How did COVID-19 influence the speed of industrializing AM? This panel aims to clarify the current status of industrialization and to define the priorities for the next years.

Participants:

- Dr. Roland Fischer, Oerlikon, CEO
- Dr. Jochen Eickholt, Siemens Energy AG, Member of the Executive Board
- Dr. Markus Simon, McKinsey & Company, Inc., Partner of Advanced Electronics Practice
- Francisco Betti, World Economic Forum, Head of Advanced Manufacturing, ExCom Member
- Cindy Koh, Singapore Economic Development Board, Executive VP
- Jörg Spindler, Audi AG, Head of Manufacturing Engineering

Block C

11:00-11:45 CEST

ON-SITE

11:05-11:40 CEST

ONLINE/ ON-SITE

BREAK OR BREAKOUT SESSION

BREAKOUT SESSION 1

INTERNATIONAL COORDINATION OF AM INITIATIVES

Additive manufacturing is now an established production technology in several sectors. But to fully integrate it on a global level, international initiatives are needed. Who coordinates them? How should they be structured? What tasks are necessary? These questions will be discussed in this panel.

Moderator:

Sara Vermeulen-Anastasi, Oerlikon

Participants:

- Francisco Betti, World Economic Forum, Head of Advanced Manufacturing, ExCom Member
- Sherry Handel, Additive Manufacturer Green Trade Association, Inc., Executive Director
- Dr. Chaw Sing Ho, National Additive Manufacturing Innovation Cluster (NAMIC) Managing Director, Nanyang Technological University – NTUitive Pte Ltd
- Tom Kelly, Automation Alley, Executive Director and CEO

BREAKOUT SESSION 2

WORLD ECONOMIC FORUM: POSITION PAPER ON ADDITIVE MANUFACTURING

Experts from the World Economic Forum, ETH Zurich, the Fraunhofer Institute and selected industry experts have created a white paper on the industrialization of AM. It demonstrates how AM can economically and successfully be used in industry and when AM advantages, such as weight reduction and functional integration, come into play. The authors will present their exciting position paper in this session.

Participants:

- Prof. Mirko Meboldt, ETH Zurich, Chair of Product Dev. & Eng. Design
- Felipe Bezamat, World Economic Forum, Head of Advanced Manufacturing Industry
- Daniel Omidvarkarjan, Inspire AG & ETH Zurich, Research Associate
- Matthias Schmitt, Fraunhofer Institute for Casting, Composite and Processing Technology IGCV, Head of Fraunhofer Team – WEF position paper Group leader Additive Manufacturing

Block D

11:45 – 12:15 CEST ONLINE / ON-SITE **BLUEPRINT CASE AUDI:** ADDITIVE MANUFACTURING – ACTUAL SITUATION, USE CASES AND OUTLOOK

Participants:

- Martin Bock, Audi AG, Project lead of the metal 3d-printing-center
- Dr. Erhard Brandl, Audi AG, Head of the plastic 3d-printing-center

Block E

12:15-13:30 CEST

ON-SITE

12:30-13:15 CEST

ONLINE/ ON-SITE

LUNCH OR BREAKOUT SESSION

BREAKOUT SESSION 1

EDUCATING AM: HOW TO ENABLE ENGINEERS?

Educating new and established engineers is critical in industrializing AM. Four university professors from renowned universities discuss the question of how education systems need to change to build these required capabilities in engineers.

Moderator:

Sven Krause

Participants:

- Prof. Iskander Akhatov, Skolkovo Institute of Science and Technology, Director of the Center for Materials Technologies
- Prof. Johannes Henrich Schleifenbaum, RWTH Aachen University, Professor and Director DAP RWTH, Managing Director ACAM
- Prof. Anastasios John Hart, Massachusetts Institute of Technology, Professor of Mechanical Engineering
- Prof. Katrin Wudy, TU Munich, Professor for Laser-based Additive Manufacturing

BREAKOUT SESSION 2

NEW MATERIAL SOLUTIONS: OVERVIEW ON RECENT DEVELOPMENTS

One of AM's advantages is the ability to create complex components from a wide variety of materials with very specific properties. Leading experts will present the latest developments in the field of AM materials.

Moderator:

Dr. Kerstin Reinsch, Oerlikon

Participants:

- Mikkel Pedersen, Oerlikon, Head of R&D Additive Manufacturing
- Pierre Forêt, Linde, Director R&D Additive Manufacturing
- Prof. Patrik Hoffmann, Empa, Swiss Federal Laboratories for Materials Science and Technology, Head of Laboratory for Advanced Materials Processing

Block F

13:30-14:00 CEST



BLUEPRINT CASE SIEMENS: REPAIR TO IMPROVE:

AN INDUSTRIAL PART UPGRADE USE CASE FOR MORE SUSTAINABILITY

Participants:

- Dr. Markus Seibold, Siemens Energy AG, VP Additive Manufacturing
- **Dr. Karsten Heuser**, Siemens Digital Industries, VP Additive Manufacturing

Block G

14:00 – 14:30 CEST

ONLINE/ ON-SITE **BLUEPRINT CASE BOEING:** ADDITIVE MANUFACTURING IN AEROSPACE: OPPORTUNITIES AND CHALLENGES ON THE ROAD AHEAD. RECENT EXAMPLE & SUCCESS: SATELLITES

Participants:

- **Dr. Melissa Orme**, The Boeing Company, VP Boeing Additive Manufacturing, Engineering, Test & Technology
- Nicholas Mule, The Boeing Company, Director of the Boeing Additive Manufacturing Intelligence Center
- Richard Aston, The Boeing Company, Principal Senior, Technical Fellow

Block H

14:30-15:30 CEST

ON-SITE

14:40-15:20 CEST

ONLINE/ ON-SITE

BREAK OR BREAKOUT SESSION

BREAKOUT SESSION 1

INTERNATIONAL NORMS AND STANDARDS: WHAT'S MISSING?

Many experts state that missing standards affects the entire AM process and hinders the industrialization of AM. In this panel, we examine this claim from different perspectives. The question is: What standards are really missing in AM?

Moderator:

Dr. Zara Larsen, Oerlikon

Participants:

- Marc Lee, National Additive
 Manufacturing Innovation Cluster,
 Head IP & Commercialization
- Wee Hong Goh, TÜV SÜD PSB PTE Ltd, SVP, Product Service Asean
- Klas Boivie, SINTEF Manufacturing AS, Senior Research Scientist

BREAKOUT SESSION 2

INTERDISCIPLINARY SYSTEM SOLUTIONS: COLLABORATION AMONG THE VALUE CHAIN

Comprehensive interdisciplinary collaboration with end-to-end consideration of all work-flows in the AM process is needed to bring more AM products to market. Where are we today and what's next? This session will provide insights on this topic.

Moderator:

Sven Krause

Participants:

- Andreas Hartmann, Solukon Maschinenbau GmbH, Co-Founder, CEO/CTO
- Dr. Sven Hicken, Oerlikon, CTO
 Surface Solutions & Head of Business
 Unit Additive Manufacturing
- Dr. Vino Suntharakumaran, DMG Mori Additive GmbH, Managing Director
- Paolo Gennaro, GF Machining Solutions, Head of Additive Technologies
- Dr. Simon Merkt-Schippers, SLM Solutions Group AG, VP Product Management

Block I

15:30 – 16:30 CEST



REPRODUCIBILITY: SUCCESS FACTORS FOR SCALING UP

The reproducibility of components on different printers is one of the most important requirements for the successful industrialization of AM. This panel will address the current state, progress, and what needs to be accelerated in the future to achieve the goal of process stability.

Participants:

- Frank L. Blaimberger, TÜV SÜD, VP, Global Head of Advanced Manufacturing
- Dr. Mohsen Seifi, ASTM International, Director of Global Additive Manufacturing Programs
- René Kreissl, Trumpf GmbH + Co. KG, Head of Business Unit Additive Manufacturing
- Markus Glasser, EOS GmbH, SVP EMEA
- Christine Kandziora, Linde, Executive Director R&D Manufacturing Market Segments

Block J

16:30-17:30 CEST

ONLINE/ ON-SITE

AM 2030: AN INSPIRING LOOK INTO THE FUTURE

To end the day, we take a look at the future potential of AM. What are possible applications with additive manufacturing in 2030? Which new fields and markets will AM open up? Looking to the future is a motivational boost for the AM community.

Participants:

- Prof. Christian Seidel, University of Applied Science Munich, full Professor for Manufacturing Technologies and Additive Manufacturing, Fraunhofer Institute IGCV, Head of Additive Manufacturing
- **Jürgen Tiedje**, Directorate Prosperity in the Directorate General for Research and Innovation of the European Commission, Head of the "Industrial Transformation" Unit

Block K

17:30-17:45 CEST



SUMMARY AND CLOSING REMARKS

Dr. Roland Fischer, Oerlikon, CEO

Speakers Day 2



Prof. Nikolaus A. Adams
TU Munich
Chair of Aerodynamics and Flow
Mechanics Dean of the Faculty
of Mechanical Engineering



Richard Aston
The Boeing Company
Boeing Principal Senior Technical
Fellow



Felipe Bezamat

World Economic Forum

Head of Advanced Manufacturing
Industry at the World Economic Forum



Martin Bock

Audi AG

Project lead of the metal
3d-printing-center



Dr. Erhard Brandl

Audi AG

Head of the plastic 3d-printing-center



Dr. Jochen Eickholt
Siemens Energy AG
Member of the Executive Board



Pierre Forêt

Linde

Director R&D

Additive Manufacturing



Markus Glasser

EOS GmbH

SVP EMEA



Prof. A. John Hart

Massachusetts Institute of
Technology

Professor of Mechanical
Engineering, MIT



Prof. Iskander Sh. Akhatov Skolkovo Institute of Science and Technology Director of the Center for Materials Technologies



Francisco Betti
World Economic Forum
Head of Advanced Manufacturing,
ExCom Member



Frank L. Blaimberger

TÜV SÜD

VP, Global Head of Advanced

Manufacturing



Klas Boivie
SINTEF Manufacturing AS
Senior Research Scientist



Dr. Melinda Crane Moderator



Dr. Roland Fischer

Oerlikon

CEO



Paolo Gennaro

GF Machining Solutions

Head of Additive Technologies



Sherry Handel

AMGTA

Executive Director



Andreas Hartmann Solukon Maschinenbau GmbH Co-Founder, CEO/CTO

Speakers Day 2



Dr. Karsten Heuser Siemens Digital Industries VP Additive Manufacturing



Dr. Chaw Sing Ho
National Additive Manufacturing Innovation Cluster
Co-Founder and Managing
Director



Goh Wee Hong

TÜV SÜD PSB PTE Ltd

Product Service Asean



Tom Kelly

Automation Alley

Executive Director and CEO



René Kreissl

Trumpf GmbH + Co. KG

Head of Business Unit Additive

Manufacturing



State chancellery of the state of North Rhine-Westphalia Prime Minister North Rhine-Westphalia

Armin Laschet



Prof. Mirko Meboldt

ETH Zurich

Chair of Product Dev. & Eng.
Design



Nicholas Mulé
The Boeing Company
Director of the Boeing Additive
Manufacturing Intelligence Center



Dr. Melissa E. Orme
The Boeing Company
VP Boeing Additive Manufacturing,
Engineering, Test & Technology



Dr. Sven Hicken

Oerlikon
CTO Surface Solutions &
Head of Business Unit
Additive Manufacturing



Prof. Patrik Hoffmann
Empa, Swiss Federal
Laboratories for Materials
Science and Technology
Head of Laboratory for
Advanced Materials Processing



Christine Kandziora
Linde
Executive Director R&D –
Manufacturing Market Segments



Cindy Koh
Singapore Economic
Development Board
EVP



Dr. Zara Larsen

Oerlikon

Regional President Americas



Marc Lee
National Additive Manufacturing Innovation Cluster
Head IP & Commercialization



Dr. Simon Merkt-Schippers
SLM Solutions Group AG
VP Product Management



Daniel Omidvarkarjan

ETH Zürich

Research Associate at
Inspire AG and ETH Zurich



Mikkel Pedersen

Oerlikon

Head of R&D Additive

Manufacturing

Speakers Day 2



Achim Peltz
Siemens AG
CEO Motion Control



Prof. Johannes Henrich Schleifenbaum RWTH Aachen University Professor and Director DAP RWTH, Managing Director ACAM



Dr. Markus Seibold Siemens Energy AG VP Additive Manufacturing



Dr. Mohsen Seifi **ASTM International**Director of Global Additive

Manufacturing Programs



Joerg Spindler

Audi AG

Head of Manufacturing Engineering



Oerlikon Chairman

Prof. Michael Süß



Sara Vermeulen-Anastasi

Oerlikon

SVP, Head of Group Communications



Dr. Kerstin Reinsch

Oerlikon
Global Head of Marketing &
Communications of Business
Unit Additive Manufacturing

Matthias Schmitt

Prof. Christian Seidel



Fraunhofer Institute for Casting
Composite and Processing Technology
IGCV, Head of Fraunhofer Team – WEF
position paper Group leader Additive
Manufacturing



University of Applied Science Munich, Fraunhofer Institute IGCV full Professor for Manufacturing Technologies and Additive Manufacturing, Head of Additive Manufacturing



Dr. Markus Simon

McKinsey & Company, Inc.

Partner of Advanced Electronics

Practice



Dr. Vino Suntharakumaran

DMG Mori Additive GmbH

Managing Director



Juergen Tiedje

Directorate Prosperity in the Directorate
General for Research and Innovation of
the European Commission
Head of the "Industrial Transformation" Unit



Prof. Katrin Wudy

TU Munich

Professor for Laser-based

Additive Manufacturing

10:00 – 14:30 CEST ONLINE

WORKSHOPS

- **Trumpf:** Reproducibility in laser powder bed fusion process Status at TRUMPF, customer experience and requirements
- **TU Munich:** Simulation in Additive Manufacturing
- Oerlikon: Breaking performance barriers while balancing customized and standard processes
- **Siemens:** Empowering you to create, make and use additive applications at scale the 5 how's of industrial AM!
- **RWTH Aachen:** Sustainable Productivity in Additive Manufacturing















PLATINUM PARTNERS:

GOLD MEMBERS:

CONTENT PARTNERS:

SIEMENS









McKinsey & Company

SILVER SUPPORTERS:



























IN COLLABORATION WITH:

MEDIA PARTNERS:











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