AZL AACHEN
EXCELLENCE IN LIGHTWEIGHT PRODUCTION
PARTNERSHIP

# 7th AZL Annual Partner Meeting

LIGHTWEIGHT INNOVATIONS | NETWORKING |

UPDATE ON AZL ACTIVITIES | DISCUSSION OF FUTURE ACTIVITIES

24-25 JUNE 2020

Update on AZL Workgroups, Projects, Services
Speed Dating Presentations of Partner Companies
Keynote Presentations
Live Demos from AZL Tech Center

# Day 1 | June 24th, 2020

## Session 1: Workgroup Review

| | |
|---|---|
| 10:45 | Login |
| **11:00** | **Welcome**<br>Dr. Michael Emonts \| Dr. Kai Fischer |
| **11:05** | **Keynote \| Saudi Aramco**<br>Dr. Ihsan Al-Taie, Chief Technologist, Nonmetallic Applications Development R&D Division<br>*"R&T Towards Lowering the Cost of Carbon Fiber"* |
| **11:45** | **Update AZL Services – Your reliable Partner in Lightweight Production** |
| **12:00** | **Speed Dating (6 Presentations a 6 minutes)** |

- Huesker Synthetic GmbH, Philipp Zur-Lienen – "Multi-Material Design with W8SVR"
- Laserline GmbH, Michael Nagel – "Laserline Diode Lasers for High Speed Automated Tape Placement Processes"
- Conbility GmbH, Kamran Samaie – "Conbility – New Tape Placement Machine with Laser-assisted In-situ Consolidation"
- Inometa GmbH, Roman Woznitza – "Industrializing Thermoplastic Tape Winding - Contract Manufacturing at INOMETA"
- Airborne International, Marcus Kremers – "Fast, Robust and Easy manufacturing of of Thermoplastic Tailored Blanks"
- Polytec Plastics Germany GmbH & Co. KG, Stefan Szabo –"Innovative plastic solutions for a wealth of applications"

| | |
|---|---|
| **12:40** | **Update AZL activities: Workgroups (6x6min)** |

- Hybrid Thermoplastic Composites, Philipp Striet
- High-Performance SMC, Dr. Kai Fischer
- Composites in Pipes and Vessels, Martin Rieger

# Day 1 | June 24th, 2020

**12:40** **Update AZL activities: Workgroups (6x6min)**

- Advanced Thermoset Production, Hao Wang
- Composites in Buildings and Infrastructure, Philipp Wigger
- Product Cost Benchmarking – Joint Business Case Analysis, Markus Breiing

**13:30** Networking and Q&A via conference platform

## Session 2: Project Review

**14:30** **Update AZL Projects & Studies including Live-Demos from AZL Tech Center**

- Low-Cost and Energy-Efficient Double-Belt Press Follow-Up Project, Martin Rieger
- DPP Nano – Research Campus DPP, Philipp Striet
- Ultra-Fast Manufacturing of Tailored Composite Blanks Follow-Up Project, Alexander Peitz
- KMUsense 4.0, Markus Breiing
- Next Generation Mobility Solutions, Hao Wang

**15:35** **Speed Dating**

- ITA, Carsten Uthemann – "Customer-specific training and a new project on recycled carbon-fibre NCFs"
- Engel Austria GmbH, Gernot Schweizer – "Production cell for tailored composite blanks – Insights into the machine technology"
- IKV, Daniel Schneider – "Integrative Composite Production Technologies"
- Hengrui Corporation Limited, Dr. Timo Huber – "New Challenges and Opportunities in a Changing Industry"
- Fagor Arrasate S. Coop., Estibalitz Arregi – "Full automatic turnkey SMC production line"
- Elisa Deutschland GmbH, Felix Jordan – "Digital Twin in plant manufacturing"

**16:10** End of first day

# Day 2 | June 25th, 2020

## Session 3: Project & Partnership Outlook

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|---|---|
| 10:45 | Login |
| **11:00** | **Welcome**<br>Dr. Michael Emonts \| Dr. Kai Fischer |
| **11:05** | **Keynote \| ENGEL**<br>Dr. Norbert Müller, Head of Center for Lightweight Composite Technologies<br>*Productivity with thermoplastic Composites - a Key to Lightweight Technology of tomorrow* |
| **11:45** | **Outlook AZL projects and studies** |
| **12:30** | **Polling: Your input for the next year** |
| **12:35** | **Speed Dating** |

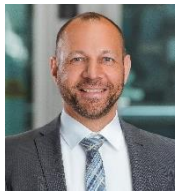
- Mitsui Chemicals Europe GmbH, Dr. Christos Karatzias – "Simulation approach for composite delamination prediction using UD tapes based on Carbon Fiber and Polypropylene (TAFNEX™)
- DSM Engineering Materials B.V., Dr. Giacomo Perfetti –" DSM UDea™ UD Glass & Carbon Fiber Reinforced UD Tapes"
- LG Technology Center Europe, Philipp Möller – "LG Hausys Thermoplastic UD Tape Materials and Advanced Engineering Know How"
- IPT, Patrick Scholz – "From Mask production to Mass Production of Composites"
- Econcore NV, Thomasz Czarnecki – "Thermoplastic honeycomb technology – a cost efficient enabler of performance and light-weighting"
- AZL Aachen GmbH, Philipp Fröhlig – "Development of a 3D-printed bycicle frame – result of creative collaboration in the AZL Partner Hub"

| | |
|---|---|
| **13:20** | **Open Discussion: AZL Partnership – Next year** |
| **13:45** | **Closing remarks and outlook** |
| **14:00** | End of meeting |

# AZL Annual Partner Meeting 2020 | Speaker

## AZL

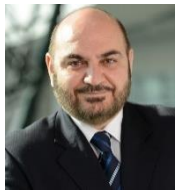
**Dr. Michael Emonts**
Managing Director of RWTH Aachen,
Managing Partner of AZL Aachen GmbH



**Dr. Kai Fischer**
Divisional Director of AZL of RWTH Aachen,
Managing Partner of AZL Aachen GmbH

**Philipp Fröhlig**
Senior Project Manager
AZL Aachen GmbH

## Keynote



**Dr. Ihsan Al-Taie**
Chief Technologist
Saudi Aramco

**Dr. Norbert Müller**
Head of Center for Lightweight Composite Technologies
ENGEL AUSTRIA GmbH

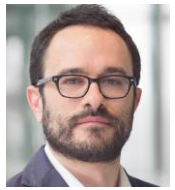
## Speed Dating

**Marcus Kremers**
CTO
Airborne International

**Philipp Fröhlig**
Senior Project Manager
AZL Aachen GmbH

**Kamran Samaie**
Software Engineer
Application Development Production
Conbility GmbH

**Dr. Giacomo Perfetti**
Application Development Engineer
Advanced Thermoplastic Composites
DSM



**Tomasz Czarnecki**
Chief Operating Officer
Econcore

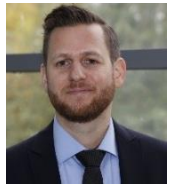
**Felix Jordan**
Business Development Manager
Elisa Deutschland GmbH

# AZL Annual Partner Meeting 2020 | Speaker

**Gernot Schweizer**
Development Engineer
ENGEL

**Arregi Estibalitz**
Business Unit Manager
Fagor Arrasate

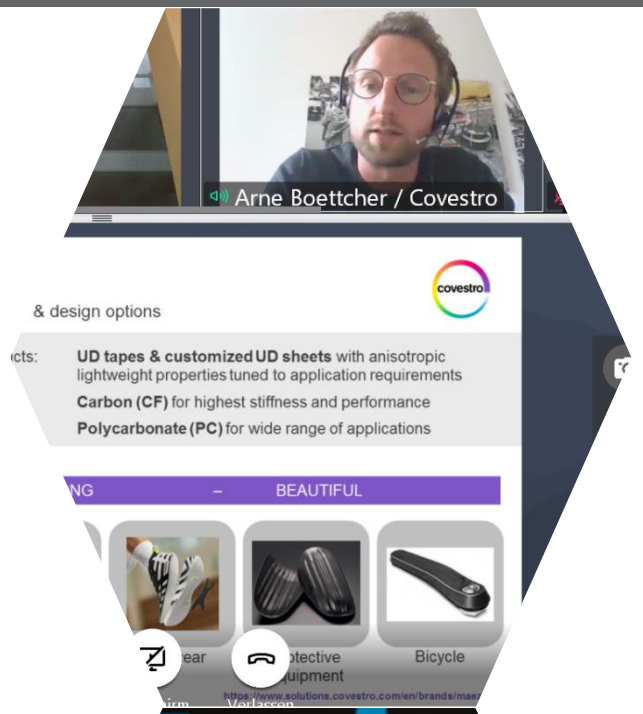
**Patrick Scholz**
Business Unit Manager Lightweight Construction Production Technology
Fraunhofer Institute for Production Technology IPT



**Dr. Timo Huber**
Vice President Advanced Composite Technology Center
ACTC
Hengrui Corporation Limited

**Roman Woznitza**
Account Manager
Inometa

**Philippp zur Lienen**
Head of Composite Engineering and Production
Huesker



**Carsten Uthemann**
Research Assistant
Institut für Textiltechnik of RWTH Aachen University

**Daniel Schneider**
Head of Department
Institute for Plastics Processing in Industry and Craft at RWTH Aachen University

**Michael Nagel**
Senior Key-Account-Manager Technical Sales
Laserline

**Philipp Möller**
Research Engineer | Production Technology & Components
LG Technology Center Europe

**Dr. Christos Karatzias**
Business Development Manager
Mitsui Chemicals Europe GmbH

**Stefan Szabo**
Head of Product Line New Mobility & Structural
POLYTEC PLASTICS Germany GmbH & Co. KG

# PARTNERSHIP TEAM

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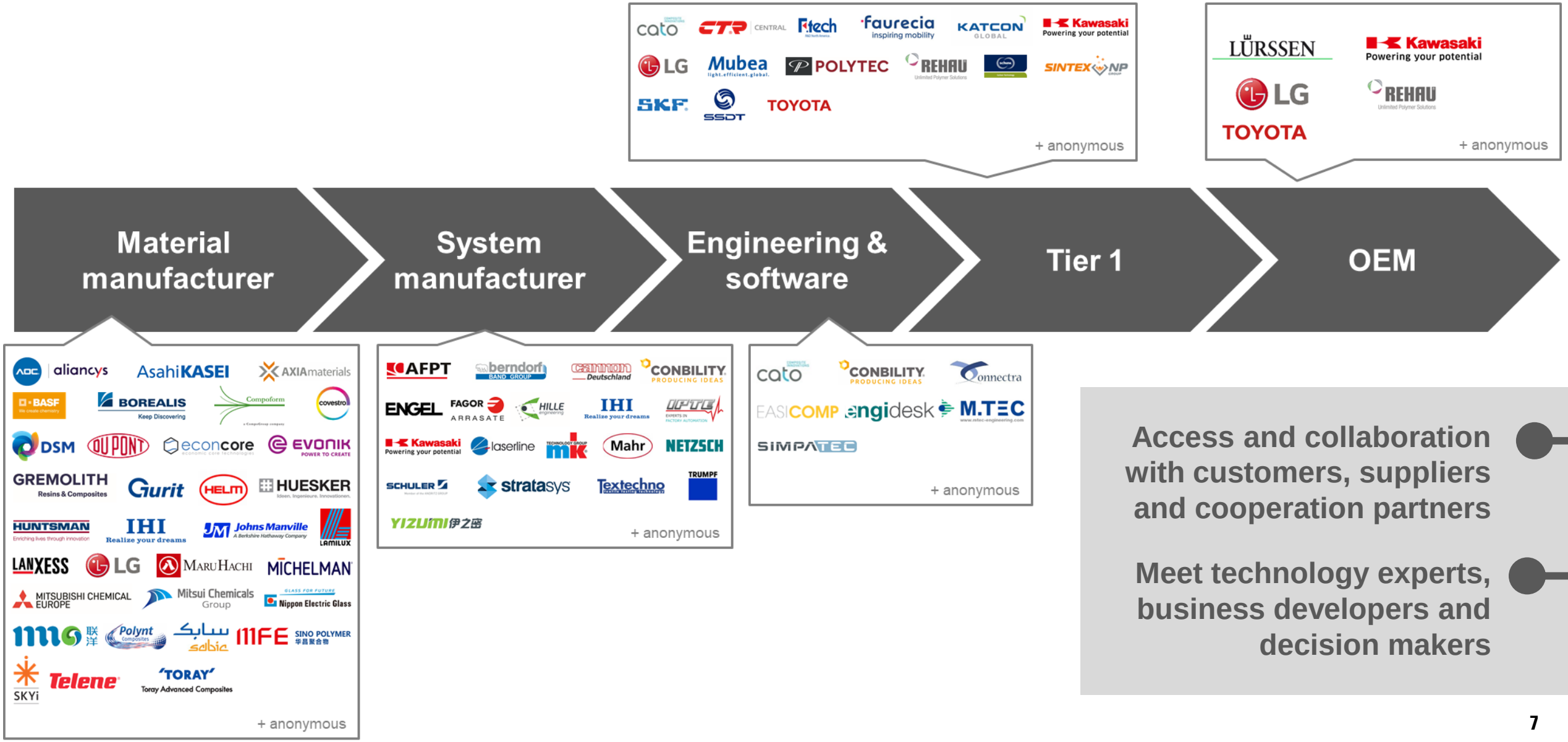
# AZL Cross-Industry Network

## Collaboration of 80+ companies along the entire value chain



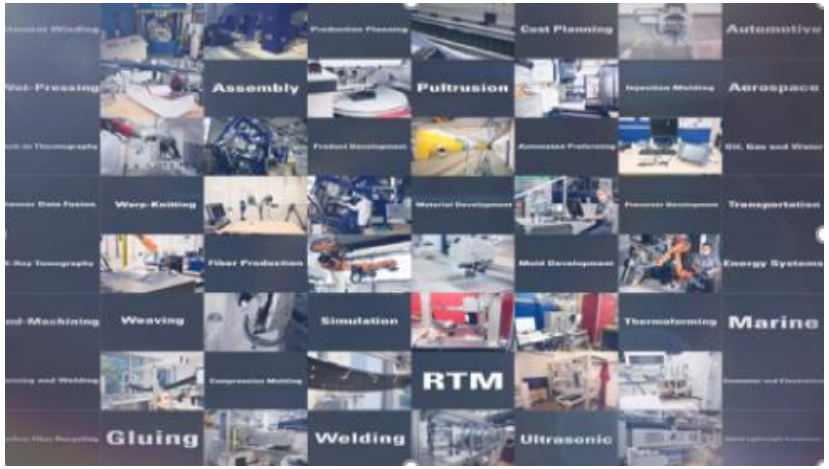

**Access and collaboration with customers, suppliers and cooperation partners**

**Meet technology experts, business developers and decision makers**

# Our 9 RWTH Partner Institutes

## From fiber to product: Research covering the entire lightweight value chain

- AZL Aachener Zentrum für integrativen Leichtbau | RWTH AACHEN UNIVERSITY — Process Chains for Hybrid Composite Materials
- INSTITUT FÜR KUNSTSTOFFVERARBEITUNG IN INDUSTRIE UND HANDWERK AN DER RWTH AACHEN — Plastics Material & Processing Technologies
- Fraunhofer IPT — Production Technologies
- WZL | RWTH AACHEN UNIVERSITY — Machine Tools and Measurement Technologies
- Fraunhofer ILT — Laser Technology
- ika | RWTH AACHEN UNIVERSITY — Automotive Science and Engineering
- ITA | RWTH AACHEN UNIVERSITY — Fiber & Textile Technology
- ISF | RWTH AACHEN UNIVERSITY — Bonding Technology
- Institut für Strukturmechanik und Leichtbau | RWTH AACHEN UNIVERSITY — Lightweight Design




**» Scan or click to watch the video:**
30+ technologies of the AZL partner institutes