

PRESS RELEASE

AZL Aachen GmbH

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3rd AZL Annual Partner Meeting: International lightweight network with now 70 AZL Companies defined next year's projects

Last week, 150 representatives of the AZL Partner Network including 18 new companies, who joined since the beginning of the year, met in Aachen to discuss the activities of the last 12 months and to define future joint projects such as a market and technology study addressing the Buildings and Infrastructure lightweight market.

Since its foundation, the AZL Network has grown steadily: Having started with 35 founding companies, the AZL today counts 70 AZL Partner Companies coming from 18 different countries, such as the USA, India, Japan, Korea, China, Mexico and several European countries. Representing the complete lightweight value chain, companies like 3M, Adam Opel, DSM, DuPont, ENGEL, Evonik, Faurecia, KraussMaffei Technologies, LG, Mitsubishi, Mitsui Chemicals, Mubea, Philips, Plastic Omnium, Siemens ThyssenKrupp or Toyota closely work together over the year in research and development initiatives and projects. Additionally, the complete AZL Network meets every year to define AZL's strategy, pre-competitive Joint Partner Projects as well as new services for generating business and opening new markets.

Dr. Kai Fischer, Managing Director of AZL Aachen GmbH, states: "Within the last three years, we have built-up multiple focused research and development activities: More than 850 representatives of our partner companies have met in more than 30 workshops or workgroup meetings to define joint partner projects, to network and to drive lightweight production forward."

In June, a Joint Partner Project on *Ultra-Fast Manufacturing of Tailored Composite Blanks* started, involving 12 Partner Companies from seven countries to develop a machine prototype for proving the feasibility of a novel manufacturing principle to produce tailored composite blanks in seconds at medium investment cost.

For the next year, the AZL network accepted the proposal of a 6-month market and technology study on the growing market *Buildings and Infrastructure*. Dr. Michael Emonts, Managing Director of AZL Aachen GmbH summarizes: "The study will comprise application analyses of 12 market segments, investigation of 100 applications, technology analyses of 25 highlight components and 10 detailed business cases. Besides requirement analyses for materials and production technologies, new concepts for efficient profitable production technologies are developed including cost engineering analysis. For the first time, this study will be open for non-partner companies to join."

Furthermore, the AZL Partners agreed at the Annual Partner Meeting to follow-up two Joint Partner Projects on New Designs for Low-Cost and Energy-Efficient Double-Belt Presses for Continuous Composite



Manufacturing and on a Material and Processing Benchmark of Thermoplastic Tapes. These had been completed successfully this year.

Aliancys, supplier of resins for composite applications, has recently joined the AZL Network in April 2016. Thomas Wegman, Marketing Manager at Aliancys summarizes the company's debut at its first Annual Partner Meeting: "AZL's research and development activities as well as the excellent networking opportunities are very helpful for growing our composite business. Right from the start, we have been involved in one of AZL's workgroup on *High-Performance SMC*. Now we are looking forward to additional activities, such as the investigation on the Buildings and Infrastructure market. From our perspective, we believe this is a very important market for thermoset applications with significant potential for growth. The expertise of AZL in lightweight production and material science are of great help here for new application development."

At the Annual Partner Meeting, the AZL Partner Companies discussed not only research and development projects, but also decided to start into joint Business Development activities to enter new markets and regions. Each proposed project was accepted by more than 20 AZL Partner Companies. These companies will now meet to define the concrete project content before the projects will start in the second half of the year.



Picture 1: AZL Annual Partner Meeting on June 8th and 9th, 2016 in Aachen: 150 representatives of AZL Partners met to define joint activities and projects for the next AZL year. (Copyright: AZL/Fröls)



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Picture 2: At the AZL Annual Partner Meeting 2016, Dr. Kai Fischer (left), Dr. Michael Emonts (middle), Managing Directors of



AZL Aachen GmbH, together with Dr. Michael Effing (right), Senior Advisor to the AZL, gave updates on previous AZL activities and presented project proposals, such as the Market and Technology Study on Buildings and Infrastructure. (Copyright: AZL/Fröls)

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Picture 3: Thomas Wegman, Marketing Manager at Aliancys, one of the new companies joining the AZL network (Copyright: Aliancys)

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Participants of the 3rd AZL Annual Partner Meeting in Aachen:

3M Deutschland GmbH, Adam Opel AG, AFPT GmbH, Aliancys Nederland B.V., Ashland, BYK-Chemie GmbH, CANNON, Cato Composite Innovations BV, Code Product Solutions, Conbility GmbH, Connectra Global KB, Covestro, DSM Engineering Plastics BV, DuPont de Nemours Performance Polymers, EAS-ICOMP GmbH, ENGEL Deutschland GmbH, engidesk GmbH, Evonik Industries AG, F.A. Kümpers GmbH & Co. KG, F.tech R&D North America Inc., Fagor Arrasate S. Coop., Faurecia Autositze GmbH, Federal Ministry for Economic Affairs and Energy, Fr. Lürssen Werft GmbH, Fraunhofer Institute for Laser Technology ILT, Fraunhofer Institute for Production Technology IPT, Freudenberg New Technologies SE & Co. KG, Germany Trade and Invest - Gesellschaft für Außenwirtschaft und Standortmarketing mbH, Gurit (UK) Ltd, Helm AG, Henkel AG & Co. KGaA, Henrob - Part of the Atlas Copco Group, Hille Engineering GmbH & Co. KG, Huntsman Polyurethanes, Institut für Textiltechnik (ITA) of RWTH Aachen University, Institute for Automotive Engineering (ika) of RWTH Aachen University, Institute of Plastics Processing (IKV) in Industry and the Skilled Crafts, Institute of Structural Mechanics and Lightweight Design (SLA), Isola GmbH, Katcon Advanced Materials, Laboratory for Machine Tools and Production Engineering (WZL) of RWTH Aachen University, LAMILUX Heinrich Strunz Holding GmbH & Co. KG, LANXESS Deutschland GmbH, Laserline GmbH, LG Technology Center Europe, M.TEC Ingenieurgesellschaft für kunststofftechnische Produktentwicklung mbH, Mahr Metering Systems GmbH, Maru Hachi Corporation, Mitsubishi Heavy Industries



Europe, Ltd., Mitsui Chemicals, Inc., Mubea KG, Philips GmbH Photonics Aachen, Plastic Omnium Auto Components GmbH, Polymer Park, Polynt Composites Germany GmbH, PPG Industries Fiber Glass, Reifenhäuser Reicofil GmbH & Co. KG, SABIC, SCA Schucker GmbH & Co. KG, Schuler Pressen GmbH, Siemens AG, Telene SAS, Ten Cate Advanced Composites BV, ThyssenKrupp AG, Toyota Motor Europe NV/SA, Welding and Joining Institute (ISF) of RWTH Aachen University as well as seven anonymous AZL Partner Companies.

About AZL:

The worldwide unique lightweight competence network Aachen Center for Integrative Lightweight Production (AZL) of RWTH Aachen demonstrates significant lightweight expertise in research and development. The objective of the AZL is the transformation of lightweight design in mass production. With its partner institutes active in various fields of lightweight production technology (totally more than 750 scientists and 1,100 graduate assistants) on the RWTH Aachen Campus, AZL regroups all required know-how to help the composites industry to develop tomorrow's lightweight production technology. As a service provider partnering with companies in the field of lightweight production technology, AZL Aachen GmbH offers industrial services in engineering, consultancy and project management, networking and human resources marketing, among others. As the contract partner, the AZL Aachen GmbH is managing the AZL Partner Network consisting of 70 industrial partners representing the entire lightweight production value chain from the raw material producer, over molders, manufacturing equipment suppliers, Tier 1 and Tier 2 to OEMs, from SMEs to large multinational corporations, from Germany to Mexico, Korea or Japan.

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