

AZL

Aachen GmbH

Excellence in Lightweight Production



AZL Partnership Model

Services | Approach | Benefits

In cooperation with:

AZL **RWTHAACHEN**
Aachener Zentrum für
integrativen Leichtbau **UNIVERSITY**



AZL Partnership Model

Your Link between Research and Industry

OUR MISSION

AZL consists of two separate entities: The Aachen Center for Integrative Lightweight Production (AZL) of RWTH Aachen University addresses teaching activities as well as basic research and development of lightweight products, materials, production processes and systems and has access to the latest full-scale machines and automation systems. As a service provider partnering with companies in the field of lightweight production technology, AZL Aachen GmbH provides industrial services in the areas of engineering, consultancy and project management, networking and business development. Together as AZL, we are the one-stop shop for lightweight production technology and offer holistic and cross-industry solutions for your business.

With the AZL Partnership, the AZL Aachen GmbH enables the close cooperation between the lightweight industry and the research institutes of RWTH Aachen Campus along the whole value chain.

OUR PARTNERSHIP SERVICES

Annual
Partner Meeting

Workshops and
Workgroups

Joint Partner
Projects

Acquisition of
Public Funding

Networking

Marketing, PR

Human Resources

Extended
Matchmaking

Market
Intelligence

Campus Office

OUR PARTNERSHIP TYPES



Our Research and Industrial Partners

Entire Lightweight Value Chain

MORE THAN 80 PARTNER COMPANIES FROM 21 COUNTRIES



OUR RESEARCH PARTNERS AT RWTH AACHEN CAMPUS

All competences along the entire composite value chain: 9 Institutes with >750 scientists working on +100 lightweight research projects in a walking distance of 1000 m.

INSTITUT FÜR
KUNSTSTOFFVERARBEITUNG
IN INDUSTRIE UND HANDWERK AN DER RWTH AACHEN



Fraunhofer
IPT

Fraunhofer
ILT

Institut für
Strukturmechanik
und Leichtbau

RWTHAACHEN
UNIVERSITY

WZL

RWTHAACHEN
UNIVERSITY



RWTH Campus Meilen © Capmus GmbH / Steindl

ISF | **RWTHAACHEN**
WELDING AND JOINING INSTITUTE UNIVERSITY

ITA | **RWTHAACHEN**
UNIVERSITY

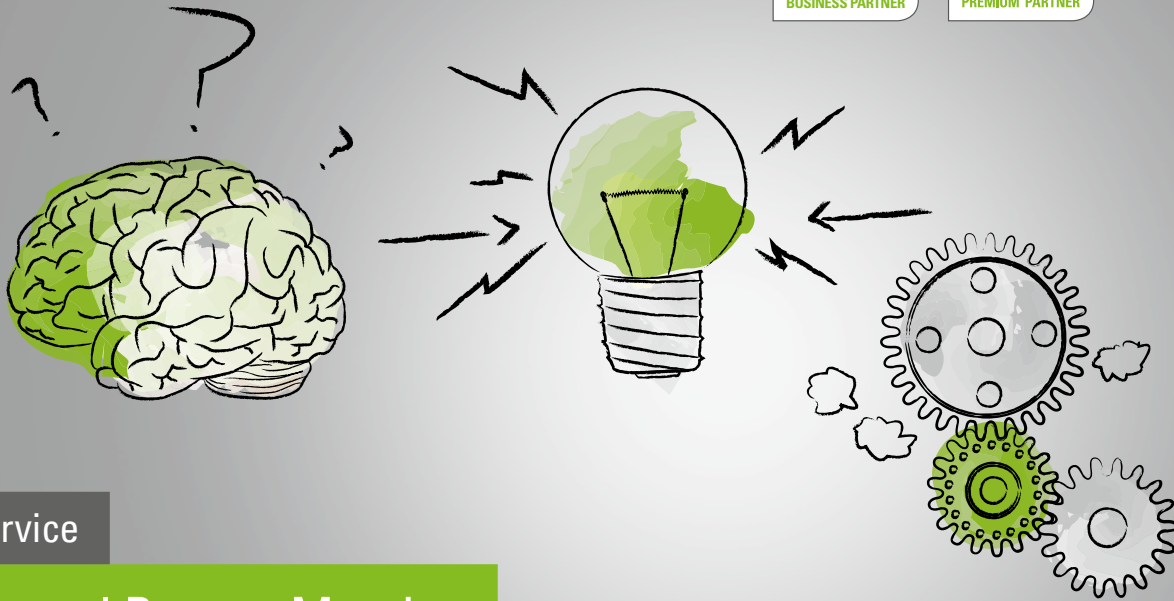
ika | **RWTHAACHEN**
INSTITUT FÜR KRAFTFAHRZEUGE UNIVERSITY

AZL | **RWTHAACHEN**
Aachener Zentrum für integrativen Leichtbau UNIVERSITY

Annual Partner Meeting 2018:

June 27th and 28th

INCLUDED IN:



Service

Annual Partner Meeting

APPROACH

- One two-day meeting per year for co-definition of AZL strategy
- Keynote presentations of AZL Partner Companies and Institutes (Speed Dating)
- Definition of joint partner projects, workgroups and workshops
- Outcome of realized projects and workgroups
- Discussion rounds and networking opportunities



YOUR BENEFITS

- Presentation of your innovations to partners
- Networking with 100 - 150 representatives of national and international AZL Partner Companies
- Definition of joint activities and projects



INCLUDED IN:



Workgroups Meetings 2018:

High-Performance SMC | May 24th & November 2018

High-Speed RTM Matrices | February 7th & September 2018

Hybrid Thermoplastic Composites | March 20th & September 2018

Pipes and Vessels | June 7th & November 2018

>> lightweight-production.com/dates



Service

Workshops and Workgroups

APPROACH

- Workshops to indicate and discuss topics for collaboration and research, e.g.
 - Joining
 - Lightweight Research Landscape
 - Quality Assurance in Composite Value Chains
 - End-machining of Fiber-reinforced Plastics
- Industrial Workgroups with regular meetings addressing lightweight technologies and applications such as
 - High-Speed RTM Matrices
 - Hybrid Thermoplastic Composites
 - High-Performance SMC
 - Composite Pipes and Vessels
 - Composites in Buildings and Infrastructure
- Websites (Business Platforms) for external communication of services and products along workgroup technologies (www.tp-composites.com, www.high-speed-rtm.com)

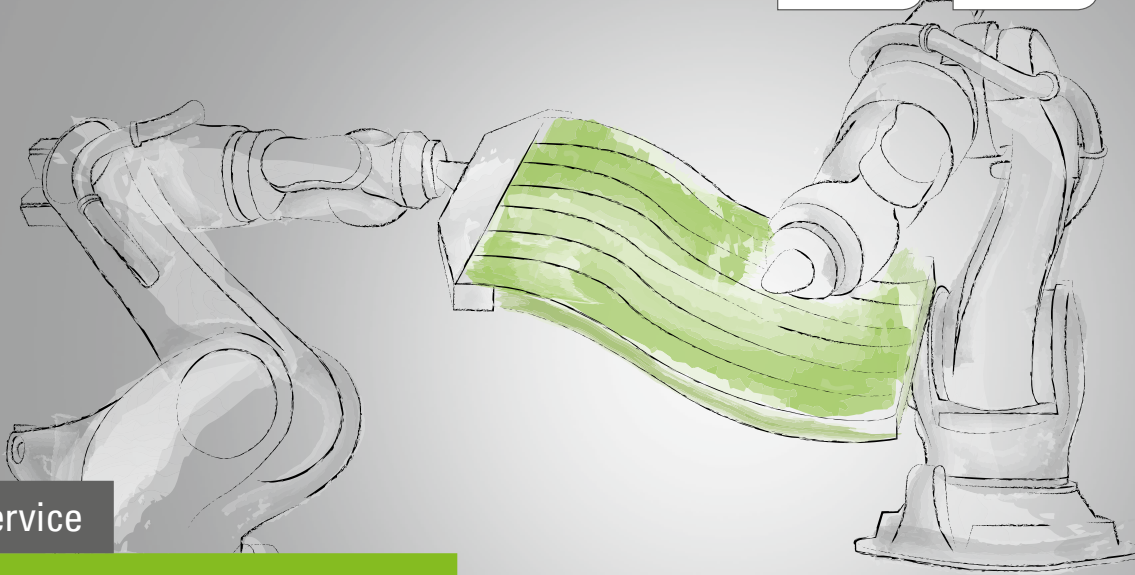


YOUR BENEFITS

- Technology- and product-oriented networking
- Identification of pre-competitive projects and initialization of projects
- Showcase for your services and products



INCLUDED IN:



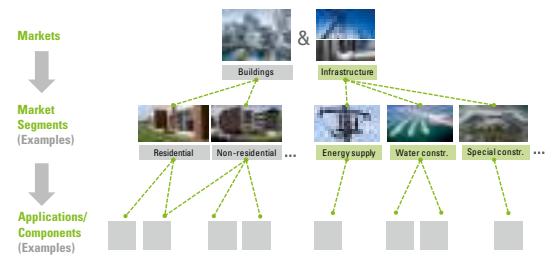
Service

Joint Partner Projects

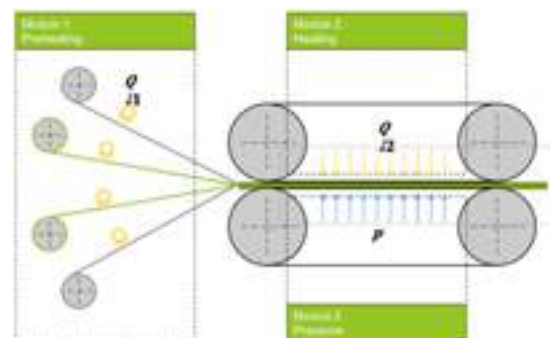
APPROACH

EXEMPLARY TOPICS:

- **Ultra-Fast Manufacturing of Tailored Composite Blanks**
 - 06/2016-05/2018, 12 companies
 - New production system for ~500 kg/h throughput
- **Tape Qualification and Benchmarking**
 - Various projects since 2015, up to 7 companies
 - Interdependencies morphology / processing / mechanics of commercial tapes
 - Defined setting of tape- and laminate morphology, analysis "effects of defects"
- **Cost-efficient Double Belt Presses**
 - Various projects accomplished and running, 5–7 companies
 - New machine developed and installed
 - Optimization of new machine concept
 - In-line quality metrology
- **Study "New Potentials for Composite Technologies in Buildings & Infrastructure"**
 - Joint Partner Study 11/2016-09/2017, > 25 companies
 - New scenarios for applications and production technologies
 - 438 identified applications for 20 market segments, technology analyses of 25 highlight components and 11 business cases
 - +700 result slides, 4 report meetings and 3 workshops with + 200 participants, 11 expert presentations and 13 workshop sessions



Study Example: Identification of market segments, applications and components offering new potentials for composite technologies in Buildings & Infrastructure



Project Example: New Machine Design for Low-Cost and Energy-Efficient Double-Belt Presses

YOUR BENEFITS

- Exclusive Joint Partner Projects with AZL Partner Institutes and AZL Partner Companies
- Focused pre-competitive R&D at shared costs

INCLUDED IN:



Service

Acquisition for Public Funding

APPROACH

- Risk-reduction by identification of available public funding possibilities for your demand (e.g. BMBF, BMWI, EU, cross-border funding, etc.)
- Identification of potential international partners and consulting on focusing research topics
- Consulting how to use the AZL infrastructure as a technology platform
- Direct contact via the AZL Aachen GmbH partners to set up consortia for public funded projects



YOUR BENEFITS

- Supported acquisition for public funding for your projects
- Identification of potential partners for your demands
- Writing of project proposals

Dates:

Open Day 2018 | April 19th, 2018

INCLUDED IN:



Service

Networking

APPROACH

- Platform to initialize projects within the AZL Network
- New pre-competitive R&D projects
- New cooperations
- Presentation of your innovative products and developments
- Discussion of the AZL strategy, update on new equipment and services
- Strengthen the network between AZL Partner Companies and the lightweight activities of the RWTH Aachen Campus

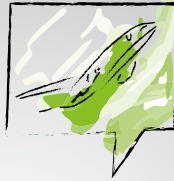


YOUR BENEFITS

- Access to the international key players in the field of lightweight production
- Access to potential business partners
- One stop contact to the RWTH Aachen University



INCLUDED IN:



Service

Marketing, PR, Human Resources

APPROACH

- Setup of a newsletter and press releases
- Presentation of your company on our technology websites, so called Business Platforms (www.tp-composites.com, www.high-speed-rtm.com)
- Internal AZL Partner Knowledge and Communication Platform with more than 700 users
- Job and CV board to address AZL PhD and Master graduates as new potential employees



YOUR BENEFITS

- Marketing and PR activities according to your needs
- A range of options for presenting your company in the lightweight community
- Access to a pool of new potential employees



CVs of graduates from 9 Institutes (Bachelor, Master, PhD)

Events 2018:

B2B Networking Event @ CAMX, US | October 2018

Executive Networking Event @ Bau | January 2019

Executive Networking Event @ IAA | September 2019

Networking Event @ Paris Air Show Le Bourget | June 2019

Web Conferences for Business Cases

>> lightweight-production.com/dates

INCLUDED IN:



Service

Joint Business Development in New Regions and New Markets

APPROACH

- **B2B Networking Events** addressing target regions and markets
 - 2017: Market: Automotive, Region: Poland
 - 2018: Market: Building and Infrastructure, Region: US
 - 2019: Market: Mobility and Transportation with focus on Aerospace and Automotive, Region: China
- **Composite Business Cases** reviewed in web conferences providing insights into applications and the production of composite components
- **Overview of lightweight conferences** (+200 listed conferences)
- **Insight into markets** with analysis of free available reports



YOUR BENEFITS

- Joint forces for access to new markets and regions
- Individual and high-level contacts to lightweight players outside the AZL Network
- Focused information, including cost and performance analysis



INCLUDED IN:



Service

Co-working Space at RWTH Aachen Campus

APPROACH

- Shared office with AZL Partner Companies on RWTH Aachen Campus
- Close co-location with researchers and companies on one of Europe's largest technology-oriented research campus
- Fully equipped office
- Usage of meeting rooms
- Communication zone

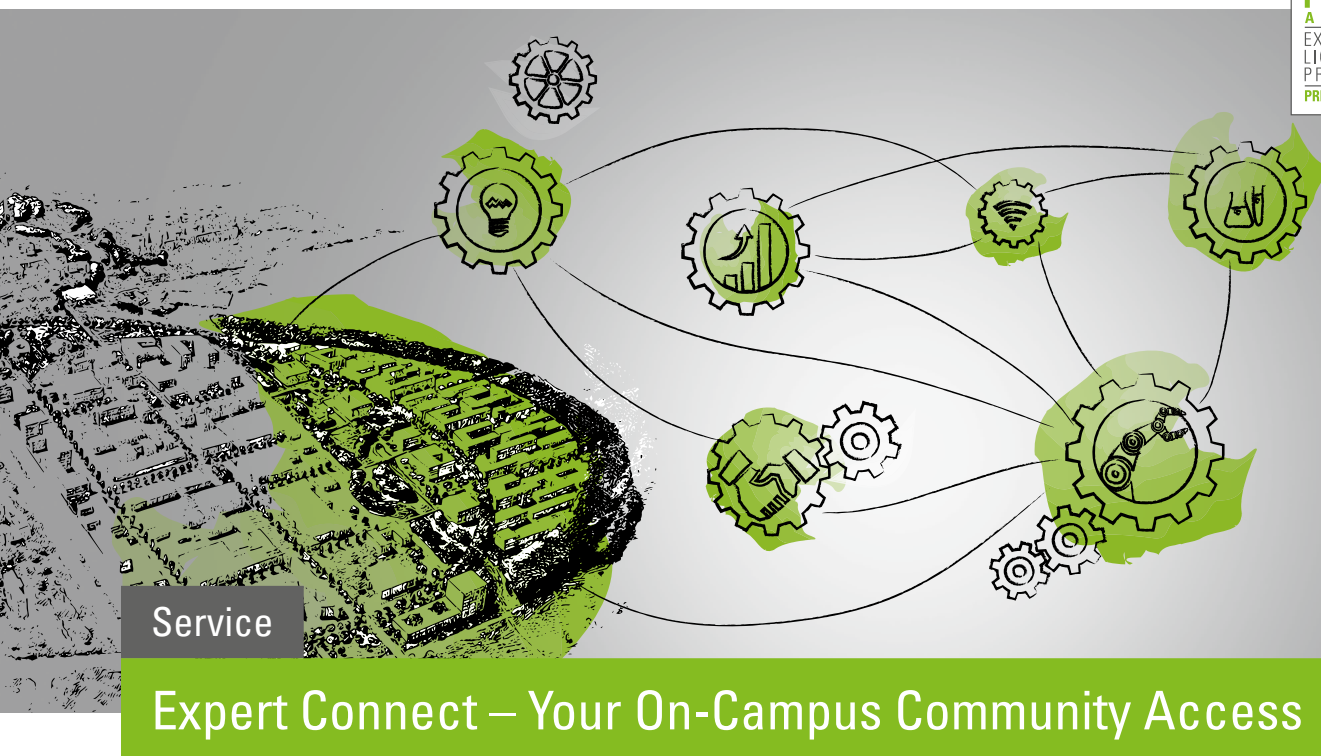


RWTH Aachen Campus with 16 new Cluster Buildings | Copyright: Peter Winandy

YOUR BENEFITS

- Working within the heart of Europe's largest landscape for production technology
- Shoulder to shoulder with lightweight companies and research institutes in a shared office
- Keeping your finger on the pulse of new technologies





APPROACH

- Exclusive usage of one representative office room (~ 20 m²) on RWTH Campus (Cluster Building "Production Engineering" | Campus-Boulevard 30 | Aachen/Germany)
 - Infrastructure for 2-3 employees with Internet, telephone connection, etc.
 - Representative meeting & conference rooms at RWTH Aachen Campus
 - Communication zone for networking
- Direct access to RWTH Aachen research institutes, AZL Partner Companies as well as to external companies
 - Day-to-day meetings at the RWTH Aachen Campus
 - Innovation board and executive meetings with experts from RWTH Aachen University and industry
- Individual extended Marketing support
 - E.g. exclusive listing in technical presentations, press releases, AZL facilities
 - Intense involvement in AZL conferences and events



YOUR BENEFITS

- Having an inspiring presence in a high-tech environment on Europe's largest technology campus
- Direct daily contact to lightweight companies and institutes
- Individualized support for your Marketing and Business Development

Our Services

Existing Partnerships can be upgraded anytime.



Business Partnership



Premium Partnership

R&D AND NETWORKING

STANDARD SERVICES

EXTENDED SERVICES

Annual Partner Meeting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Workshops and Workgroups	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Joint Partner Projects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Acquisition of Public Funding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Networking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marketing, PR, Human Resources	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

BUSINESS DEVELOPMENT AND EXTENDED NETWORKING

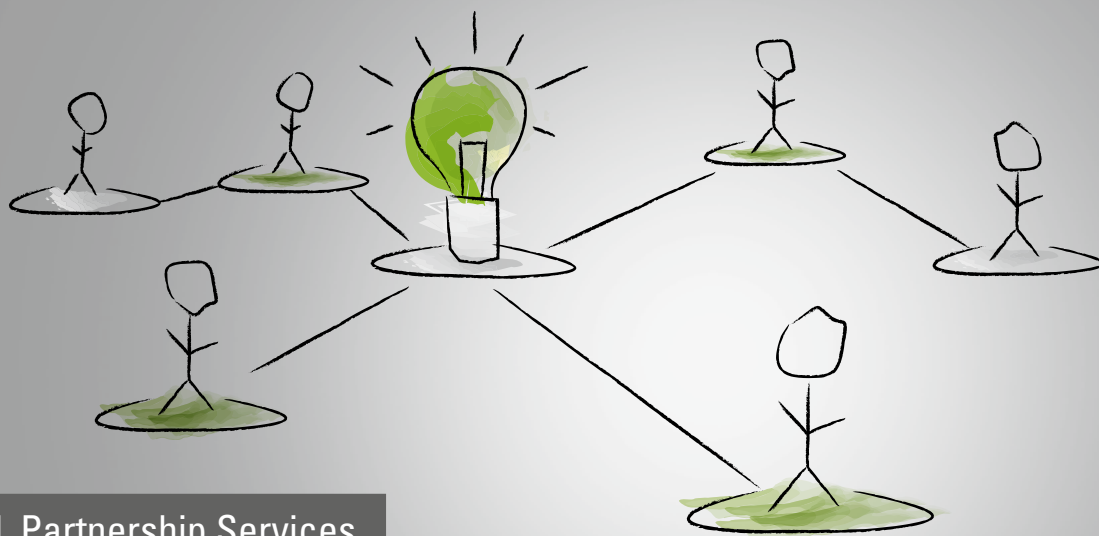
Extended Matchmaking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Market Intelligence	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CAMPUS OFFICE

Shared Office & Meeting Rooms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Representative Exclusive Office		<input checked="" type="checkbox"/>
Representative Meeting & Conference Rooms		<input checked="" type="checkbox"/>

INDIVIDUALIZED MARKETING AND MATCHMAKING

Individual Matchmaking with the RWTH Research Community		<input checked="" type="checkbox"/>
Individual Matchmaking with Industrial Partners		<input checked="" type="checkbox"/>
Individualized Marketing		<input checked="" type="checkbox"/>



AZL Partnership Services

Your Options



Business Partnership



Premium Partnership

NUMBER OF EMPLOYEES	ANNUAL CONTRIBUTION	ANNUAL CONTRIBUTION
< 25	6,500,- €	35,000,- €
25 – 250	10,000,- €	35,000,- €
250 – 500	12,500,- €	35,000,- €
> 500	15,000,- €	35,000,- €

Continuously growing Partnership Network

More than 80 Partner Companies from 21 different Countries

Effective: December 2017



BROAD RANGE OF REPRESENTED COMPANIES

- From start-ups to multi-national corporations
- Sector-independent
- OEMs, Tier 1, Tier 2, molder, system and machine developer, material supplier, service provider

Your Contacts



DR.-ING. MICHAEL EMONTS

Managing Director
Phone: +49 241 80-24500
michael.emonts@azl-aachen-gmbh.de



DR.-ING. KAI FISCHER

Managing Director
Phone: +49 241 80-27105
kai.fischer@azl-aachen-gmbh.de



DR.-ING. MICHAEL EFFING

Senior Advisor
Phone: +49 241 80-23887
michael.effing@azl-aachen-gmbh.de

AZL
Aachen GmbH
Excellence in Lightweight Production



Seffenter Weg 201
52074 Aachen
Germany

Phone: +49 241 89-04382
Fax: +49 241 80-624505
info@azl-aachen-gmbh.de

www.azl-lightweight-production.com