

PRESS RELEASE

September 6, 2018 || Page 1 | 3

Fraunhofer opens new project center for lightweight automotive construction at the Opole University of Technology in Poland

On September 6, 2018, the Fraunhofer-Gesellschaft opened its inaugural project center at the Opole University of Technology in Poland. The newly established research platform goes by the name of Fraunhofer Project Center for Advanced Lightweight Technologies (ALight) and is the fruit of a partnership between the Fraunhofer Institute for Machine Tools and Forming Technology IWU and the Opole University of Technology. This project center unites both partners' expertise in the development of production processes, new design ideas and pricing strategies for the manufacture of lightweight hybrid components, in particular for the automotive industry.

Lightweight construction is one of the greatest challenges facing the automotive industry. Electric motors and hybrid engines increase vehicle weight, which must be compensated by lightweight components. Lightweight materials and innovative processes can help achieve a decisive reduction in fuel consumption, CO₂ emissions and production costs. In order to support automakers in reaching these ambitious goals, the Fraunhofer-Gesellschaft and the Opole University of Technology have joined forces to set up the Fraunhofer Project Center for Advanced Lightweight Technologies on the university's campus. The new Fraunhofer project center was officially opened in the presence of: Poland's Deputy Prime PhD Minister Jarosław Gowin; Marcin Ociepa, permanent Secretary in the Ministry of Entrepreneurship and Technology; Fraunhofer President Prof. Reimund Neugebauer; Arkadiusz Wiśniewski, Mayor of Opole; Prof. Marek Tukiendorf, Rector of the Opole University of Technology; Prof. Welf-Guntram Drossel, managing director of the Fraunhofer IWU; and Prof. Lothar Kroll, Division Director at Fraunhofer IWU and Managing Director of the Fraunhofer Project Center ALight.

At the interface of cross-border collaboration

The Fraunhofer project center focuses on developing production processes, new design ideas and pricing strategies for the manufacture of lightweight hybrid components. At the same time its work also encompasses other areas of expertise such as modeling and simulation of structures and processes, and recycling and remanufacturing. The project center is located at the interface of cross-border collaboration between German automotive manufacturers and component suppliers, on the one hand, and their subsidiaries and suppliers in Poland, on the other hand.

Editorial Notes

Janis Eitner | Fraunhofer-Gesellschaft, Munich | Communications | Phone +49 89 1205-1333 | presse@zv.fraunhofer.de

Martin Lamß | Fraunhofer Institute for Machine Tools and Forming Technology IWU | Phone +49 371 5397-1454 | martin.lamss@iwu.fraunhofer.de
Reichenhainer Strasse 88 | 09126 Chemnitz | www.iwu.fraunhofer.de

“Interdisciplinary collaboration and international partnerships are the cornerstones of top-class research today,” says Prof. Reimund Neugebauer, President of the Fraunhofer-Gesellschaft. “That is why we look forward to working together with our Polish partners. Fraunhofer IWU has wide-ranging expertise in lightweight construction and will also contribute its know-how in handling advanced materials. The researchers at Opole University of Technology will contribute their specific areas of expertise, for example in process and process engineering simulations. Together we can add value, intensify knowledge transfer and increase innovation for the companies involved.”

As Prof. Marek Tukiendorf explains: “The partnership with the Fraunhofer-Gesellschaft in the new project center is not only an extraordinary opportunity for the future of Opole University of Technology, but also a special obligation for me and the entire academic community. Without doubt, it represents a milestone in the development of our university.”

And, as PhD Jarosław Gowin underscores: “The Polish-German Fraunhofer project center will function as a bridge, closing the gap between the two partners – with their complementary, country-specific areas of expertise. In particular, it will make optimal use of their strengths and leverage existing synergies. The partnership will act as a catalyst for cross-border collaboration between the research sector and industry in both Poland and Germany in the critical area of lightweight construction. Knowledge and resources will be shared in a sensible manner while encouraging close cooperation between suppliers and research institutes.”

Prof. Welf-Guntram Drossel of Fraunhofer IWU adds: “Given our decades of experience in automotive manufacturing – from individual components and processes, through to complex mechanical systems, and even the design of entire factories – our research focuses on non-metallic materials, especially plastics and fiber composites. In the long term, the partnership with Opole University of Technology promises to expand our capabilities, too.”

Prof. Lothar Kroll, Managing Director of the new Fraunhofer project center, concretizes: “The Fraunhofer Project Center for Advanced Lightweight Technologies unites the basic research being carried out at Opole University of Technology with the applied research of the Fraunhofer-Gesellschaft. The fusion of technologies in lightweight construction, for example, makes it possible to combine what have previously been discrete production processes for diverse materials, such as metals, plastics and technical textiles.”

Eco-friendly automobile production

In turn this will be making the production of lightweight structures for mobile applications energy- and cost-efficient as well as eco-friendly. The European car industry will be the ultimate beneficiary of this process. In addition, new resource-efficient produc-

PRESS RELEASE

September 6, 2018 || Page 2 | 3

tion technologies that contribute to climate protection can be beneficially tested by all industries dealing with lightweight and multi-component designs.

PRESS RELEASE

September 6, 2018 || Page 3 | 3

Milestone in the German-Polish partnership

The Fraunhofer Project Center for Advanced Lightweight Technologies is another element in the traditionally good partnership between Poland and Germany. This partnership has intensified since Poland joined the EU on May 1, 2004, especially in the fields of science and industry. Today, the regions along the border between the two countries are home to a well-developed network of centers for technology, innovation and research. The new Fraunhofer project center can act as a key catalyst in intensifying this bilateral exchange.



Prof. Reimund Neugebauer, President of the Fraunhofer-Gesellschaft, at the opening of the new „Fraunhofer Project Center for Advanced Lightweight Technologies (ALight)” at the Opole University of Technology in Poland. © Fraunhofer IWU | Bild in Farbe und Druckqualität: www.fraunhofer.de/presse.

The **Fraunhofer-Gesellschaft** is the leading organization for applied research in Europe. Its research activities are conducted by 72 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of more than 25,000, who work with an annual research budget totaling 2.3 billion euros. Of this sum, almost 2 billion euros is generated through contract research. Around 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects. International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development.