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Fraunhofer research in Zwickau consolidated

Application Center for Optical Metrology positively evaluated

(Dresden, June 10, 2021) Five years after the launch of the Fraunhofer Application Center for Optical Metrology and Surface Technologies AZOM at Westsächsische Hochschule Zwickau University of Applied Sciences (WHZ), the research institution has been positively evaluated by external reviewers. The application center will thus continue to strengthen and expand Zwickau as a location for research and higher education.

High-ranking representatives from industry and science reviewed Fraunhofer AZOM's research results up to now and recommend the continuing operation of the application center. In its early years, the research facility received funding from the Free State of Saxony. The visible successes in numerous publicly funded and industrial research projects as well as the firm anchoring in the Zwickau region ensure that the application center can finance itself further from its own resources and become firmly established. The evaluators were particularly pleased with the commitment and dedication of the research team, which more than exceeded the set targets. "Institutions and companies from research and development play an important role, especially for our industrially dominated region," emphasized Zwickau's mayor Constance Arndt. "Fraunhofer AZOM has quickly found its place, and it has long been a recognized partner for institutions and companies, thus enriching the local location." Prof. Christoph Leyens, director of parent institute Fraunhofer IWS, is delighted about the center's positive development: "Fraunhofer AZOM's topics ideally complement our research portfolio, so that it has established itself as an integral part of Fraunhofer IWS. We have succeeded in establishing a stable connection between Dresden and Zwickau and in setting a research anchor in southwest Saxony. The task now is to further consolidate this."

Research projects in the automotive industry and medical technology

Meanwhile, Fraunhofer AZOM is closely cooperating with the German automotive industry. The development of optical measurement technology for technical surfaces plays a significant role in the automotive production of vehicles. Fraunhofer AZOM is also involved in international research projects with the latest surface modification and characterization methods for the semiconductor industry. "We also see great potential

Head of Corporate Communications

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in new areas of medical technology," explains the head of the application center, Prof. Peter Hartmann. Current research is focusing on the development of optical measurement technology and processes, for example, for the detection of cell changes or image transmission by means of a single optical fiber. This has the potential to reduce the diameter of endoscopes to the size of a hair.

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From intern to international "postdoc"

Thanks to its close cooperation with WHZ, Fraunhofer AZOM contributes significantly to practice-oriented engineering education at the university. Around 60 students have so far completed their bachelor's and master's theses at the application center. Others also benefit from the opportunity to enter research as interns or as research assistants, or are now working in science at the Zwickau application center. Scientific presentations at international conferences and worldwide cooperation with universities and colleges not only provide Fraunhofer AZOM's students and scientists with important practical experience, but also help them to establish new interesting contacts for future projects. In this way, for example, it was possible to win an American "postdoc" for five years as a research associate at the Fraunhofer application center and as an English-speaking lecturer at WHZ. "For research and teaching at our university of applied sciences with a high level of practical relevance, Fraunhofer AZOM is a great benefit and shows the large potential of the cooperation with Fraunhofer-Gesellschaft," emphasizes the WHZ rector, Prof. Dr. Stephan Kassel, the win-win situation.

About Fraunhofer AZOM

The Fraunhofer Institute for Material and Beam Technology IWS operates the Fraunhofer Application Center for Optical Metrology and Surface Technologies (AZOM) in cooperation with Westsächsische Hochschule Zwickau University of Applied Sciences (WHZ). Scientists at this center research and develop the latest approaches in optical metrology, image processing, process control and surface characterization. The aim is to quickly and directly implement research results in customized solutions for industrial processes. Fraunhofer AZOM provides an interface between applied science and industry in the fields of medical, automotive and mechanical engineering as well as semiconductor technology.

The center's research and development work is performed along the entire value chain. In addition to feasibility studies and contract measurements, Fraunhofer AZOM offers the industrial implementation of established technologies as well as the development

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At Westsächsische Hochschule Zwickau, IWS runs the Fraunhofer Application Center for Optical Metrology and Surface Technologies AZOM. The Fraunhofer project group at the Dortmund OberflächenCentrum DOC® is also integrated into the Dresden Institute. The main cooperation partners in the USA include the Center for Coatings and Diamond Technologies (CCD) at Michigan State University in East Lansing and the Center for Laser Applications (CLA) in Plymouth, Michigan. Fraunhofer IWS employs around 450 people at its headquarters in Dresden.

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of novel measurement methods and surface technologies. Zwickau's scientists design complex optical measuring methods and system components for industrial applications, characterize surfaces, develop customized sensors and actuators, and offer non-destructive process and component monitoring.

In addition, Fraunhofer AZOM's services include the development of electronic controls, complex custom software and the design of optical system components such as measuring light sources and fiber-based assemblies. The center focuses in particular on solutions for individual customer requirements which cannot be satisfactorily addressed with standard technology available on the market.

Further information: www.iws.fraunhofer.de/azom

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About Westsächsische Hochschule Zwickau (WHZ) University of Applied Sciences Zwickau

WHZ focuses on technology, economy and life quality. Following the mission statement "University for Mobility", WHZ organizes its numerous research activities into five research profile lines: Automotive and Production, Energy and Infrastructure, Cyber Physical Systems and Digitalization, Health and Medical Technology, Sustainability and Neo-Ecology.

Further information: www.fh-zwickau.de

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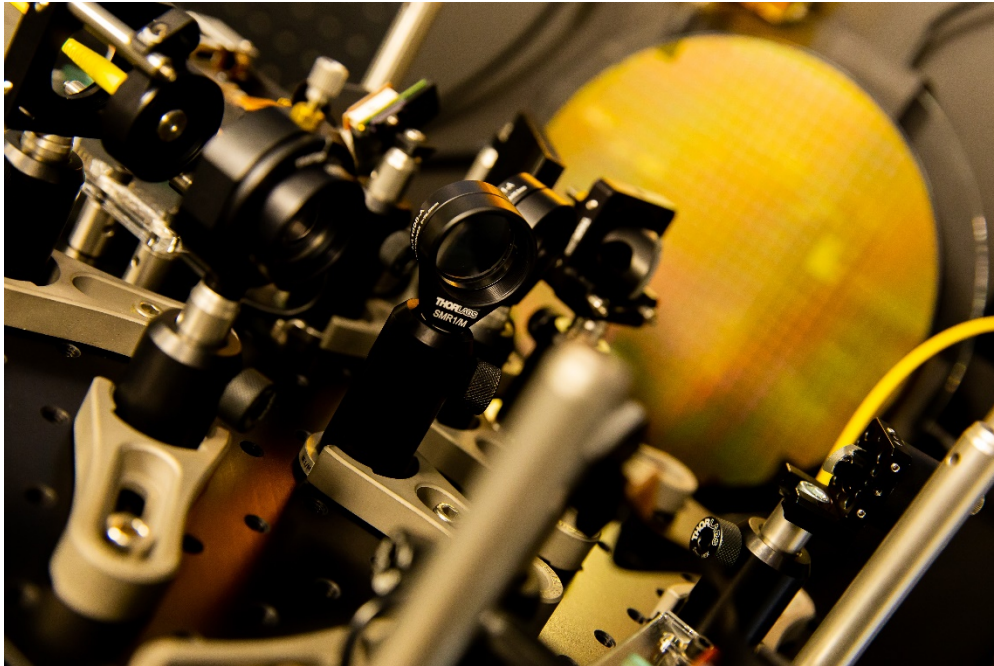
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Five years after the launch of the Fraunhofer AZOM Application Center for Optical Metrology and Surface Technologies at Westsächsische Hochschule Zwickau University of Applied Sciences (WHZ), the research institution has been positively evaluated by external reviewers.

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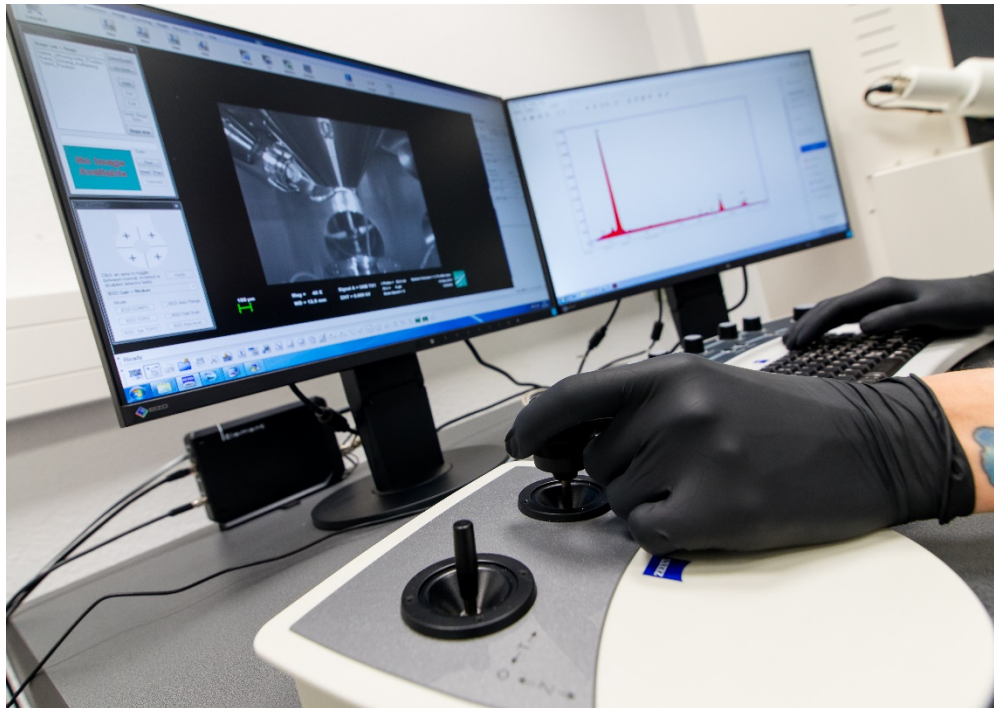
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The scientists at Fraunhofer AZOM in Zwickau research complex industrial optical measurement methods and system components, characterize surfaces, develop customized sensors and actuators, and offer non-destructive monitoring of processes and components.

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Fraunhofer AZOM provides state-of-the-art surface characterization methods and covers the entire value chain from exploratory measurements to measurement technology implementation and the development of new measurement methods.

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