

PRESS RELEASE

PRESS RELEASE

No. 04 | 2023

March 10, 2023 || Page 1 | 5

Establishing Design as an Integral Component in Research and Development

Inauguration of the joint Fraunhofer and TU Dresden DesignLab in Dresden

(Dresden, 03/10/2023) In its various disciplines and manifestations, design is increasingly gaining importance in Fraunhofer's research. Supporting this trend, the three Fraunhofer Institutes IVI, IWS and IWU in Dresden, together with Technische Universität Dresden, are establishing the "DesignLab for Applied Research" on behalf of the research community. Based in the Saxon state capital, the DesignLab will conduct design research in collaboration with all Fraunhofer institutes across the country, with plans to extend this work to the international level in the future. The DesignLab was officially inaugurated on March 8, 2023.

Design in its various disciplines and manifestations is gaining increasing significance for research, especially at Fraunhofer. Used rather selectively in the past, it is progressively developing into an integral component of numerous projects and a major contributor to the success of research. By promoting and establishing design, Fraunhofer embraces current market trends and, in close cooperation with the University of Excellence TU Dresden, has founded the cooperative DesignLab. This endeavor supports the entire research process from the funding application to the transfer of research findings. It introduces methods and perspectives to significantly increase the application orientation and target group relevance of research.

With its Chair of Industrial Design Engineering, the Department for Speculative Transformation (DST) is an ideal partner for Fraunhofer with many years of experience at the interface between humans and technology. The chairholder, Prof. Jens Krzywinski, heads the DesignLab. "The development of user-oriented, innovative, comprehensive solutions underscores the technological maturity of research and contributes substantially to the transfer to a successful product," he emphasized during the inauguration event held at the Fraunhofer Institute for Transportation and Infrastructure Systems IVI in Dresden. "A thorough understanding of design also creates added value in functional terms by focusing on the needs of users. It rounds out technological research and development by adding essential aspects to create competitive comprehensive solutions. A user-oriented design of operating elements and user interfaces strengthens usability and allows for efficient, safe operation." In

Head of Corporate Communications

Markus Forytta | Fraunhofer Institute for Material and Beam Technology IWS | Phone +49 351 83391-3614 | Winterbergstraße 28 | DE-01277 Dresden | www.iws.fraunhofer.de | markus.forytta@iws.fraunhofer.de

Head of DesignLab for Applied Research

Prof. Dr.-Ing. Jens Krzywinski | Chair of Industrial Design Engineering of TU Dresden | Phone +49 351 46 40-612 | Zeunerstraße 38 | DE-01069 Dresden | www.designlab.works | jens.krzywinski@tu-dresden.de

FRAUNHOFER-INSTITUT FÜR WERKSTOFF- UND STRAHLTECHNIK IWS

turn, the findings from practical development will flow directly back into theoretical research as a result of this close cooperation.

The agreement concluded by the three institutes Fraunhofer IVI, IWS and IWU with TU Dresden to establish the DesignLab for Applied Research opens up these options for all interested Fraunhofer institutes. It complements research projects that are specifically focused on technical feasibility with indispensable design aspects such as usability, ergonomics and reliability. Therefore, it helps to bridge the gap between technology maturity, user acceptance and functional added value. The DesignLab strengthens the existing close cooperation between university and extramural research and provides substantial advantages for the Fraunhofer-Gesellschaft, TU Dresden and their partners. The initial wide range of jointly developed design solutions was already introduced by the participating institutes during the inauguration through demonstrators and presentations. Further projects, including those addressing science visualization, are already being planned and implemented together with other Fraunhofer Institutes from all over Germany.

PRESS RELEASE

No. 04 | 2023

March 10, 2023 || Page 2 | 5



PRESS RELEASE

No. 04 | 2023

March 10, 2023 || Page 3 | 5

Design is increasingly gaining importance in Fraunhofer's research. This is why the three Fraunhofer Institutes IVI, IWS and IWU in Dresden, together with Technische Universität Dresden, are establishing the "DesignLab for Applied Research".

© Fraunhofer IVI

Materials and Lasers – Competence with a System: The **Fraunhofer Institute for Material and Beam Technology IWS** develops complex system solutions in materials and laser technology. We define ourselves as idea drivers developing customized solutions based on laser applications, functionalized surfaces as well as material and process innovations – from easy-to-integrate custom solutions to cost-efficient solutions for small and medium-sized enterprises to industry-ready one-stop solutions. Our research focuses on aerospace, energy and environmental technology, automotive, medical and mechanical engineering, toolmaking, electrical engineering and microelectronics, and photonics and optics sectors. In our five future and innovation fields of battery technology, hydrogen technology, surface functionalization, photonic production systems and additive manufacturing, we are already creating the basis today for the technological answers of tomorrow.



PRESS RELEASE

No. 04 | 2023

March 10, 2023 || Page 4 | 5

The DesignLab strengthens the already close cooperation between non-university and university research.

© Fraunhofer IVI

Materials and Lasers – Competence with a System: The **Fraunhofer Institute for Material and Beam Technology IWS** develops complex system solutions in materials and laser technology. We define ourselves as idea drivers developing customized solutions based on laser applications, functionalized surfaces as well as material and process innovations – from easy-to-integrate custom solutions to cost-efficient solutions for small and medium-sized enterprises to industry-ready one-stop solutions. Our research focuses on aerospace, energy and environmental technology, automotive, medical and mechanical engineering, toolmaking, electrical engineering and microelectronics, and photonics and optics sectors. In our five future and innovation fields of battery technology, hydrogen technology, surface functionalization, photonic production systems and additive manufacturing, we are already creating the basis today for the technological answers of tomorrow.



PRESS RELEASE

No. 04 | 2023

March 10, 2023 || Page 5 | 5

The DesignLab complements research projects specifically focused on technical feasibility with indispensable design aspects such as usability, ergonomics and reliability and helps to bridge the gap between technology maturity, user acceptance and functional added value.

© Fraunhofer IVI

Materials and Lasers – Competence with a System: The **Fraunhofer Institute for Material and Beam Technology IWS** develops complex system solutions in materials and laser technology. We define ourselves as idea drivers developing customized solutions based on laser applications, functionalized surfaces as well as material and process innovations – from easy-to-integrate custom solutions to cost-efficient solutions for small and medium-sized enterprises to industry-ready one-stop solutions. Our research focuses on aerospace, energy and environmental technology, automotive, medical and mechanical engineering, toolmaking, electrical engineering and microelectronics, and photonics and optics sectors. In our five future and innovation fields of battery technology, hydrogen technology, surface functionalization, photonic production systems and additive manufacturing, we are already creating the basis today for the technological answers of tomorrow.