

SHORT NEWS

SHORT NEWSMay 23, 2022 || Page 1 | 3

Fraunhofer ITWM in the Final of the »Clusters4Future« Competition **»MePrecise« Bundles Expertise in Ultraprecision- And Microtechnologies**

Many products from optics, medical technology, mechanical engineering or the automotive industry are manufactured with ultraprecision- and micro technologies. We all use them directly or indirectly every day and benefit from their further development. »MePrecise« is the competitive contribution of various research institutions from Kaiserslautern to the »Clusters4Future«, an innovation network of the Federal Ministry of Education and Research (BMBF). Prof. Dr. Anita Schöbel, director of the Fraunhofer Institute for Industrial Mathematics ITWM is co-spokesperson of »MePrecise«.

In the field of research and development of ultra-precision- and microtechnologies, a number of scientific breakthroughs have been achieved in recent years. From ultra-precise machine tools and 3D printing technology to sensor functional parts and microstructures for reaction and separation processes. Examples include optical components in cell phones, high-precision vision aids and intraocular lenses, microfluidics for medical diagnostic devices or sensors and actuators for autonomous driving. Together with partners from the region, new production processes, products, services and business models are now to be created in »MePrecise«. In the »Clusters4Future« competition, the project reached the final round; together with 14 other (of originally 117) competition entries, the project was recommended for a six-month conception phase.

Kaiserslautern Ensures Technological Sovereignty

Besides the Fraunhofer ITWM, other research institutions from Kaiserslautern are involved in »MePrecise«, among them the Technical University (TUK) and the University of Applied Sciences, which conduct research in close cooperation with the institute. Among the cooperating companies, special emphasis is also placed on a regional reference in order to actively and attractively shape Kaiserslautern as a science location – especially small and medium-sized enterprises (SMEs) are on board. In this context, »MePrecise« also finds approval and support on the social level: The goal is to involve the city and society in the project, for example, through an art project that is to be implemented together with the Pfalzgalerie.

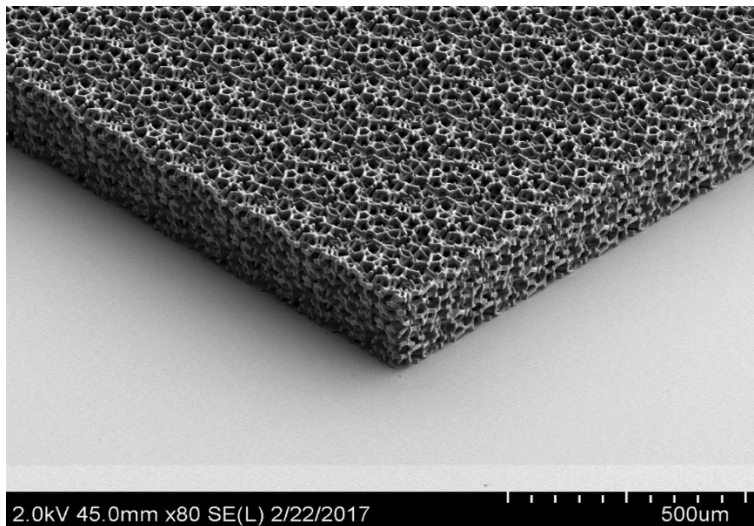
Visuals

SHORT NEWS

May 23, 2022 || Page 2 | 3



Keyvisual © MePrecise



2.0kV 45.0mm x80 SE(L) 2/22/2017

500um

Example of an optimized filter microstructure, a calibration standard 3D-printed by us. © Fraunhofer ITWM

FRAUNHOFER INSTITUTE FOR INDUSTRIAL MATHEMATICS ITWM**Press contact****Ilka Blauth**

Fraunhofer Institute Industrial Mathematics ITWM
Fraunhofer-Platz 1
67663 Kaiserslautern

Telephone +49 631 31600-4674

presse@itwm.fraunhofer.de

www.itwm.fraunhofer.de

SHORT NEWS

May 23, 2022 || Page 3 | 3

About the Fraunhofer Institute for Industrial Mathematics ITWM

The Fraunhofer Institute for Industrial Mathematics ITWM in Kaiserslautern is one of the largest research institutes for industrial mathematics worldwide. We see our task in further developing mathematics as a key technology and providing innovative impetus. Our focus is on the implementation of mathematical methods and technology in application projects and their further development in research projects. The close cooperation with partners from industry guarantees the high practical relevance of our work.

Their integral components are consulting, implementation and support in the application of high-performance computer technology and the provision of tailor-made software solutions. Our various competencies address a wide range of customers: automotive industry, mechanical engineering, textile industry, energy and finance. This also benefits from our good networking, for example in the High performance center "Simulation- and software-based innovation".