

Fraunhofer Institute for Microelectronic Circuits and Systems IMS

> PRESS RELEASE 1 Febraury, 2024 || Page 1 of 3

PRESS RELEASE

Kick-off for the BMBF project »KoVit«

Improving post-COVID aftercare and diagnostics: Contactless vital signs measurements combined with an innovative app to enhance life quality

Within the project »KoVit - Contactless vital signs recording for an objective follow-up of post-Covid to support medical diagnostics«¹, the Fraunhofer Institute for Microelectronic Circuits and Systems IMS is working with the Department of Infectiology at Essen University Hospital, Fimo Health GmbH and MedEcon Ruhr GmbH to sustainably improve the lives of post-COVID patients. The project is funded by the Federal Ministry of Education and Research (BMBF) as part of the »Hybrid Interaction Systems for Maintaining Health Even in Exceptional Situations (HIS)« program and will run from September 2023 to August 2024.

The multidisciplinary project aims to provide new insights into the treatment of post-COVID symptoms

Due to the wide range of symptoms, the diagnosis and treatment of post-COVID syndrome (PCS) requires a multidisciplinary approach. A central element is the continuous measurement of vital signs. The scientists of the KoVit project are working on developing an advanced optical system that enables these measurements. »We are focusing on contactless vital signs measurements using optical sensors. This enables continuous monitoring of post-COVID patients and precise adjustment of therapy«, explains Prof. Karsten Seidl, Head of Health at Fraunhofer IMS. In addition to the optical system for the non-contact measurement of vital parameters from Fraunhofer IMS, the Clinic for Infectiology at *Essen University Hospital (DE)* is contributing its

Editorial Lea Krammer | Fraunhofer Institute for Microelektronic Circuits and Systems IMS | Telefon +49 203 3783 343 | Finkenstraße 61 | 47057 Duisburg | www.ims.fraunhofer.de | presse@ims.fraunhofer.de

¹»KoVit - Contactless vital parameter recording for objective post-Covid monitoring to support medical diagnostics« is funded by the BMBF under the reference number 16SV9174 as part of the program »Hybrid interaction systems for maintaining health even in exceptional situations (HIS)«.



Fraunhofer Institute for Microelectronic Circuits and Systems IMS

> PRESS RELEASE 1 Febraury, 2024 || Page 2 of 3

expertise in the diagnosis and treatment of PCS. <u>Fimo Health GmbH</u> (DE) offers expertise in patient support through an innovative app with symptom diary management. <u>MedEcon Ruhr</u> <u>GmbH</u> (DE) is responsible for the requirements specification of the system and evaluates the concept regarding transferability into care structures in order to contribute to the development of treatment standards and transfer solutions.

Early detection of late effects enables preventive interventions

Continuous monitoring through camera scans not only supports medical treatment and therapy, but also enables the early detection of late effects in post-COVID patients. KoVit's hybrid interaction system thus plays a decisive role in monitoring and supporting the treatment and care of post-COVID diseases. The project aims to be a pioneering development for the holistic care of those affected.

Click here for more information on KoVit on the BMBF website. (DE)

Fraunhofer IMS

Smart Sensor Systems for a safe, secure, and sustainable future: In numerous state-of-the-art research laboratories, Fraunhofer IMS works with more than 250 talented scientific employees and students on innovative microelectronic solutions. As a trusted research and development partner for industry, the institutes' goal is to develop customized sensor systems for your specific needs in the areas of biomedical sensors, optical systems, open source semiconductors, embedded AI, technology services, and even quantum technology. The teams in the four business units – Health, Industry, Mobility, and Space and Security – are committed to implementing outstanding and versatile microelectronics that can be utilized across all your projects. For example, these solutions feature high integration capability, enormous energy efficiency and reliable functionality even under harsh conditions.

www.ims.fraunhofer.de/en.html

Research Fab Microelectronics Germany (FMD)

The Fraunhofer IMS is part of the Forschungsfabrik Mikroelektronik Deutschland (FMD) - a cooperation of the Fraunhofer Group for Microelectronics with the Leibniz Institutes FBH and IHP. As a pioneer for cross-site and cross-technology collaboration, the FMD addresses current and future challenges in electronics



Fraunhofer Institute for Microelectronic Circuits and Systems IMS

> PRESS RELEASE 1 Febraury, 2024 || Page 3 of 3

research and provides important impulses for the development of elementary innovations for the world of tomorrow.

<u>https://www.forschungsfabrik-mikroelektronik.de/en.htm/</u> | Also visit our virtual 3D showroom at <u>https://fmd-insight.de/showroom</u>

Pictures and captions



© Fraunhofer IMS