



PRESS BRIEFING – MAY 29, 2020

Secure IoT sensor system for medical applications

The Internet of Things offers huge potential for the healthcare sector – ranging from diagnostics to patient safety and optimized logistical processes. A total of 21 European partners are involved in the project SERENE IoT, which aims to lay the foundations for IoT applications in healthcare. Within the scope of this project, the German consortium under the coordination of Fraunhofer EMFT is developing an IoT-capable mobile analysis device to detect multi-resistant Staphylococcus aureus (MRSA). The detection method was developed in the research project MRE-Test, funded by the Bavarian State Ministry for Education, Culture, Science and Art, and is now being transferred into a secure networked system.

Within the project new application-specific memory chips with a very low level of energy consumption shall be developed. A further focus of the research project is the development of a secure software and hardware architecture for IoT networking of medical devices and the secure transfer of confidential data via wired and wireless communication. The MRSA detection system will enable fast and secure testing of patients without time-consuming and costly laboratory equipment, and will be tested at the hospital of the Ludwig Maximilian University of Munich.

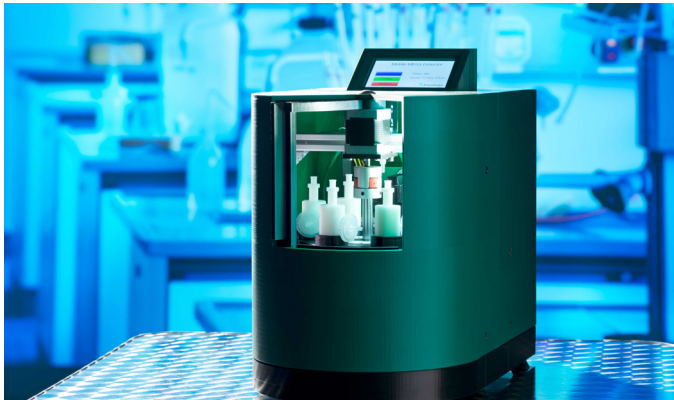
The SERENEIoT project is funded jointly by the European Union and the German Federal Ministry for Education and Science.

Project partners (German Consortium)

Flavia IT-Management GmbH, Kassel
spring techno GmbH & Co. KG, Bremen
SGS-TUV Saar GmbH, München
X-FAB GmbH & Co. KG, Dresden
Hospital of the Ludwig Maximilian University of Munich

Fraunhofer EMFT

researches and develops sensor systems and actuators for people and the environment at its locations in Munich, Oberpfaffenhofen and Regensburg. The competences of the approx. 130 employees include manufacturing-oriented microtechnologies, innovative sensor solutions, microdosing and secure electronics.



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Secured and connected On-Site-MRSA-Detector (© Fraunhofer EMFT/Bernd Müller)

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