

PRESS RELEASE

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Fraunhofer ENAS presents an optical monitoring system for quality control of electroplating solutions at the Japanese trade fair MEMS Sensing & Network System

The Fraunhofer Institute for Electronic Nano Systems ENAS shows an exhibit demonstrating a monitoring system for quality control of electroplating solutions at the trade fair MEMS Sensing & Network System in Chiba, Japan, from October 4 until 6, 2017. The system is based on optical sensors and was developed in a joint project with the Japanese partner SHINKO ELECTRIC INDUSTRIES Co., Ltd.

Complex methods such as high-performance liquid chromatography are state-of-the-art for monitoring the quality and consistence of electroplating solutions during the deposition process. Fraunhofer ENAS and SHINKO developed an optical sensor system to quantify essential ingredients of electroplating solutions. By detecting a deviation to the predetermined parameters, the consistence of the solution can be regulated directly, if necessary. The sensor system works with short measurement times in the millisecond range. Due to the application of innovative spectral sensors, the system is more cost-efficient than alternative system solutions. A compact size, wireless communication and the optional battery operation mode enable an efficient integration in various systems.

This sensor system is being presented for the very first time in front of a specialist audience. In addition to its application in the quality control of electroplating processes, the system can also be adjusted for other applications such as process measuring technologies and analytical equipment. It can be adapted to all processes where the monitoring of threshold values is possible to ensure the quality of liquids. These include process and quality monitoring systems for food technology, environmental analysis or semiconductor industry.

In addition, Fraunhofer ENAS shows further research and development results, such as sensors, components and technologies for medical and optical systems, at its booth (no 11-E) in hall 7. Furthermore, the institute works in a close cooperation with the Tanaka Lab at the Tohoku University in Sendai. Dr. Mario Baum from the department System Packaging of Fraunhofer ENAS speaks about »MEMS and NEMS Technologies for a Smart World« at the International Micromachine Nanotech Symposium on October 6, 2017.

IN COOPERATION WITH

www.shinko.co.jp**Editors**

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Optical sensor system for monitoring of electroplating processes.
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