

Over the last years, the European Conference on Smart Objects, Systems and Technologies (former European Workshop on Smart Objects) has become a central platform in Europe for personal networking and information exchange in the field of RFID technologies and applications.

Conference SCOPE

While the networking of objects for the purpose of data collection and distributed control is no longer a recent phenomenon, the sheer number of things that are networked to information systems has dramatically risen. Today, the Internet is increasingly extended to all kinds of physical assets: product components, finished products, logistic units, equipment, documents, vehicles, buildings and electronic meters as well as embedded systems of all kind. Mature industries, like the energy or automotive are in euphoric mood and accordingly, we see enormous research and technological development activity: For instance, Auto-ID technologies such as RFID are being increasingly combined with data storage capacity and sensors or other communication devices that provide real-time data such as position, temperature, pressure, vibrations etc. These special-purpose computer systems are able to sense information from the real world or perform actions upon it and are also able to communicate with other networked computer systems.

Accepted papers will be published in the IEEE Xplore® Digital Library.

Conference Venue

Maria-Reiche-Str. 2, 01109 Dresden, Germany
Local organizer: Fraunhofer Institute for Photonic Microsystems (Fraunhofer IPMS)

Conference Fee / Registration

The conference fee:	for participants	250.00 €
	for speakers	225.00 €
	for students	150.00 €

Conference fee includes: Conference attendance for both days, proceedings (CD-ROM), coffee breaks, lunch, social event.

For online registration please visit our website. You will be able to find continuously updated information on www.smart-systech.eu.

For further information feel free to contact info@smart-systech.eu

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Responsibilities

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PROGRAM

Smart SysTech 2018

European Conference on
Smart Objects, Systems and
Technologies

12.06. – 13.06.2018

Dresden, Germany
Fraunhofer Institute for Photonic
Microsystems (Fraunhofer IPMS)



Tuesday, 12.06.2018	
09:00	Registration & Welcome
10:00	Conference Opening
10:30	Keynote #1 High performance mm-Wave and THz-technologies for smart systems Prof. Dr. rer. nat. Andreas Mai Department Head Technology IHP
11:30	Lunch Break
	Session 1: Sensor Networks & Internet of Things
12:30	SHM of Concrete Bridge Structures using Wireless Sensor Networks S.H. Ali, National University of Sciences & Technology, Islamabad, Pakistan
12:55	Wireless Sensors for Industry 4.0 – Wireless Communication and Wireless Powering H.C. Müller, Fraunhofer IMS, Duisburg, Germany
13:20	Smart Grid Data Classification with Deep Networks Ö. Özdemir, Pázmány Péter Catholic University, Budapest, Hungary
13:45	LoRaWAN for IoT Applications in Air Cargo O. Poenicke, Fraunhofer IFF, Magdeburg, Germany
14:10	Coffee Break
15:30	Tour Group 1 @ Industrial IoT Test Bed, HTW Dresden
16:35	Tour Group 2 @ Industrial IoT Test Bed, HTW Dresden
19:30	Social Event @ Dresden 1900

Wednesday, 13.06.2018	
Registration & Welcome	08:00
Session 2: Technologies & Architectures I	
HF RFID Card Optimization Regarding the IC's Non-Linearity S. Rizkalla, TU Wien, Austria	08:35
Read Rate Optimization of an RFID Tunnel Gate by Using the Concept of an Electromagnetic Reverberation Chamber With Different Q Factors S. Schwarz, Fraunhofer IFF, Magdeburg, Germany	09:00
Realization and Measurements of a Novel Dual Frequency Circulator for POW-RFID P. Kuhn, Fraunhofer IMS, Duisburg, Germany	09:25
A Channel Sounding System for Highly Interfered License-Exempt Frequency Bands J. Robert, FAU Erlangen-Nürnberg, Erlangen, Germany	09:50
Coffee Break	10:15
Keynote #2 Enabling IoT – The Smart Systems Hub Dr. Patrick Grosa Head of Research & Technology Transfer of the HTSB	
Session 3: Technologies & Architectures II	
Analog Frontend for Ultra Low Power 60-GHz RFID Tag for Back-Scattering Communication A. Harutyunyan, Fraunhofer IPMS, Dresden, Germany	11:45
A comparison of several ASK modulator techniques for SHF Reader implementation E.E. Bektas, Fraunhofer IMS, Duisburg, Germany	12:10
Lunch Break	12:35
Session 4: Cyber-Physical Systems	
Machine Learning Based Indoor Localisation Using Environmental Data in PhyNetLab Warehouse M. Masoudinejad, TU Dortmund, Dortmund, Germany	13:35
Smart Self-Sufficient Wireless Current Sensor A. Hennig, Fraunhofer IMS Duisburg, Germany	14:00
A GUI-based Platform for Quickly Prototyping Server-side IoT Applications T. Nepomuceno, Fraunhofer SCS, Germany	14:25
Blockchain Cloud Manufacturing: Shop Floor and Machine Level A. Vatankhah Barenji, Guangdong University of Technology, Guangzhou, China	14:50
Coffee Break	15:15
Closing Session	15:45