

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

Sandtorstraße 22, 39106 Magdeburg, Germany

Local organizer: Fraunhofer Institute for Factory Operation and Automation (Fraunhofer IFF)

### 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, 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](http://www.smart-systech.eu).

For further information feel free to contact [info@smart-systech.eu](mailto:info@smart-systech.eu)

### Programme Committee

- Peter Altes (AIM-D e.V., Germany)
- Frank Deicke (Fraunhofer-IPMS, Dresden, Germany)
- Andrés García Higuera (UCLM, Ciudad Real, Spain)
- Christian Gorldt (BIBA Bremen, Germany)
- Manfred Glesner (University Darmstadt, Germany)
- Klaus Finkenzeller (Giesecke & Devrient Munich, Germany)
- Thomas Hollstein (Tallinn University of Technology, Estonia)
- Andreas Löffler (Continental AG, Germany)
- Klaus Richter (Fraunhofer IFF, Germany)
- Joerg Robert (FAU Erlangen-Nuremberg, Germany)
- Klaus-Dieter Thoben (BIBA Bremen, Germany)
- Dieter Uckelmann (Hochschule für Technik Stuttgart, Germany)
- Gerd vom Bögel (Fraunhofer IMS, Germany)
- Michael E. Wernle (Meshed Systems Munich, Germany)
- Uwe Wissendheit (IR-Systeme GmbH Hassfurt, Germany)
- Jürgen Wöllenstein (IMTEK and Fraunhofer IPM, Germany)

### Responsibilities

**Conference General Chair:** Thomas Hollstein, Jens Strüker,  
Uwe Wissendheit, Andreas Löffler  
Email: [organisation@smart-systech.eu](mailto:organisation@smart-systech.eu)

**Program Chair:** Andreas Löffler  
Email: [program@smart-systech.eu](mailto:program@smart-systech.eu)

**Industrial Chair:** Klaus Finkenzeller, Holger Ziekow  
Email: [industrial@smart-systech.eu](mailto:industrial@smart-systech.eu)

**Local Chair:** Prof. Michael Schenk  
Email: [local@smart-systech.eu](mailto:local@smart-systech.eu)

### Cooperations



### Sponsors



### Media Partners



### Partners



ITG INFORMATIONSTECHNISCHE  
GESELLSCHAFT IM VDE

SMART  
SysTech

## PROGRAM

# Smart SysTech 2019

European Conference on  
Smart Objects, Systems and  
Technologies

04.06. – 05.06.2019

Magdeburg, Germany  
Fraunhofer Institute for Factory Operation and  
Automation (Fraunhofer IFF)



## Tuesday, 04.06.2019

09:00	Registration
10:00	Conference Opening
10:30	<b>Keynote #1</b> <b>Mobile Sensor System for Logistics Aspects</b> Hon.-Prof. Dr.-Ing. Klaus Richter, Fraunhofer IFF
	<b>Session 1: Smart Objects</b>
11:20	<b>Online Data Acquisition and Analysis Using Multi Sensor Network System for Smart Manufacturing</b> H. Ohannessian, Business Unit of Measurement and Testing Technology, Fraunhofer Institute for Factory Operation and Automation IFF, Magdeburg, Germany
11:45	<b>Intelligent IoT Maintenance of Belt Conveyors using LoRaWAN</b> C. Richter Institute of Logistics and Material Handling Systems University Magdeburg "Otto-von-Guericke" Magdeburg, Germany
12:10	Lunch Break
	<b>Session 2: RFID &amp; NFC</b>
13:10	<b>Automated Dynamic Storage Allocation in the Industrial Laundry Sector using RFID</b> M. Matke, Logistics and Factory Systems, Fraunhofer IFF, Magdeburg, Germany
13:35	<b>Influence on an Electrically Small UHF RFID Split Ring Resonator Antenna by Biocompatible Conformal Thin and Thick Film Coatings</b> V.M.K. Werner, Institute of Medical and Polymer Engineering Technical University of Munich Garching, Germany
14:00	<b>A Novel Automated NFC Interoperability Test and Debug System</b> M. Erb, Institute of Technical Informatics, Graz University of Technology, Austria
	<b>Session 3: Smart Sensors</b>
14:25	<b>Discussions on sensor-based Assistance Systems for Forklifts</b> L. Cao Institute of Logistics and Material Handling Systems, Otto von Guericke University, Magdeburg, Germany
14:50	<b>User acceptance and Usability of a home based gait analysis system</b> S. Stoutz, Chair of Health and Physical Activity, Institute III/Department Sport Science, Otto von Guericke University, Magdeburg, Magdeburg, Germany
15:15	Coffee Break
15:45	Lab Tour Experimental Factory <a href="http://www.exfa.de">www.exfa.de</a>
18:30	Social Event

## Wednesday, 05.06.2019

Registration	08:00
<b>Session 4: Industry 4.0</b>	
<b>Corporate Social Responsibility Challenges and Risks of Industry 4.0 technologies: A review</b> D.O. Mora Sanchez, Faculty of Engineering Sciences and Industries, Universidad UTE, Quito, Ecuador	08:35
<b>Grinding Burn Prediction with Artificial Neural Networks based on Grinding Parameters</b> C. Reser, Institute for Cloud Computing and IT Security, Furtwangen University of Applied Science, Furtwangen, Germany	09:00
<b>Companion Specifications for Smart Factories: From Machine to Process View</b> C. Engel, XITASO Engineering GmbH, Magdeburg, Germany	09:25
<b>Engineering Model Linking and Ontology Linking for Production</b> S. Adler, Virtual Engineering, Fraunhofer Institute of Factory operation and automation, Magdeburg, Germany	09:50
Coffee Break	10:15
<b>Session 5: ITS &amp; Localization</b>	
<b>Non-Line of Sight Detection by Temporal Channel Impulse Response Tracking</b> P. Le, Research and Development, metraTec GmbH, Magdeburg, Germany	10:45
<b>Development of an ITS-G5 Road Side Unit for Intelligent Transportation Systems</b> R.E. Carsjens, Innovation Lab (IL), Thorsis Technologies GmbH, Magdeburg, Germany	11:10
<b>Simulation Software for Radio Wave Propagation in V2X-applications</b> J. Klemme, Innovation Lab (IL), Thorsis Technologies GmbH, Magdeburg, Germany	11:35
Lunch Break	12:00
<b>Keynote #2</b> <b>Augmented Poetry</b> Herbert Beesten, Head of tarakos GmbH	13:00
<b>Session 6: Smart Logistics</b>	
<b>Survey of Depth Cameras for Processintegrated State Detection in Logistics</b> M. Riestock, Institute for Intelligent Cooperating Systems, Otto von Guericke University, Magdeburg, Germany	13:45
<b>Image Processing in Logistics - Considerations on the Role of Intelligence</b> H. Borstell, Otto von Guericke University, Magdeburg, Germany	14:10
<b>Planning Method for IoT applications in Logistics</b> O. Poenicke, Material Handling Engineering and Systems, Fraunhofer Institute for Factory Operation and Automation IFF, Magdeburg, Germany	14:35
Coffee Break	15:00
Closing Session	15:30