

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 electronical 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.

■ Conference Venue

RFID-Anwenderzentrum München, Boltzmannstr. 15, Munich, Germany
Local organizer: Technische Universität München,
RFID-Anwenderzentrum München

■ Conference Fee / Registration

The conference fee:	for participants	250,00 €
	for speakers	225,00 €
	for students	150,00 €

Conference fee includes: Conference attention for both days, 1 copy proceedings (CD-ROM), Coffee-breaks, Lunch-snack, Social event.

Opening of registration: **16.04.2012**. For online registration please visit our website.

You will be able to find continuously updated information under:

www.smart-systech.eu

For further general information please feel free to contact:

info@smart-systech.eu

■ Programme Committee

- ☆ Frank Deicke (Fraunhofer-IPMS, Dresden, Germany)
- ☆ Andrés García Higuera (UCLM, Ciudad Real, Spain)
- ☆ Christian Gorldt (BIBA Bremen, Germany)
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- ☆ Jürgen Wöllenstein (IMTEK and Fraunhofer IPM, Germany)
- ☆ Holger Ziekow (AGT Group (R&D) GmbH, Germany)

■ Responsibilities

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SMART
SysTech

PROGRAM

Smart SysTech 2012

European Conference on
Smart Objects, Systems and
Technologies

12.06. – 13.06.2012
Munich / Germany
Technische Universität München
RFID-Anwenderzentrum München

RFID))) AZM

Technische Universität München

VDE

Tuesday, 12.06.2012

08:00	<i>Registration</i>	
09:00	Conference Opening Smart SysTech Organisation Team	
09:10	Conference Welcome Erwin Biebl, RFID-Anwenderzentrum	
09:35	Industrial Presentations Chair: M.E. Wernle, Meshed Systems, Munich, Germany	
10:05	Keynote #1: IoT and Cyber Physical Systems – Building Blocks for the Future Internet Werner Mohr, Head of Research Alliances, Nokia Siemens Networks GmbH & Co. KG	
11:05	<i>Coffee Break / Industrial Exhibition</i>	
	Session 1: Security Chair: F. Deicke	
11:30	RFID Jamming and Attacks on Israeli e-Voting D. Schirman, School of Electrical Engineering, Tel-Aviv University, Israel	
11:55	Theoretical Limits of ISO/IEC 14443A RFID Eavesdropping Attacks F. Pfeiffer, perisens GmbH, Munich, Germany	
12:20	<i>Lunch / Industrial Exhibition</i>	
	Session 2: Localisation Chair: E. Schmidt	Session 3: Logistics Chair: F. Michahelles
13:20	Dispersion Effects at High Bandwidth Localization for UHF RFID Tags A. Löffler, University of Erlangen-Nuremberg, Germany	Reliable Scanning of Tagged Special Containers with RFID Electro-magnetic Reverberation D. Werthmann, BIBA, Bremen, Germany
13:45	Localization of Passive UHF RFID Tagged Goods with Monopulse Method for a Logistic Application C. Loibl, Technische Universität München, Germany	Evaluation of Feature Attributes for an RFID Conveyor Belt Application using Probabilistic Models M. Goller, Enso-Detego GmbH, Graz, Austria
14:10	Machine Learning Assisted Position Detection of UHF RFID Tags F. Willnecker, Technische Universität München, Germany	Comprehensive Traceability System of Milk Samples Using RFID A. G. Higuera, University of Castilla-La Mancha, Spain
14:35	<i>Coffee Break / Industrial Exhibition</i>	
	Session 4: Special RFID Systems Chair: A. Löffler	
15:00	Integrating RFID Transponders into Fibre-Reinforced Plastics by Using Textile Production Technology T. Philipp, Technische Universität München, Germany	
15:25	Improving Energy Efficiency for Small-Scale Solar Energy Harvesting T. Gädeke, Karlsruhe Institute of Technology (KIT), Germany	
15:50	Low Frequency Reader Design Approach for Metallic Environments R. Jacobi, Fraunhofer Institute for Microelectronic Circuits and Systems IMS, Germany	
16:30	<i>Experimental Test Bay Tour at RFID-AZM</i>	
18:00		
20:00	<i>Social Event/Dinner</i>	

Wednesday, 13.06.2012

<i>Registration</i>		08:00
Session 5: Anti-Collision Chair: K. Finkenzeller		Session 6: Sensor Tags Chair: A. G. Higuera
Forward Error Correction in Long-Range RFID Systems A. Schantin, University of Siegen, Germany	Low-power UHF-RFID Sensor Tags for a Complete Monitoring and Traceability of the Cold Chain I. Schumacher, Fraunhofer IPM, Germany	09:00
Performance of BCH Codes and Transmit Diversity for MISO UHF RFID Communication G. Smietanka, TU Dortmund University, Germany	Rapid Prototyping System for RFID Sensing Applications R. Kanan, University of Applied Sciences HES-SO Valais, Switzerland	09:25
A Robust RFID Inventory Y. Glouche, INRIA, France	Implantable RFID Sensor Platform to Monitor Vital Functions of Small Animals Controlled by Network Based Software T. Volk, Offenburg University of Applied Sciences, Germany	09:50
Pseudorandom Noise based Channel Coding Scheme for Tag to Reader Communication in UHF-RFID Systems S. Grey, Fraunhofer IMS, Germany	A Passive Novel Transponder for Monitoring Leakage in Silicone Breast Implants by Using RFID ISO 15693 M. Bhattacharyya, Offenburg University of Applied Sciences, Germany	10:15
<i>Coffee Break / Industrial Exhibition</i>		10:40
Keynote #2: Smart Home - Status and Future Development Thomas Prokopp, RWE Effizienz GmbH		11:05
<i>Lunch / Industrial Exhibition</i>		12:05
Session 7: Measurement and Design in Smart Object Systems Chair: U. Wissendheit		Session 8: Economic Aspects in Smart Object Systems Chair: T. Hollstein
Dual-Feed On-Metal Antenna Design for High-Performance, Radio-Powered UHF RFID Sensors M. Fliieger, HTW Saarland - University of Applied Sciences, Germany	Value Creation in Pharmaceutical Supply Chains using Customer-Centric RFID Applications T. Engel, Technische Universität München, Germany	13:05
EMI Susceptibility Analysis of RFID cards R. Prestros, NXP Semiconductors, Austria	User-centred Development of a Wireless Sensor Network-based Asset Management System for Mobile Measurement Devices H. Preiss, Fraunhofer IIS, Germany	13:30
<i>Coffee Break / Industrial Exhibition</i>		13:55
Wireless RFID Chip Impedance Measurement by Using an Reader and a Statistically Analysis M. Heiss, Fraunhofer IPMS, Germany	Added Value Services for Smart Transport Systems: Case ALETHEIA Project E. Arratia-Scheit, Fraunhofer IIS, Germany	14:20
Tariff Settings for Smart Home Area Networks V. Radonjic, University of Belgrade, Serbia	Radio Frequency Identification (RFID) Technologies for Locating Warehouse Resources: A Conceptual Framework M. Hassan, Brunel University, United Kingdom	
<i>Closure of the Conference</i>		15:15
<i>Conference End</i>		15:30