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

Fraunhofer IIS, Am Wolfsmantel 33, Erlangen, Germany
Local organizer: Fraunhofer Institute for Integrated Circuits IIS

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.
Opening of registration: **16.04.2013**. 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*

Programme Committee

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

Responsibilities

Conference General Chair:	Thomas Hollstein, Jens Strüker, Uwe Wissendheit
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Program Chair:	Andreas Löffler, Frank Deicke
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Industrial Chair:	Erwin Schmidt, Holger Ziekow
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Local Chair:	Alexander Pflaum
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Tuesday, 11.06.2013

Time	Event
08:00	*Registration*
09:00	**Conference Opening** Smart SysTech Organisation Team
09:10	**Conference Welcome** Jürgen Hupp, Fraunhofer IIS
09:35	**Industrial & Poster Presentations** Chair: Erwin Schmidt, Pepperl + Fuchs GmbH, Germany
10:05	**Keynote #1: Innovations for Growth** Markus Weinländer, Head of Product Management SIMATIC Ident, Siemens AG & Member of the Board AIM Germany
10:55	*Coffee Break / Industrial & Poster Exhibition*
	Session 1: Cyber-Physical Systems Chair: A. Löffler
11:20	**Threat Modeling Smart Metering Gateways** T. Voß, softScheck GmbH, Germany
11:45	**Low-Cost Wireless System for Measuring Energy Efficiency in Industry** A. García-Higuera, University of Castilla-La Mancha, Spain
12:10	**Agent-based Control for Material Handling Systems in In-House Logistics: Towards Cyber-Physical Systems in In-House-Logistics** D. Werthmann, University of Bremen / LogDynamics Lab, Germany
12:35	*Lunch / Industrial & Poster Exhibition*
	Session 2: Sensors & Antennas Chair: E. Schmidt
13:35	**Analysis of a Patch Array Dielectric Lens Antenna for Mobile Applications** K. Ganapathy, University of Erlangen-Nürnberg, Germany
14:00	**High-Temperature UHF RFID Sensor Measurements in a Full-Metal Environment** R. Hildebrandt, Fraunhofer IPMS, Germany
14:25	**Characterization of UHF RFID Sensor Tags with Electromagnetically Coupled Passive Sensors** J. Gao, Mid Sweden University, Sweden
14:50	*Coffee Break / Industrial & Poster Exhibition*
	Session 3: Security Chair: T. Hollstein
15:15	**Extending ISO/IEC 14443 Type A Eavesdropping Range using Higher Harmonics** M. Engelhardt, Technische Universität München, Germany
15:40	**Identity-Based Authentication to Address Relay Attacks in Temperature Sensor-enabled Smartcards** S. Piramuthu, University of Florida, United States
17:00	*Tour at Test and Application Center L.I.N.K. (in Nuremberg) / Bus from Fraunhofer IIS (conference venue)*
19:15	*Social Event/Dinner in Nuremberg (see Location on www.smart-systech.eu)*
23:00	*Bus back to Erlangen (conference venue)*

Wednesday, 12.06.2013

Event	Time
Registration	08:00
Session 4: Smart Objects I Chair: T. Hollstein	
A Web-of-Things Gateway for KNX Networks G. Bovet, Telecom ParisTech, France	09:00
Web Services Framework for Power Quality Monitoring F. J. Gômez, Control Engineering and Intelligent Systems, Universitat de Girona, Spain	09:25
Improved Coverage for Low-Power Telemetry Systems using Telegram Splitting G. Kilian, Fraunhofer IIS, Germany	09:50
A Novel Smart Home Application Using an Internet of Things Middleware A. Messias da Costa Souza, Cruzeiro do Sul University, Brazil	10:15
Coffee Break / Industrial & Poster Exhibition	10:40
Keynote #2: Energy Harvesting Powered Wireless Sensors and Actuators Frank Schmidt, CTO EnOcean GmbH, Germany	11:05
Session 5: Localization Chair: G. vom Bögel	
Stochastic and Deterministic Broadband UHF RFID Channel Models for Indoor Localization A. Löffler, University of Erlangen-Nürnberg, Germany	11:50
Analysis of the Radio Propagation Model at RFID Applications O. Friedewald, University of Applied Sciences Magdeburg-Stendal, Germany	12:15
Lunch / Industrial & Poster Exhibition	12:40
Session 6: Production & Manufacturing Chair: A. García-Higuera	
Structural Modeling of a RFID-enabled Reconfigurable Architecture for a Flexible Manufacturing System R. Vatankhahbarenji, Eastern Mediterranean University, Turkey	13:40
Systematisation of Smart Objects in Production and Logistics Applications M. Deindl, RWTH Aachen University, Germany	14:05
Coffee Break / Industrial & Poster Exhibition	14:30
Session 7: Smart Objects II & Ethical Aspects Chair: U. Wissendheit	
A NFC-based Concept for Medication Related Patient Services T. Engel, Technische Universität München, Germany	14:55
The Effect of the Flows of Information on Residential Electricity Consumption: Feasibility Study of Smart Metering Pilot in Latvia I. Laicane, Riga Technical University, Latvia	15:20
Ethical Implications of RFID and Internet of Things seen from a Christian Perspective E. Schmidt, Pepperl + Fuchs GmbH, Germany	15:45
Closing Session Smart SysTech Organisation Team	16:15
Conference End	16:30