

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 IML, Joseph-von-Fraunhofer-Str. 2-4, Dortmund
Local organizer: Fraunhofer Institute for Material Flow and Logistics IML

■ 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: 20.04.2014. 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 Gorltd (BIBA Bremen, Germany)
- Manfred Glesner (University Darmstadt, 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
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PROGRAM

Smart SysTech 2014

European Conference on
Smart Objects, Systems and
Technologies

01.07. – 02.07.2014
Dortmund, Germany
Fraunhofer Institute for Material Flow
and Logistics IML



Tuesday, 01.07.2014

08:00	Registration
09:00	Conference Opening Smart SysTech Organisation Team
09:10	Conference Welcome
09:35	Industrial & Poster Presentations
	Session 1: Energy Harvesting Chair: U. Wissendheit
09:50	An Evaluation of Energy Harvesting for Smart UHF RFID Tags I. Mayordomo, Fraunhofer IIS, Germany
10:15	Energy self-sufficient sensor nodes for the detection of gaseous hazardous substances in case of disaster S. Rademacher, Fraunhofer IPM, Germany
10:40	Wireless Sensor System for Industrial Applications Powered by Thermoelectric Generator F. Meyer, Fraunhofer IMS, Germany
11:05	Coffee Break / Industrial & Poster Exhibition
11:30	Keynote #1: Logistics 4.0 Prof. Dr. Michael ten Hompel (Director of Fraunhofer IML, Dortmund, Germany)
12:30	Lunch / Industrial & Poster Exhibition
	Session 2: Software Defined RFID Systems Chair: A. García Higuera
13:30	A Study of Software Defined Radio Receivers for Passive RFID Systems H. Salah, FAU Erlangen-Nürnberg, Germany
13:55	Hybrid Extension of a Flexible Software Defined RFID Reader M. Warnke, TU Dortmund, Germany
14:20	Fraunhofer IML
16:00	DASA Dortmund
20:00	Social Event/Dinner

Wednesday, 02.07.2014

08:00	Registration
	Session 3: Navigation & Safety Chair: A. Löffler
08:30	Navigation for Occupational Safety in Harsh Industrial Environments F. Hartmann, KIT, Germany
08:55	Safety Wristband for Active Security Network A. García Higuera, University of Castilla – La Mancha, Spain

	Session 4: Communication Technologies Chair: A. Löffler	
	An Efficient RFID Tag Estimation Method Using Biased Chebyshev Inequality for Dynamic Frame Slotted ALOHA H.A. Ahmed, FAU Erlangen-Nürnberg, Germany	09:20
	Analysis of Average Outage Probabilities in a Finite, Centralised Radio Network with Slotted Random Access H. Lieske, FAU Erlangen-Nürnberg, Germany	09:45
	Coffee Break / Industrial & Poster Exhibition	10:10
	Session 5: Smart Grids Chair: J. Strueker	
	Novel Consumer Classification Scheme for Smart Grids K. Tornai, Pázmány Péter Catholic University, Hungary	10:40
	Development of an Algorithm to Control and Optimize the Coordinated Charging Process of a Group of Electric Vehicles R. Torabi, University of Coimbra, Portugal	11:05
	Session 6: Smart Systems Chair: U. Wissendheit	
	An Integrated Embedded Solution for Driving Support M. Tufo, University of Sannio, Italy	11:30
	Controlling Smart Objects from Web Applications using the Webinos Platform G. La Torre, University of Catania, Italy	11:55
	Lunch / Industrial & Poster Exhibition	12:20
	Session 7: Cyber-Physical Systems Chair: A. Löffler	
	Unleashing the Power of Events out of Smart Transport Items M. Stockmann, Fraunhofer IML, Germany	13:20
	Event-Driven Production Control based on Sensor Events S. Kropp, FIR at RWTH Aachen, Germany	13:45
	1.5 Billion Events a week – a statistical assessment for smart transport items in German FMCG supply chains P. Wrycza, Fraunhofer IML, Germany	14:10
	Coffee Break / Industrial & Poster Exhibition	14:30
	Session 8: Smart Objects Chair: G. vom Boegel	
	Using the RFID Wristband for Automatic Identification in Manual Processes O. Poenicke, Fraunhofer IFF, Germany	14:55
	Detecting Smart Plug Configuration Changes in Smart Homes A. Leonardi, AGT International, Germany	15:20
	Smart Flight Case R.C. Jacobi, Fraunhofer IMS, Germany	15:45
	Closing Session Smart SysTech Organisation Team	16:10
	Conference End	16:30