

Call for Papers

Smart SysTech 2012

European Conference on Smart Objects, Systems and Technologies
(former RFID-SysTech)

June 12 to June 13, 2012
RFID-Anwenderzentrum
Munich, Germany

RFID))) AZM

<http://www.smart-systech.eu/>

Accepted contributions will be published in the VDE conference proceedings and in the IEEE *Xplore*® Digital Library.

Over the last seven years, the *European Workshop on RFID Systems and Technologies* (RFID SysTech) had become a central platform in Europe for personal networking and information exchange in the field of smart object technologies and applications. Based on this great success we are now proud to announce the first *Smart-SysTech - European Conference on Smart Objects, Systems and Technologies* to be held in Munich from June 12th to June 13th. This change is accompanied by an extension of our main topic. While RFID remains one of the cornerstones, we open the focus of the event. This is due to the fact that AutoID technologies and the “Internet of Things” have grown together to advanced networked “Smart Objects” technologies.

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.

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The resulting integration into existing business processes and IT infrastructures under the side condition of enabling an interaction between intelligent objects and business applications within and between enterprises in a generic, flexible and scalable manner is a considerable challenge. At the same time, the economic potential is promising and will also help enterprises to address completely new challenges in the area of sustainability and energy management, home automation and demand respond: Interacting with smart devices will ensure that enterprises get correct, auditable trails for sustainability metrics or billing information for recharging electric cars. However, business-to-business integration solutions such as the EPCglobal network or other bilateral approaches have to be developed further in order to meet the supporting requirements.

The specific profile of this conference is to examine both the technology and economic aspects:

- the latest achievements in technologies and systems for smart objects
- their integration into information systems and business processes and
- their business value.

Scientists and practitioners from the fields of electrical engineering, computer science and information systems will find an excellent opportunity to participate in interdisciplinary discussions, set up new networks and exchange information on a professional level. In addition to the conference and a poster session, an industrial exhibition and demo session presenting the latest innovations will be held.

Topics of Interest

Smart Objects and Technologies:

- Embedded Smart Objects
- RFID Transponder/NFC Technologies and Architectures
- Ultra Low Power Concepts
- Distributed Intelligence
- Sensors and Actuators
- Printed Electronics and New Materials
- Smart Object Manufacturing Technologies

Smart Objects and Communication:

- Wireless Networks: Technologies and Auto-configuration
- Sensor Networks
- Smart Dust
- Communication Protocols and Service Abstraction
- Standardization and Regulatory Issues
- Antenna Design and Air Interface
- Anti-collision schemes
- Propagation & Channel Modeling



System Design and Integration:

- Smart Objects and Applications
- Internet of Things
- AutoID System Design
- ID and Sensors in Cloud Computing
- System Modeling
- System Security
- Privacy Concepts
- Cryptographic Methods
- Middleware and Databases
- Dependable Systems (System Reliability)
- Positioning and Localization

Economic, Security and Sociologic Aspects of Smart Objects:

- Logistics and Supply Chain Management (e.g., Tracking and Tracing)
- Manufacturing Control
- Cooperative data processing
- Industrial Process Automation
- Health Care, Pharmaceutical
- Business Value and Performance Measurement
- Business Models
- Security and Privacy
- Sociological Aspects and Technology Acceptance
- Home Automation
- Smart Metering and Smart Grid
- Energy- and Sustainability Management
- Demand Respond Solutions

Submission

All submissions (full papers) must follow the guidelines given under: http://www.smart-systech.eu/html/call_for_papers.html. Accepted scientific contributions will be published in the VDE conference proceedings and in the IEEE *Xplore*®.

Paper submission due:	Feb. 6, 2012
Notification of acceptance:	March 26, 2012
Publication-ready versions due:	April 24, 2012
Posters, demos, videos submissions due:	April 24, 2012