

## PROGRAM

# RFID SysTech 2007

## 3<sup>rd</sup> European Workshop on RFID Systems and Technologies

- 12.06. – 13.06.2007
- Duisburg – Fraunhofer IMS

## VDE/ITG Focus Project RFID



After successful accomplishment of two workshops in 2005 and 2006 and very positive feedback from Industry and Academia, the

## 3<sup>rd</sup> Workshop on RFID Systems and Technologies

will be offered in 2007 from 12.06.2007 to 13.06.2007.

The Workshop will offer an enhanced program with invited and reviewed presentations from industry and universities. The specific profile of this workshop is to present the latest achievements in RFID technologies and systems and to setup cooperation partnerships for leadership in RFID technologies.

### Location

Fraunhofer Institute for Microelectronic Circuits  
and Systems (IMS)

Finkenstr. 61  
47057 Duisburg  
Phone: +49-203-3783-0  
<http://www.ims.fraunhofer.de>

### Registration

By Fax: VDE-Concerns Service  
Fax: +49-(0)69 96 31 52 13

By E-Mail: [vde-conferences@vde.com](mailto:vde-conferences@vde.com)

Online: [www.rfid-systech.org/](http://www.rfid-systech.org/)

Opening of registration: 23.05.2007

### Conference Fee

The conference fee: 195,- EUR

### Industrial exhibition

An industrial exhibition is presented during the workshop breaks.

### Further Information

Permanently updated information on paper formats, the workshop program, registration fee and location you will be able to find under:

[www.rfid-systech.org/](http://www.rfid-systech.org/)

For further common information please feel free to contact:

Uwe Wissendheit ([submissions@rfid-systech.org](mailto:submissions@rfid-systech.org))

Thomas Hollstein ([organisation@rfid-systech.org](mailto:organisation@rfid-systech.org))

### Program Committee

**Local Chair:** Stephan Kolnsberg

Phone: +49-203-3783-202

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**Programme Chair:** Uwe Wissendheit

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**Industrial Chair:** Michael E. Wernle

Phone: +49-89-6666 5124

E-Mail: [exhibition@rfid-systech.org](mailto:exhibition@rfid-systech.org)

**Organisational Chair:** Thomas Hollstein

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E-Mail: [organisation@rfid-systech.org](mailto:organisation@rfid-systech.org)

### Program Committee Members

Manfred Glesner (TU Darmstadt)

Klaus Hecker (oe-a/VDMA Frankfurt)

Thomas Hollstein (TU Darmstadt)

Stephan Kolnsberg (Fraunhofer-IMS Duisburg)

Harmut Pohl (FH Bonn)

Erwin Schmidt (Pepperl + Fuchs, Mannheim)

Ulrich Waldmann (Fraunhofer-SIT, Darmstadt)

Michael E. Wernle (Meshed Systems, Munich)

Uwe Wissenheit (University Erlangen)

### Cooperation

Organic Electronics Association (VDMA)

[www.oe-a.org](http://www.oe-a.org)

# Program

## Tuesday, 12.06.2007

**09:00 Registration**

**10:00 Workshop opening**  
(T. Hollstein, S. Kolnsberg, U. Wissendheit)

**10:10 Introduction to Fraunhofer IMS**  
(A. Grabmaier)

**10:30 Uniqueness & Interoperability for AutoID supported Systems (Invited)**  
(H. Oehlmann, EUrodatacouncil, Naumburg, Germany)

**11:15 Coffee Break / Industrial exhibition**

### Session 1: RFID-Systems and System Design

**11:45 Planning and Analysis of UHF RFID Systems for Consumer Goods Logistics Using Ray Tracing Predictions**  
(P. Bosselmann, RWTH Aachen, Germany)

**12:10 Mobile Multi-Purpose RFID System**  
(R. Falk, Siemens AG, Munich, Germany)

**12:35 NFC is the Double-Click in the Internet of the Things**  
(F. Graeber, NXP Semiconductors GmbH, Hamburg, Germany)

**13:00 Lunch / Industrial exhibition**

**14:15 Design Methodology of a Voltage Multiplier for Full Passive Long Range UHF RFID**  
(A. Vaz, CEIT, San Sebastian, Spain)

**14:40 Design and Analysis of a Complete RFID System in the UHF Band focused on the Backscattering Communication and Reader Architecture**  
(I. Mayordomo, TECNUN, San Sebastian, Spain)

**15:05 Modelling of HF and UHF RFID Technology for System and Circuit Level Simulations**  
(O. Soffke, MES, TU Darmstadt, Germany)

**15:30 Coffee Break / Industrial exhibition**

### Session 2: RFID-Sensors and Positioning

**16:00 Developments in sensorised smart RFID Tags: Monitoring and Traceability of sensitive Products**  
(J.G. Sanchez, University of Castilla La-Mancha, Spain)

**16:25 Optimal Impedance Matching in Passive UHF RFID Sensors**  
(R. Morales-Ramos, Fraunhofer IIS, Erlangen, Germany)

**16:50 Position Localization for Object Management with the Aid of Passive RFID Tags**  
(F. Meyer, Fraunhofer IMS, Duisburg, Germany)

**17:15 End of the first Day's Sessions**

**17:30 Excursions on Fraunhofer IMS**

**20:00 Social Event**

## Wednesday, 13.06.2007

**09:00 Economic Considerations for RFID Systems: from Application Ideas to running practical Applications (Invited)**  
(A. Pflaum, Fraunhofer IIS, Fuerth, Germany)

### Parallel session 3A: Transponders and Materials

**09:45 Predicting the Influence of permittive Materials on passive inductive coupled RFID Transponders**  
(S. Cichos, Germany)

**10:10 RFID in metallic Environment**  
(J. Bernhard, Fraunhofer IIS, Erlangen, Germany)

**10:35 Coffee Break / Industrial exhibition**

**11:15 New Properties of RFID Transponders on Metal with Microstrip Antennas**  
(O. Meriläinen, Jyskä, Finland)

**11:40 Printed Electronics – From Vision to first Products**  
(J. Ficker, PolyIC, Fuerth, Germany)

**12:30 Lunch / Industrial exhibition**

### Parallel session 3B: Security and Privacy

**09:45 Data Security in RFID on Item Level**  
(M. Auerbach, RWTH Aachen, Germany)

**10:10 Data-on-Tag: An Approach to Privacy friendly Usage of RFID Technologies**  
(K. Werner, SAP Research CEC Dresden, Germany)

**10:35 Coffee Break / Industrial exhibition**

**11:15 Implementing high-level Counterfeit Security using RFID and PKI**  
(A. Wallstabe, University of Applied Sciences Bonn-Rhein-Sieg, St. Augustin, Germany)

**11:40 Security Challenges for RFID Key Applications**  
(U. Waldmann, Fraunhofer SIT, Darmstadt, Germany)

**12:05 RFID Usage in Retail beyond the Point of Sale – Temporary Deactivation as a Solution for Challenges in Privacy and Security**  
(C. Wonnemann, IIG, Freiburg, Germany)

**12:30 Lunch / Industrial exhibition**

### Session 4: Logistic and Maintenance

**13:45 Logistics and Supply Chain Management**  
(C. Meiß, Fraunhofer IML, Dortmund, Germany)

**14:10 "Smart Logistics" - Usage of innovative Information and Communication Technologies in Production Logistics**  
(R. Keil, TU Dresden, Germany)

**14:35 Tracking and Tracing in Production Scenarios with passive RFID Transponders**  
(C. Gorldt, BIBA, University of Bremen, Germany)

**15:00 Coffee Break / Industrial exhibition**

**15:30 SMMART - System for Mobile Maintenance Accessible in Real Time**  
(J. Kusper, Tricon, Linz, Austria)

**15:55 RFID in Industrial Maintenance und Service**  
(R. Mlynek, conSeneca, Haan, Germany)

**16:20 Mobile Maintenance Managment**  
(S. Hinckel, GAB, Schwetzingen, Germany)

**16:45 Discussion**

**17:00 End of the Workshop**

## WORKSHOP REGISTRATION FORM

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# RFID SysTech'07

3<sup>rd</sup> European Workshop on RFID Systems and Technologies  
June 12<sup>th</sup> to June 13<sup>th</sup>, 2007, Duisburg – Fraunhofer IMS

Please fill out this form in capital letters and send it to:

**VDE-Concerns Service**  
**Stresemannalle 15**  
**60596 Frankfurt/Main**



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by E-Mail: [registration@rfid-systech.org](mailto:registration@rfid-systech.org)  
online: <http://rfid-systech.org/>

Registration Fee: 195,- EUR

Mr.  Mrs.  Title:

First name:

Family name:

Company:

Department:

Street, Nr.:

Country:

ZIP Code:

City:

Telephone:

Fax:

E-Mail:

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Date

Signature

