## Overview

**Date of the conference:** September 5th / 6th, 2012

**Venue**
Saarland University, Lehrstuhl für Messtechnik (LMT)
Building C7 4
Stuhlsatzenhausweg
66123 Saarbrücken / Germany

Please note that there are several daily flights from Berlin, Hamburg, Luxembourg, and Vienna to Saarbrücken airport (SCN). The airport is approx. 20 min from Saarland University. The distance from Saarbrücken main station to the campus is about 5 km. There are buses running every 30 minutes. A controlled car park can be found at the campus.
**For further information (site plan and map of the area) please see www.uni-saarland.de**

**Local organisation**
Prof. Andreas Schütze
Phone +49 (0) 681 302 4664

**The conference dinner** will be in the evening of September 5th, 2012.

**Fees**

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|---|---|
| EUSAS Members | 300 EURO |
| Students | 225 EURO |
| Public services (e.g. fire brigades) | 450 EURO |
| Others | 500 EURO |

**10 % Early bird discount**
There will be a discount of 10% for registration until July 22nd, 2012

**Bank account**

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| Bank | Deutsche Bank Duisburg |
| Account No | 499 051 100 |
| Account holder | EUSAS e.V. |
| Bank code | 350 700 24 |
| Specific term | **EUSAS 2012** |
| Swift Code | DEUTDEDB350 |
| IBAN | DE 79 3507 0024 0499 0511 00 |

## Registration

Please use the enclosed registration form and send it by mail, email or fax to EUSAS to the attention of Mrs. P. Mang (address see below) **by August 28th, 2012 at the latest.**
You may also find the registration form on the EUSAS homepage **www.eusas.org/events**

**Cancellation**
Registrations can be cancelled in written form without charge until 2 weeks before the conference. No re-imbursement of fee is possible in case of later cancellation.

In case a registered participant is indisposed, it is possible to appoint a deputy. Please be so kind to give us the person's name well in advance.

In case the conference is cancelled by EUSAS, we shall reimburse the registration fee that has already been paid. EUSAS shall not accept any claims beyond that.

**Conference Hotel**
Hotel La Résidence Saarbrücken
Faktoreistrasse 2
66111 Saarbrücken / Germany
**www.la-residence.de**
A limited number of rooms have been reserved at a special rate. Please make your own reservation by August 1st.

Phone +49 (0) 681 3882 0
Fax +49 (0) 681 3882 185
Keyword EUSAS

For alternative accommodation, please see
**www.saarbruecken.de/en/tourism/accommodations**

**Conference organization**
Universität Duisburg-Essen
EUSAS e.V. Secretariat
Prof. Dr. Ingolf Willms
Mrs. Patricia Mang
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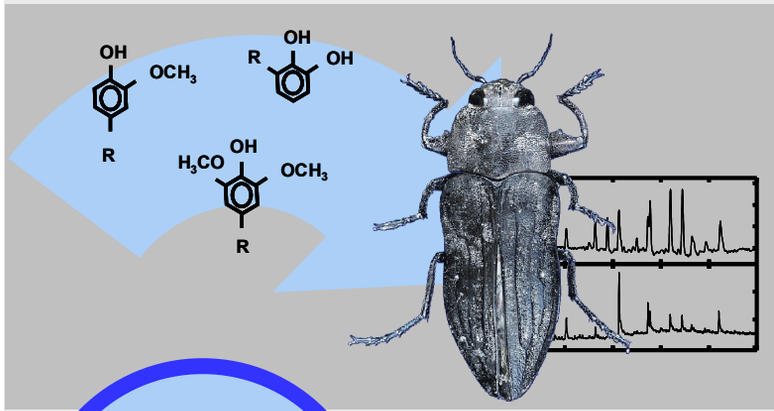
EUSAS
European Society for Automatic Alarm Systems e.V.

### European Conference on

# The Future of Gas Sensors for Fire Detection and Safety Techniques

**Conference language**
**English**




**5th/6th of September 2012 Saarbrücken Germany**

## Wednesday, September 5th, 2012

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|---|---|---|
| 11:30 | **Registration & Welcome snack** | |
| Session 1<br>Chairman | Prof. Andreas Schütze, Universität Saarland | |
| 12:50 | **Welcome** | Michael Schnell<br>*EUSAS Chairman* |
| 13:00 | **Current state of the art in gas sensing for fire detection** | Jeff Cutler<br>*Apollo Fire Detectors Ltd.* |
| 13:30 | **Practical results with Sam Detect in industrial environments** | Holm Dietz<br>*EADS RST Rostock System-Technik GmbH* |
| 14:00 | **Optochemical nanosensors - a new approach for wireless sensing in harsh environments** | Prof. Martin Eickhoff<br>*Universität Gießen* |
| 14:30 | **Coffee break** | |
| Session 2<br>Chairman | Peter Stahl, Wagner Switzerland Ltd. | |
| 15:00 | **Work function based gas sensing in CMOS** | Ingo Freund<br>*Micronas GmbH* |
| 15:30 | **Response times of fire gas- and smoke-detectors in near wall positions** | Dr. Ulrich Hoefer<br>*Siemens Schweiz AG* |
| 16:00 | **Highly selective smouldering fire detection in a coal mine: field studies and beyond** | Prof. Andreas Schütze<br>*Universität Saarland* |
| 16:30 | **End of the first conference day** | |
| 19:00 | **Conference dinner** | |

## Thursday, September 6th, 2012

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| Session 3<br>Chairman | Prof. Dieter Kohl, Quantum Technologies | |
| 09:00 | **High field IMS for fire detection** | Dr. Kurt Lenkeit and A. Schumann<br>*Minimax GmbH & Co. KG* |
| 09:30 | **Gas sensors for wood drying and combustion processes** | Dr. Olaf Kiesewetter and Marco Bauer<br>*UST GmbH* |
| 10:00 | **Perspectives of biomimetic smoke gas detection** | Prof. Stefan Schütz<br>*Uni Göttingen* |
| 10:30 | **Coffee break** | |
| Session 4<br>Chairman | Michael Schnell, EUSAS Chairman | |
| 11:00 | **Smart sensor technologies for security applications** | Prof. Peter Kaul and Prof. Gerhard Holl<br>*Hochschule Bonn-Rhein-Sieg* |
| 11:30 | **Handheld instrument with orthogonal gas sensors for detection of dangerous chemicals** | Dr. Andreas Walte<br>*Airsense Analytics GmbH* |
| 12:00 | **Passive cooling techniques for reliable overheating and fire protection** | Prof. Dieter Kohl<br>*Quantum Technologies* |
| 12:30 | **Closing of the conference** | Michael Schnell<br>*EUSAS Chairman* |
| 12:40 | **Snack** | |

## Aim of the conference

EUSAS European Society for Automatic Alarm Systems e.V.

The future of gas sensors for fire and safety techniques is determined to a great extent by new detection principles, new or enhanced sensors, sophisticated evaluation algorithms, and latest communication technologies. Equally, new demands arising from unconventional applications have stimulated new solutions, combining proven technologies in novel and innovative ways. This conference aims to review these drivers and how they are shaping the future of fire detection.

The conference kicks off with a review of the state of the art in gas sensing for fire detection. From there it moves forward to examine new demands in subway stations and mining which are being tackled by the application of multisensors - using established sensor technologies in combination with novel complex algorithms to achieve reliable signal evaluation. The focus then moves to new detection principles: First, a new technology which exploits “work function changes” for signal generation is introduced along with results from first tests by an experienced user company.

Second, results of a current EU project are reported showing the possibility to marry the sensitive layers of established semiconductor gas sensors with glass fibres thereby avoiding any electrical contacts at the site of detection. The programme continues with a paper describing the challenges of providing effective fire detection in a large scale drying process where fast and efficient drying must be balanced with the risk of fire. This is followed by papers addressing the essential role of biological aspects in the future of fire detection, the potential importance of extremely sensitive ion mobility measurements both for fire detection and other safety and security applications. The workshop closes with a presentation on new developments of passive cooling.

## Target audience

Planners and operators of public facilities, fire risk managers, security and fire protection personnel, technical developers and product managers.