

SYMPOSIUM „MAGNETORESISTIVE SENSORS AND MAGNETIC SYSTEMS“

The market for robust, precise and miniaturized sensors is steadily increasing. As a result magnetoresistive (MR) sensor technology is being used in a growing number of applications and continues to be the subject of intense research.

The MR-Symposium, which takes place in 2013 for the 12th time, has established itself as the leading international platform for presenting the latest technological developments and innovative applications in the field of MR technology and magnetic systems. Both potential users, wishing to implement this unique technology in new products, and researchers engaged in this dynamic field, are provided with information about the latest technical advances as well as descriptions of new applications from leading edge users.

OBJECTIVE OF THE SYMPOSIUM

A hand-picked selection of experts from around the world will provide first-hand information on the latest research results and newest applications of magnetoresistive technology. The presentations cover fundamental technological advances, e. g. in TMR sensor technology, as well as a wide range of application examples for MR sensors, including robotics, aviation and space, bioanalytical equipment, non-destructive testing, industrial automation and automotive applications. In addition to this there are presentations covering related subjects, such as the new EU framework programme Horizon 2020, innovative packaging of sensor components and new magnetic materials.

12TH MR-SYMPOSIUM – REGISTRATION

HOW TO REGISTER

Please register by post, fax or internet. Your registration is requested by **5th March 2013**. If you cancel your participation after **10th March 2013** a refund of the participation fee is not possible.

Via post Sensitec GmbH
Ellen Slatter
Georg-Ohm-Str. 11
35633 Lahnu
Germany

Via telefax to +49 (0) 6441-9788-17
For fax reply form, see rear page of the invitation letter.

Via internet | Online registration via www.sensitec.com

Fee With early bird discount: **Euro 490,-** plus VAT
After 25th February 2013: **Euro 550,-** plus VAT

Invoice will be issued after receipt of registration.

Credit card payment is not possible.

The fee includes conference transcript, lunch and refreshments on both days, dinner incl. special programme and the optional Wetzlar sightseeing tour. The invoice for advance payment will be issued after receipt of registration.

YOUR CONTACT

Organisation | Ellen Slatter, +49-6441-97 88-16
ellen.slatter@sensitec.com

Technical matters | Dr. Joachim Hölzl, +49-6441-97 88-46
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Location | Stadthalle Wetzlar Kongress- und Kultur-Zentrum, Brühlsbachstraße 2b, 35578 Wetzlar
(for route description, please refer to <http://www.sensitec.com>)

Hotel | Please make your own hotel reservation. The following hotels provide a limited contingent of rooms with special rates (reference: MR-Symposium Sensitec):
Hotel Wetzlarer Hof

+49 (0)6441-908-0 (until 25th February 2013)

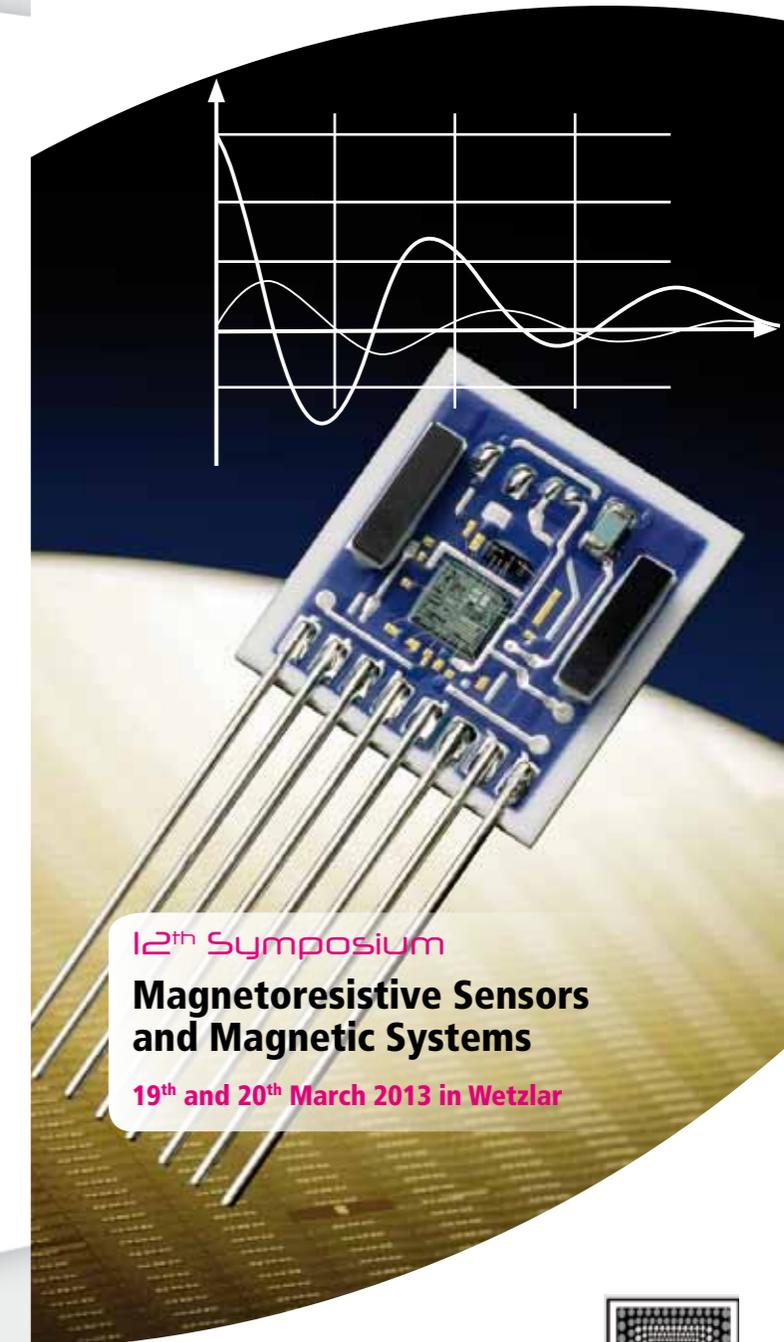
Hotel Bürgerhof

+49 (0)6441-903-0 (until 15th February 2013)

Hotel Mercure

+49 (0)6441-417-0 (until 14th February 2013)

Special programme | On 19th March 2013 we invite you to take part in a very interesting sightseeing tour through the „Optical Parcours“ of Wetzlar and a special evening programme during dinner. As this is an option, please indicate your participation on the registration form accordingly when registering.

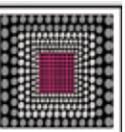


12th Symposium

**Magnetoresistive Sensors
and Magnetic Systems**

19th and 20th March 2013 in Wetzlar

12th MR Symposium
Wetzlar 2013



GROUP OF PARTICIPANTS

The Symposium is addressed to technical experts and managers in the automotive, industrial automation, medical technology, materials testing and consumer sectors as well as other industries, who wish to enhance their knowledge about MR technology and magnetic systems.

PROGRAMME

19th March 2013

Time	Name	Institution	Title
10.00 - 10.05	Dr. Rolf Slatter	Sensitec GmbH, Lahnau	Welcome and Introduction
10.05 - 10.15	Prof. Helmut Schlaak	TU Darmstadt, Chairman MST Rhein-Main	
10.15 - 10.45	Prof. Burkhard Hillebrands	University of Kaiserslautern	TeMoRy: A robust storage cell based on TMR
10.45 - 11.15	Patrick Brown	Imperial College London	3D AMR magnetometer for space applications
11.15 - 11.45	Christophe Duret	NTN-SNR, Annecy	TMR sensor in plunger block application
11.45 - 12.15	Burkhard Stritzke	Lenord, Bauer & Co. GmbH, Oberhausen	Scalable GMR-based absolute encoder kit for large hollow-shaft drives
12.15 - 13.15	Lunch		
13.15 - 13.45	Enda Nicholl	Analog Devices, Limerick	High performance signal processing solutions for MR sensors

19th March 2013

Time	Name	Institution	Title
13.45 - 14.15	Ludger Hebing	LTi Drives GmbH, Lahnau	Methods of current measurement in frequency converters
14.15 - 14.45	Dr. Philipp Münch	John Deere European Technology Innovation Centre, Kaiserslautern	Off-road machines and their unique needs for precision sensing
14.45 - 15.15	Arndt Steinke	CiS GmbH, Erfurt	Hybrid integration by means of batch process compatible technological modules
15.15 - 15.45	Coffee Break		
15.45 - 16.15	Max Lai	iSentek Technology, Taipei	MR sensor for the portal device technology
16.15 - 16.45	Georg Röhrer	AMS, Unterpommstatten	Comparison of magnetic field sensors based on commercial eCompass solutions
16.45 - 17.15	Dr. Oliver Hayden	Siemens AG, Erlangen	Applying consumer electronics for single cell detection
ca. 17.30	Optional evening programme: Guided tour through the „Optical Parcours“ of Wetzlar (for registered participants only, so please indicate on the registration form). Meeting point for the walk is the main entrance of the town hall. Conference dinner at 19.30 in town hall.		

20th March 2013

Time	Name	Institution	Title
8.30 - 9.00	Michael R. Johnson	NASA-JPL, Pasadena	MR on Mars - Applying magneto-resistive sensors on „Curiosity“
9.00 - 9.30	Dr. Natalia Sergeeva-Chollet	CEA Saclay Digiteo labs, Gif-sur-Yvette	Non-destructive testing using magneto-resistive sensors
9.30 - 10.00	Dr. Hans Werner Schumacher	Physikalisch-Technische Bundesanstalt, Braunschweig	Metrology needs for magnetic sensors
10.00 - 10.30	Coffee Break		
10.30 - 11.00	Nina Gibbert-Doll	Hessen Agentur GmbH, Wiesbaden	New EU framework programme FP8 Horizon 2020 and EEN
11.00 - 11.30	Ralph Breuer	GKN Stromag AG, Unna	MR sensor technology in wind and crane application under consideration of EN13.849
11.30 - 12.00	Dr. Ronald Lehndorff	Sensitec GmbH, Lahnau	New generation of MR length sensors
12.00 - 12.30	Prof. Bob Lorenz	University of Wisconsin-Madison	Integration of GMRs in power electronic package layout to achieve multifunctional sensing
12.30 - 13.30	Lunch		

20th March 2013

Time	Name	Institution	Title
13.30 - 14.00	Dr. Ralph Dupont	Levicron GmbH, Kaiserslautern	Applied MR sensor systems for closed-loop operation of precision and high frequency motor spindles
14.00 - 14.30	Eike Guthörl	Sensitec GmbH, Lahnau	Absolute angle measurement at the shaft circumference
14.30 - 15.00	Prof. Monika Saumer	University of Applied Sciences, Zweibrücken	Electrochemical deposition of magnetic materials for microsystems: Process technologies and material properties
15.00 - 15.15	Coffee Break		
15.15 - 15.45	Dr. Heiner Flocke	iC-Haus, Bodenheim	Patents: Blessing or curse?
15.45 - 16.15	Dr. Vinzenz Kirste	ORGENTEC Diagnostika GmbH, Mainz	High precision magnetic linear encoders for laboratory automation
16.15 - 16.45	Andreas Hees (tbc)	Hyundai Motor Europe Technical Center GmbH, Rüsselsheim	(tbc)
16.45 - 17.00	Dr. Rolf Slatter	Sensitec GmbH, Lahnau	Outlook and closing remarks