

SENSOR+TEST 2008 - The Measurement Fair

The 15th International Trade Fair for Sensor, Measuring, and Testing Technology will be held from 6 to 8 May on the fair grounds in Nuernberg. The conferences and forums complementing this worldwide biggest event is expected to be attended by 580 exhibitors including the major technology and market leaders of most product groups

SENSOR+TEST in Nürnberg, will cover the entire spectrum of measuring and testing system expertise in such a comprehensive and cross-industry form.

The success of SENSOR+TEST 2007 impressively strengthened its position as the world's leading forum for the whole range of measuring technology from

microsensors to complex test systems.

One of the reasons for the success has been the fact that SENSOR+TEST not only an exhibition, but offers many additional advantages: International conferences as well as a dynamic programme will provide exhibitors and visitors with the possibility for an intensive exchange of professional views.

Chemical Parameters

The detection of concentrations in gases, liquids, pastes, powders, or solid materials are of the tasks of sensors for chemical parameters. Microsystem technology with IR spectroscopy have enabled a great advance in this field.

At the SENSOR+TEST, visitors will find the entire range of chemical sensor elements based on semiconductors, catalytical, thermal, electrochemical, or optical effects. Products are available for detection of both toxic and flammable (explosive) gasses as well as special sensors for coolants. The number of applications is infinite. Among the exhibitors are two from China, both with a wide product range.

From Switzerland there is an ammonia sensor for concentrations under 1ppm to 1,000ppm. Industrial safety, refrigeration, livestock husbandry, or reduction of harmful emissions are among the targeted applications. The measuring principle is based on laser-diode spectrometry and uses tuned laser diodes (TDLS). This process, which is also available for other gases, such as oxygen or carbon dioxide, can do without a reference channel.

An optical oxygen sensor (fluorescence) for liquid media is to replace the usual standard electrodes with electrolyte solutions in the laboratory. The new process is considered as especially low-maintenance and non-critical in regard to integration and offers an integrated temperature compensation for oxygen measurement in water, sludge, or fermentation monitoring. Corresponding software enables storage and evaluation of test series. The same manufacturer presents a measuring system which evaluates NIR reflection measurements. The spectral analysis in the range of 900nm to 1,700nm enables the determination of diverse parameters of polymers or the concentrations of phosphates, proteins, dextrose, glutamate, etc. in foodstuffs.

For environmental analysis, chemical and bio-sensors come from Tuebingen. They deal with the detection of typical indicators for myocardial infarctions at the point of care, rapidly and without the application of marker substances. Environmental technology deals with methods and biosensors with which toxic substances can be efficiently detected in surface water or for performing risk assessment in foodstuffs.

A laser ion mobility spectrometer will be presented for highly sensitive and selective trace analysis of chemicals.

Optical Parameters

The development of microspectrometers, CCD sensors, and digital camera technology have had a considerable influence on optical sensorics. Parameters, such as light intensity or light density are considered as relatively trivial, whereas for colour measurement, for example, new sensors are still being developed. On the other hand, there are entirely new measuring tasks at 11µm wavelengths, for instance. Even for these applications there are special photodiodes today which are already built into a Dewar vessel.

Climatic Parameters

Thermal comfort at work, it can only be hoped, is not only for visitors to the SENSOR+TEST but an everyday experience. At the fair, visitors can check out a dedicated data logger. It simultaneously detects humidity, temperature, and air flow – the globe temperature, and can compute further parameters, such as the PPD value (predicted percentage of dissatisfied) according to EN ISO 7730 from these data. Also, systems for research and development of climate in interior rooms will be presented. To ensure the quality of the air in climatized rooms beyond the carbon dioxide content, a sensor in MEMS technology is presented in Nuernberg, which also detects VOC (volatile organic compound).

The SENSOR+TEST with its special focus is the place to go to obtain information on measuring and testing technology. This is the only event in the world where visitors with an interest in mobile applications can go and experience the functionality of the measuring equipment live. The spectrum ranges from simple measuring transducers to multi-channel measuring systems, from handheld instruments to mobile data loggers.

Conclusion

Anyone who has anything to do with sensors, measuring and testing technology will find the right products at the SENSOR+TEST from 6 to 8 May 2008.

SENSOR+TEST is the leading forum for sensorics, measuring and testing technologies worldwide:

The 2007 trade fair with its 610 exhibitors from 25 nations imposingly presented the entire spectrum of measuring and testing system expertise from sensors to computers – and the signs for SENSOR+TEST 2008 indicate further growth.

The conferences OPTO 2008 and IRS² as well as the VDI/VDE Expert Forum, the PTB Conference as well as a Workshop on R&D Support Programmes running in parallel to the exhibition will enrich the event with scientific facts and prognoses for the future of this industry.

Your Exhibition Centre

Nürnberg, the capital of Franconia and a metropolis with a population of 1.5 million, is at the cross-roads of important European communication arteries. Travel to Nürnberg is convenient from the east or west, whether by car, train or plane. Nürnberg is at the centre of a large economic region with internationally renowned enterprises.



The Nürnberg Exhibition Centre offers an excellent infrastructure and a practical layout: 10,000 parking spaces in the immediate vicinity of the exhibition halls, an integrated underground station and taxi access ensure quick and convenient arrival.

