



Dear Sir or Madam

At Laser World of Photonics China, due to take place in Shanghai from 20–22 March 2019, leading light measurement technology manufacturer Instrument Systems will be exhibiting proven and brand-new solutions for a wide range of current applications in the areas of LED/SSL and display measurement. This year we can be found together with our Asian marketing partners at two comprehensively equipped stands:

1. Display measurement technology: Instrument Systems Stand W4.4608 2. LED/SSL measurement technology: Rapitech Enterprise Stand OW7.7202

Be inspired by our innovative system solutions. Our experts are looking forward to your visit!

Your Instrument Systems Team sales@instrumentsystems.com

II DISPLAY MEASUREMENT # W4.4608

Beyond the eye of the beholder - objective evaluation of displays

At its own Stand # W4.4608 Instrument Systems will be placing the emphasis on systems for **display testing in lab and production**. Together with our sales partner Giant Testing Equipment Company Ltd we will be constructing five measuring stations for demonstration purposes:



Goniometric Display Measurement

On our established **DMS 803** display measurement system we will be giving live demonstrations of the diverse possibilities of view direction-dependent display analysis: motorized positioning unit, temperature chamber of -40 to +100°C, measurement of the spectral reflection value under diffused hemisphere lighting, determination of the contrast of OLED and LC displays with different types of ambient light, etc. The new curved feature allows qualification of concave and convex cylindrical displays.

Automotive Dashboard Testing

We recommend our LumiCam 2400 high-resolution imaging colorimeter for fast spatially resolved analysis of display symbols and control elements in vehicles as well as displays. In addition to the measurement of luminance and color distribution, homogeneity, contrast and mura effects can also be determined quickly and remarkably precisely.

Display In-Line Testing

Experience our spectrally optimized LumiTop 2700 imaging colorimeter in a production application. The system enables highly accurate 2D measurements in production speed through the combination of an RGB camera and a photo diode with the high-quality spectroradiometers of the CAS series, enabling it to perform the challenging measurement tasks of newer technologies such as OLED displays, QD LCDs and micro LEDS with extremely high measurement accuracy.

Mura Single Pixel Evaluation for OLEDs and micro LEDs

The LumiTop 4000 was developed to satisfy the special requirements of optical quality control of displays in production lines: high delivery rate, high measurement accuracy and robustness. With 12 megapixels the camera's high resolution enables the detection of pixel defects and inhomogeneities such as mura.

Spectral Display Testing The display test system DTS 140, based on Instrument Systems high-end spectrometers, is universally applicable as a reference system in the laboratory or for quality control in production. Light is coupled into the spectrometer with the TOP 200 telescopic optical probe connected to the spectrometer by a light guide, permitting fast changes to other applications (e.g. LED measurement).



\LED/SSL MEASUREMENT # OW7.7202

Light measurement technology is never trivial - Start with the right equipment

Rapitech (Shanghai) Enterprise Co., Ltd will be placing the photometric emphasis at Stand OW7.7202 on LED/SSL measurement technology for laboratory and production from Instrument Systems. Four measuring stations will provide an overview of the possibilities of LED/SSL measurement. In addition, Rapitech will be presenting its portfolio of industrial lasers for semiconductor applications. And it goes without saying that our experienced consultants will be available at the stand!



UV Production Testing

Within its time-tested CAS series of premium spectroradiometers, Instrument Systems has developed a new model type CAS 140D-157 that guarantees reliable and highly accurate measurements not only in the visible range but also in the UV range. In the system with a PTFE-coated integrating sphere, production tests of UV emitters can be conducted almost 24/7.

more →

VCSEL Testina

The design of the recently launched CAS 120B-HR is geared to the measurement of narrow-band emission sources, e.g. laser diodes (also VCSEL). An exceptionally high spectral resolution of up to 0.12 nm half-band width and particularly short integration times as low as 4 ms enables fast tests in the lab and production. Temporal measurements of laser diodes with a pulsed operating mode in the nanosecond range are also possible in an expanded setup with photodiode.

more →

High-Power and micro LED Testing

Reliable and fast light measurement characterization can be carried out with the CAS 140D spectroradiometer – since proven as an industry standard – in combination with a Vektrex Performance Series current source for high-power LEDs. The high measurement accuracy and delivery rate optimization likewise enable the characterization of low-lumen or micro LEDs.



\\ UPCOMING EVENTS - MEET US IN PERSON!



Instrument Systems GmbH Kastenbauerstrasse 2 81677 Munich, Germany Tel: +49 (0)89 45 49 43-58 info@instrumentsystems.com www.instrumentsystems.com Register Court: Munich - HRB 78 937 Executive Board: Dr. Markus Ehbrecht, Tsutomu Ogasawara <u>Data protection statement</u> Legal information

If you no longer wish to receive this newsletter you can unsubscribe here.

For a registration to the newsletter, please click here.