RESOURCES

A summary of new products and services for materials research...

Sphere Radiometry and Photometry Guide: Free 24-page technical guide from Labsphere details the advantages of integrating spheres for radiometric and photometric measurement applications. The guide covers integrating sphere theory, principles of operation, geometric design considerations, and system calibration considerations. Examples of integrating sphere radiometer and photometer measurements are provided. Contact: lapsphere@labsphere.com; www.labsphere.com.
Circle No. 60 on Inside Back Cover.

Alumina Foam: Goodfellow's alumina (Al_2O_3) foam is a low-density, permeable structure of cells and continuous ligaments offering high surface-area-to-volume ratio and high strength-to-weight ratio. The material combines the high thermal conductivity, low thermal expansion, and good wear resistance of a ceramic with the structural attributes of foam. Available in sheet thicknesses of 7 mm to 12.7 mm or machined to customer specifications, sheets of both the 7-mm and 12.7-mm thicknesses have a porosity of 86% and 26 pores/cm; however, the 12.7-mm sheet can have a porosity of 84% and 8 pores/cm. Contact: info@goodfellow.com; www.goodfellow.com.
Circle No. 61 on Inside Back Cover.

Electrostatic Langmuir Probe: Hiden Analytical's ESPION advanced Langmuir-style probe is designed for automated, real-time analysis of fundamental plasma characteristics, including electrical parameters, stability, and uniformity. With data-acquisition rates of 10 MHz and gating/edge-trigger resolution to 100 ns, the control set is suitable for monitoring continuous plasma and pulsed plasma at repetition rates exceeding 500 kHz. An integrated reference electrode actively tracks and eliminates low-frequency plasma potential fluctuations. Contact: info@hiden.demon.co.uk; www.hiden.co.uk.
Circle No. 62 on Inside Back Cover.

Ductless Fume Enclosures: Free catalog on the AURA line of ductless fume enclosures from Misonix details specifications, differing filter technologies, and typical applications for each filter type. Graphics show the advanced monitoring system and controls, which feature a digital display of the face velocity. Visual and audible alarms alert operators when filters are approaching saturation. Also described is the Filtrak™ Positive Sealing System, which seals the filter in place without jeopardizing filter assembly integrity. Contact: www.misonix.com.
Circle No. 69 on Inside Back Cover.

Laser Energy Meter: The Orion/PE from Ophir features a smart connector technology that automatically configures and calibrates the meter when plugged into Model PE series pyroelectric detector heads. Users can measure energy at different wavelengths with one head because calibration curves are stored in the energy meter. Users also can set a preferred start-up configuration and store it in the head's smart plugs. The instrument measures laser energy from nanojoules up to 60 J, and frequencies up to 5 kHz. Also featured are a statistics mode with a histogram of pulses, and built-in wavelength correction. Contact: sales@ophiropt.com; www.ophiropt.com.
Circle No. 70 on Inside Back Cover.

High-Temperature Magnetic Sensors: Honeywell's HTMC1021D sensors operate reliably over a temperature range of -5°C to +225°C and offer a field range of +6 G. The sensors can satisfy low-field-sensing requirements that traditionally have been performed by flux sensors. They also may be used to replace Hall Effect sensors where reliability in high-temperature environments is required. Applications include proximity sensing, position/angle sensing, and signal transformation. Contact: info@corp.honeywell.com; www.honeywell.com.
Circle No. 63 on Inside Back Cover.

Microhardness Tester with Motorized Turret: Leica Microsystems' VMHT MOT features a motorized turret in which the indenter is automatically brought into working position by means of a push-button. After finishing the indentation, the former objective is swiveled in, and the operator can perform evaluations immediately. Approach speed of the indenter may be adjusted from 25 to 60 µm/s. The unit comes with 12 incremental test forces while providing flexibility for nontraditional testing. Contact: news@leica-microsystems.com; www.leica-microsystems.com.
Circle No. 66 on Inside Back Cover.

Process Line Heaters: Kurt J. Lesker Company offers the Heatorr process line heaters, which afford process line temperature control from 100°C to 200°C, depending on the effluent being carried. Diameters range from 1.5–5 in. (~3.81–12.7 cm). Standard and custom heater elements include straight sections to 24 in. (~0.6 m) in length, 45° and 90° elbows, flange heaters, insulators, and concentric reducers. Contact: sales@lesker.com; www.lesker.com.
Circle No. 64 on Inside Back Cover.

Noncontact 3D Measurement System: Optimet's Conoscan 3000 features a multi-use single head and a collinear measurement technique that allows 3D measurements up to 700 points per second dynamically, while the stages are in motion. For most applications, system precision and repeatability is >1/8000th of the working range. Users can measure narrow and deep slots and holes of diameters <1 mm and depth-to-diameter ratios of 25:1. Blind corners also can be measured with bending optics. Contact: sales@optimet.com; www.optimet.com.
Circle No. 65 on Inside Back Cover.

Software Product Enhancements: Solutions Zone is an on-line database of enhancements for Media Cybernetics software products, including Image-Pro Plus, Scope-Pro, and Mat-Pro. Solutions include macros, device drivers, plug-in modules, applications programs, and development-consulting services. Users can download solutions from the site, either free or for a fee, via third-party links. Some hardware manufacturers have submitted drivers for their image-acquisition devices, and solutions can be submitted by the public and edited as needed by the submitter. The site is located at www.solutions-zone.com. Contact: info@mediacy.com; www.mediacy.com.
Circle No. 67 on Inside Back Cover.

Temperature-Compensating Attenuators: Methode Development Company's attenuators are designed for use in rf and microwave systems where circuits must compensate for changes in ambient temperatures. The attenuators are single-chip, passive components that eliminate the need to design or build active circuitry to compensate the rest of the rf/microwave system for temperature-induced gain changes. They are available in a choice of slopes of attenuation change versus temperature change, and they maintain their characteristics over the frequency range of dc to 2 GHz. Contact: infomdc@methode.com; www.methode.com.
Circle No. 68 on Inside Back Cover.

For further contact information for these products, check www.mrs.org/publications/bulletin/resources

https://doi.org/10.1557/mrs2000.116 Published online by Cambridge University Press