

RESOURCES

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

High-Dispersion Inductively Coupled Plasma Optical Emission Spectrometry:

The Prodigy High Dispersion ICP from Leeman Labs uses a programmable array detector (L-PAD) and an advanced high-dispersion Echelle spectrometer to enhance analytical performance. The L-PAD detector has more than four times the active area of conventional detector designs, to enable users to access any wavelength or group of wavelengths during analysis. The L-PAD also allows for high-resolution acquisition of the entire spectrum in one integration. Contact: salesinfo@LeemanLabs.com; www.LeemanLabs.com.

Circle No. 70 on Inside Back Cover.

Room-Temperature InGaAs Camera:

Sensors Unlimited's room-temperature InGaAs camera is a high-resolution (640 × 480 pixels on a 27- μ m pitch) short-wave IR imaging system (0.9–1.7 μ m). The 14-bit digital output enhances the camera's dynamic range and can be integrated with National Instruments' LabVIEW software. The camera features a snapshot-mode exposure with multiple computer-controlled integration times. Contact: info@sensorsinc.com; www.sensorsinc.com.

Circle No. 62 on Inside Back Cover.

HPLC Autosamplers:

The SIL-HT series from Shimadzu Scientific Instruments features stand-alone, high-speed, high-capacity autosamplers with built-in full-function system controllers. The SIL-HT accommodates up to 350 1-ml vials, 210 1.5-ml vials, 100 4-ml vials, and up to 4 titer plates. The system injects a 10 μ l sample in 15 s. A needle-in-the-flow-path injection method and a high-precision metering pump ensure repeatability and a "no loss" sample application. Contact: webmaster@shimadzu.com; www.ssi.shimadzu.com.

Circle No. 68 on Inside Back Cover.

Thermogravimetric Analyzer:

Thermo Cahn's VersaTherm is suitable for high-mass, high-volume samples in corrosive or high-vacuum gas environments. With the electromagnetic null-type balance, the VersaTherm handles samples with a capacity of up to 100 g and sensitivity of up to 0.1 μ g. The Synergy interface for FTIR and mass spectrometry acquires concentrated samples, which allows for identification of trace-level components and provides FTIR and MS data. Contact: www.thermocahn.com.

Circle No. 64 on Inside Back Cover.



Dual-Array-Port Spectrographs:

Jobin Yvon's TRIAX 322 and TRIAX 552 are imaging spectrographs with dual-array capabilities. Available in a 320-mm or 550-mm focal length, each system can be equipped with two array detectors. The axial exit port offers either resolution or imaging correction; the lateral exit port is optimized for resolution correction. The spectrographs can switch between two detectors without the need for realignment and are suitable for CCD/InGaAs array combinations. Contact: JGilchrist@JYHoriba.com; www.jyhoriba.com.

Circle No. 69 on Inside Back Cover.

Temperature Retraction Tester:

The Benz' TR 2200 measures the effects of low temperature on elastomeric materials. The tester reports an elastomer's low-limit operating temperature, details a sample's percentage of retraction at various temperatures, and allows determination of a temperature range in which a sample is elastic. Contact: engineering@benztesters.com; www.benztesters.com.

Circle No. 63 on Inside Back Cover

Automatic Refill System for ALD:

EpiFill™ from Epichem is a fully automated liquid-dispensing system designed to deliver measured quantities of hazardous chemical precursors via a manifold to as many as eight separately located tools. Automatic transfer of hazardous chemical precursors is made from a bunker located outside the ALD fab area. Contact: info@epichem.com; www.epichem.com.

Circle No. 67 on Inside Back Cover.

Purged Spectroscopy for 120 nm:

The SpectraPro 300i purged monochromator/spectrograph from Acton Research offers spectral operation for wavelengths as low as 120 nm. Options include venting locations, MgF₂ sealed optical ports, a purged deuterium light source, detector assemblies, and CCD camera systems. Contact: jayz@acton-research.com; www.acton-research.com.

Circle No. 61 on Inside Back Cover

Fluorescence Detector: McPherson's FL750 HPLC PLUS detects herbicides, pesticides, and oil in water. Highly toxic compounds can be measured to <1 ppb. The detector can be equipped with conventional cuvettes or with microflow through high-pressure cells. The detector can be optimized for specific measurement environments, and the excitation and emission wavelengths can be set in advance. Contact: JVASS@mcphersoninc.com; www.mcphersoninc.com.

Circle No. 66 on Inside Back Cover.

Cantilever for Scanning Probe/Atomic Force Microscopes:

The Olympus Bio-Lever from Asylum Research is a SiN, low-noise, short and soft cantilever with a low spring constant designed for force measurements and soft samples. The "V" tip on the end allows accurate positioning of the tip over the sample. Both sides of the tip are gold-coated to improve reflectance and facilitate functionalization. Contact: terry@AsylumResearch.com; www.AsylumResearch.com.

Circle No. 65 on Inside Back Cover.

Miniature Capacitance Diaphragm Gauges:

Ferran Scientific's TRIO line provides pressure measurements from atmospheric pressure down to 10⁻⁴ Torr, with accuracies of 0.5% of reading or better. Capacitance-measurement circuitry using surface-mount technology enables a small footprint without compromising accuracy. A metal diaphragm is the active element of the transducer, and the sensing element is a shielded electrode system embedded into a glass-to-metal structure. All components are bonded together, making the transducer fully elastic. Contact: sales@ferran.com; www.ferran.com.

Circle No. 60 on Inside Back Cover.

Showcase Your New Products

To appear in MRS Bulletin Resources,
submit new product announcements to:

Mary E. Kaufold, MRS Bulletin
Materials Research Society, 506
Keystone Drive, Warrendale, PA 15086
Tel: 724-779-8312; Fax: 724-779-4397;
kaufold@mrs.org



For further information on these products, access www.mrs.org/publications/bulletin/resources