

## RESOURCES

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

**Near-Infrared Imaging:** Sensors Unlimited's MiniCamera™ is a high-resolution InGaAs video camera with sensitivity to capture images in the NIR wavelength band (900–1700 nm), facilitated by its 320 × 240 imager and small size of 5 cm × 6 cm × 9.5 cm. The solid-state camera operates at room temperature, draws low power (<1.6 W), and has high detectivity with a noise floor of <500 equivalent photoelectrons and a true dynamic range of >33 dB. A c-mount lens allows attachment to microscopes. Outputs include RS170 compatible analog video and 12-bit RS422 digital. Contact: rstruthers@sensorsinc.com; www.sensorsinc.com.

Circle No. 70 on Inside Back Cover.

### Clinical and Research Products:

Electron Microscopy Science's catalog spans a new line of research- and clinical-related products for the fields of microscopy, histology, neuroscience, cell biology, anatomy, and materials science. Products include tissue processors and slicers, digital cameras and software, microwave ovens, vacuum equipment, cryogenic supplies, diamond knives, microtomy tools, chemicals, and embedding kits. Contact: sgkckc@aol.com; www.emsdiasum.com.

Circle No. 66 on Inside Back Cover.

### Cyclopentadiene Compounds for Metallocene Catalysts:

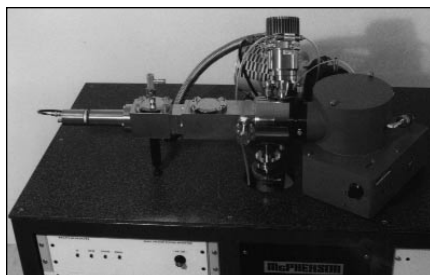
Chemical Exchange Industries has developed processes for producing alkyl cyclopentadienes and sodium cyclopentadienide, which are feedstocks for metallocene and other single-site catalysts used in the production of metallocene-catalyzed polymers. The C5 cyclic ligands offer a raw-material source for making these catalysts that use the cations of zirconium, nickel, titanium, rhodium, palladium, and other metals as part of their sandwich structure. Contact: www.texmark.com.

Circle No. 64 on Inside Back Cover.

### Deep-UV Laser-Ablation System:

The UP-213 from New Wave Research is a Nd:YAG deep-UV (213-nm) laser-ablation system that improves ablation of all materials for ICP-OES and ICP-MS. It includes a high-magnification video system with computer-controlled zoom, and a quick-change sample-cell holder for standard 1-in.-diameter (~2.54-cm) slugs and thin sections. Precision stages with submicron resolution accept large-format and specialized sample chambers, including liquid-nitrogen chambers. Contact: lasers@new-wave.com; www.new-wave.com.

Circle No. 61 on Inside Back Cover.



### VUV Atomic-Emission End-Point Detector:

McPherson's windowless discharge lamp operated with helium as a carrier gas provides a clean background that allows the introduction of secondary or sample gases from process chambers or other sources, permitting the analysis or monitoring of gaseous nonmetals. Detection of emissions from 30 nm to the visible spectral region is possible when coupled to a McPherson vacuum monochromator with suitable vacuum pumping. Scanning monochromators monitor discrete emissions, and array-detector-based systems are useful for broad range detection. Contact: EDS@mcphersoninc.com; www.mcphersoninc.com.

Circle No. 60 on Inside Back Cover.

### Quadrupole Mass Spectrometers for Light Gas Species:

Hidden Analytical's LoMASS systems integrate RF generation and three-stage mass filter technology to enable operation at twice the conventional frequency rates. The systems are available with mass range options of 1–20 amu and 1–50 amu, with choice of mass filter pole diameters of 6 mm, 9 mm, and 12 mm. Peak tail contribution from mass 4 (helium, deuterium) is <1 ppm at adjacent masses. Mass peak widths of 0.1 amu at 5% peak height are used together with high-detection sensitivity resulting from minimal transmission reduction. Contact: info@hidden.demon.co.uk; www.HiddenAnalytical.com.

Circle No. 62 on Inside Back Cover.

### On-Line Microelectronics and Packaging Industries Guide:

IMAPS' Industry Guide lists products and services for more than 600 organizations in the microelectronics and packaging industries. The searchable database includes both members and non-members of the International Microelectronics and Packaging Society. Users can search by various means, including company name, products and services offered, and industry categories. Contact: abell@imaps.org; www.imaps.org/indguide.

Circle No. 67 on Inside Back Cover.

### High-Frequency RF Feedthroughs:

Ceramaseal's ceramic-to-metal single- and dual-conductor RF feedthroughs reduce power loss from electromagnetic coupling without costly cooling jackets. Frequencies range from 100 kHz to 13.56 MHz, and temperatures range from -55°C to 400°C. The feedthroughs can handle currents of up to 800 A and voltages of up to 14 kv. They are available as weldable and vacuum flange-mounted units. Feedthroughs with custom coolant flow paths and solid conductors on the vacuum side of the feedthrough are also offered. Applications include sputtering, plasma generation, and induction heating. Contact: renee@ceramaseal.com; www.ceramaseal.com.

Circle No. 63 on Inside Back Cover.

### High-Speed Grinding and Polishing Machine:

Struer's retooled upgrade, AbraPol-10, is fully automatic and designed for quality control testing on high volumes of specimens or specimens that are large or irregular in size or shape. Rotation speeds of 150 rpm and 300 rpm are offered. The 300-rpm high-speed disc head, and a large 14-in. or 350-mm disc format, enable users to process specimens in half the time. The machine also supports the standard 12-in. or 300-mm disc size. The larger disc size increases life expectancy of grinding and polishing surfaces by 70%. Contact: info@struers.com; www.struers.com.

Circle No. 65 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 for these products, check [www.mrs.org/publications/bulletin/resources](http://www.mrs.org/publications/bulletin/resources)