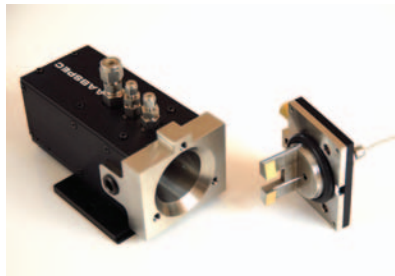


Product Resources



FT-IR spectroscopy accessory

AABSPEC introduces a horizontal large-angle reflectance infrared option for the company's #2000-A Multi-Mode spectroscopy system. According to the company, the device can be used to analyze powders, thin films, and liquids at temperatures ranging from $-170\text{ }^{\circ}\text{C}$ to $950\text{ }^{\circ}\text{C}$ and pressures ranging from ultrahigh vacuum to 2000 psi. The device, which includes gold reflecting surfaces, provides a means of introducing a direct read-out thermocouple or an additional vacuum pumping port. The device reportedly can be used with all popular FTIR spectrometers and can be retrofitted to existing #2000-A systems.

AABSPEC, Plainview, NY; www.aabspec.com

Circle 45



Fiber-optic extension

The 1-m FlexProbe fiber-optic extension from Ahura is designed for use with the company's FirstDefender handheld Raman spectrometer. The twist-on extension attaches to the laser aperture of the of the spectrometer. The fiber-optic extension uses the same nose cone and 3/4-in. working distance as the spectrometer and operates in standard point-and-shoot mode. **Ahura Corporation**, Wilmington, MA; www.ahuracorp.com

Circle 46



Scientific digital camera catalog

A catalog from Andor Technology provides an overview of digital camera technology, confocal microscopy, and spectrographs, and offers an application section showing where the company's products are being used in the field. *Scientific Digital Camera Solutions* also includes a section on fundamentals and the theory of light. **Andor Technology**, South Windsor, CT; www.andor.com

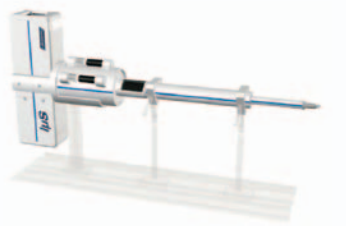
Circle 47



Portable Raman spectrometer

B&W Tek introduces a portable Raman spectrometer with a handtop computer. The portable spectrometer reportedly builds on the company's MiniRam Raman spectrometer system. The portable spectrometer uses the Microsoft Windows XP operating system. The instrument includes a 785-nm excitation laser at 300 mW to obtain Raman shift spectra from 225 cm^{-1} to 3100 cm^{-1} for solids and liquids. **B&W Tek, Inc.**, Newark, DE; www.bwtek.com

Circle 48



X-ray microsource

The $1\mu\text{S}$ X-ray microsource from Incoatec GmbH and Bruker AXS is an optimized, high-brilliance X-ray source incorporating a 30-W microfocus sealed tube and Montel multilayer X-ray optics. According to the companies, the microsource has no moving parts, does not require water-cooling, and can be integrated into a variety of X-ray analytical systems. **Incoatec GmbH**, Hamburg, Germany; www.incoatec.de. **Bruker Biosciences**, Billerica, MA; www.bruker-biosciences.com

Circle 49



ICP accessory

The Niagara Rapid Rinse accessory from Glass Expansion is designed to shorten the analysis cycle time of an unattended ICP spectrometer run. According to the company, the integral programmable three-way valve reportedly rinses the spectrometer's sample introduction system while the sample line is being drawn to waste. **Glass Expansion, Inc.**, Pocasset, MA; www.geicp.com

Circle 50



Fluorescence filters

Semrock's Multiphoton fluorescence microscopy filters are designed to offer improved levels of performance and reliability. According to the company, the filters are ideal for multiphoton fluorescence excitation with a Ti:sapphire laser and other nonlinear microscopy applications. **Semrock, Inc.**, Rochester, NY; www.semrock.com

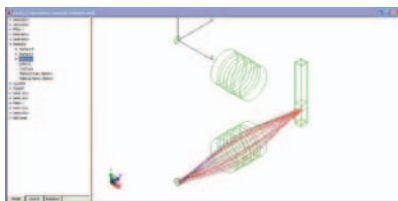
Circle 51



Reflection probe

The Hellma model 668.006-NIR reflection probe is designed for diffuse reflection measurements in the visible and NIR range in applications such as monitoring the composition of bulk goods or pastes or the moisture content of powders or granulates. According to the company, the probe can be used at pressures as high as 10 bar and temperatures as high as 140 °C. The probe has a stainless steel barrel and sapphire optical components. **Hellma**, Plainview, NY; www.hellmaUSA.com

Circle 52



Optical design software

TracePro Expert 4.0 software from Lambda Research Corporation is designed for modeling the propagation of light in imaging and non-imaging optomechanical systems. Users can model and analyze a variety of systems for applications including flow cytometry, molecular spectroscopy, and laser and LED surgical devices. **Lambda Research Corporation**, Littleton, MA; www.lambdaresearch.com

Circle 54



Luminescence monitor

The MultiFrequency Phase fluorometer from Ocean Optics is a frequency-domain luminescence monitor that uses LED excitation, avalanche photodiode detection, and filter-based wavelength selection for experimental set-up and control. It reportedly helps to mitigate index effects, eliminate ambient light, and improve system stability in dissolved oxygen applications. **Ocean Optics, Inc.**, Dunedin, FL; www.oceanoptics.com

Circle 55



Equipment and supplies

LabX is an on-line marketplace that connects professional buyers and sellers of scientific equipment and supplies. Since 1995, LabX has been a highly specialized business-to-business marketplace where scientific equipment and supplies can be purchased and sold. More than 60,000 registered members visit LabX to purchase and sell laboratory, medical, test and measurement, spectroscopy, semiconductor, and chromatographic products. **LabX**, Ontario, Canada; www.labx.com

Circle 53



X-ray detector

PANalytical introduces the PIXcel solid-state detector designed for XRD applications. According to the company, the detector contains more than 65,000 pixels, each 55 μm \times 55 μm in size. The detector can be mounted as one of the company's PreFIX interchangeable X-ray modules or positioned behind conventional point detector optics.

PANalytical, Almelo, The Netherlands; www.panalytical.com

Circle 56



ATR accessory

The VeeMAX II grazing angle ATR accessory from PIKE Technologies is designed to help users obtain FT-IR spectra of chemically modified silicon surfaces. ATR crystal options for the accessory include ZnSe, ZnS, and Si. The device can also be used as a variable angle specular reflectance accessory for the analysis of thin or thick films on reflective substrates.

PIKE Technologies, Madison, WI; www.piketech.com

Circle 57



Digital pulse processor

Amptek's PX4 reportedly combines a digital pulse processor, a power supply, a shaping amplifier, and a multichannel analyzer. It is compatible with the company's XR-100 detectors and detectors from other manufacturers. The processor is software-driven and has 24 programmable peaking times between 0.8 and 102 μ s. **Amptek, Inc.**, Bedford, MA; www.amptek.com

Circle 58



Pellet press

The manual hydraulic model PP 25 pellet press from Retsch is designed for the preparation of solid samples for X-ray fluorescence and spectral analysis. The press, with a maximum pressure of 25 tons, can produce tablets of 32 or 40 mm. According to the company, the tablets produced using the press have a highly polished surface.

Retsch, Newtown, PA; www.retsch-us.com

Circle 59



UV-Vis-NIR spectrophotometer

Shimadzu's UV-3600 research-grade UV-Vis-NIR spectrophotometer is equipped with three detectors designed to help achieve <math><0.00003</math> Abs noise at 1500 nm. The double-monochromator spectrophotometer has a measurement range of 185–3300 nm.

Shimadzu Scientific Instruments, Columbia, MD; www.ssi.shimadzu.com

Circle 60



SIC digital interface card

Spellman High Voltage Electronics Corporation introduces an SIC standard digital interface control card. The SIC control card provides three types of communication interfaces: RS-232, Ethernet, and USB. The card can be installed inside many of the company's existing high-voltage power supplies. **Spellman High Voltage**, Hauppauge, NY; www.spellmanhv.com

Circle 61



Soil analysis application note

An application note from Teledyne Leeman Labs describes the analysis of soil using EPA SW-846 Method 6010C with the company's Prodigy ICP system. According to the company, the method is also applicable to the analysis of ground waters, toxicity extracts, industrial organic wastes, sludges, and sediments. **Teledyne Leeman Labs**, Hudson, NH; www.LeemanLabs.com

Circle 62



XRF and XRD spectrometers

Thermo Electron Corporation's XRF and XRD spectrometers designed for environmental applications such as the analysis of drinking water, wastewater, soils, sludge, paint, plastics, and tires. The spectrometers have also been designed to help scientists comply with European and US regulations to reduce damage to the environment and to human health, including the RoHS/WEEE directives.

Thermo Electron Corporation, Waltham, MA; www.thermo.com

Circle 63

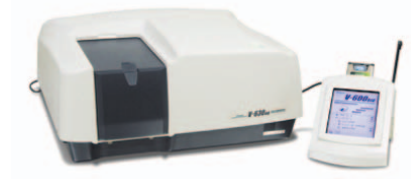


Fiber-optic flow cells

RoMack introduces their new line of fiber optic flow cells designed for absorption and fluorescence measurements. The cells offer path lengths from 1 mm to 1 meter and cover the applications ranging from UV through NIR. Features include application in harsh environments, including high temperature and aggressive chemicals. **RoMack, Inc.**, Williamsburg, VA;

www.romackfiberoptics.com

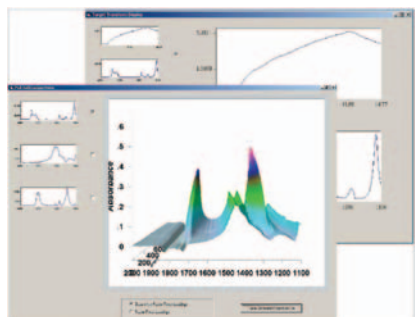
Circle 64



UV-Vis-NIR spectrophotometers

JASCO's V-600 UV-Vis-NIR spectrophotometers include features such as an automatic accessory recognition function and, for conducting routine measurements, an immediate start function. Five models are available, ranging from a general-purpose instrument to a spectrophotometer designed specifically for life science applications. **JASCO Inc.**, Easton, MD; www.jascoinc.com

Circle 65



Software

ReactionSleuth software from Remspec is designed for postprocessing of reaction monitoring datasets. The software works with multiple files in the spc format and offers PCA/Target transformation, peak-fitting capability, and 3D displays of real and synthetic datasets.

Remspec Corporation, Sturbridge, MA; www.remspec.com

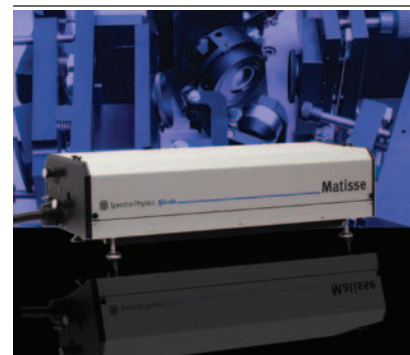
Circle 66



LC-MS system

Hitachi High Technologies America's NanoFrontier hybrid LC-MS system combines a nanoLC system with a linear ion trap time-of-flight mass analyzer. According to the company, the system can operate in either LIT or QIT-TOF mode. The system is designed for use in applications such as metabolomics, biomarker discovery and validation, and protein identification. **Hitachi High Technologies America, Inc.**, San Jose, CA; www.hitachi-hta.com

Circle 67



Ring laser

The *Matisse* tunable CW ring laser from Newport reportedly has inherent stability toward external mechanical and acoustic perturbations. The laser features active photonic elements and an electro-optic modulator for fast cavity-length stabilization. It can be configured for either Ti:sapphire or dye as the gain medium, and for spectral linewidths ranging from 10 MHz to < 50 kHz.

Newport Corporation, Irvine, CA; www.newport.com

Circle 68



ICP-OES systems

The 700-ES ICP-OES instruments from Varian are designed for a variety of applications ranging from environmental to pharmaceutical. The 710-ES models are entry-level instruments suitable for educational institutes and for industries to comply with environmental protection laws and regulations. The 720-ES and 730-ES models feature a CCD detector designed for high performance and speed. **Varian, Inc.**, Palo Alto, CA; www.varianinc.com

Circle 69



Table-top press

International Crystal Labs introduces the E-Z Quick Table Top press. It is constructed from stainless steel, chrome-plated steel, and anodized aluminum. According to the company, the press mounts vertically, which enables the use of body weight and shoulder muscles. The press uses the 7-, 4-, and 2-mm die sets that are used in the company's Quick Press and Port-A-Press presses.

International Crystal Laboratories, Garfield, NJ; www.internationalcrystal.net

Circle 70



Wireless spectrometer

The AvaSpec-BT Bluetooth spectrometer by Avantes allows wireless communication up to 150 m away from a PC. According to the company, the instrument's small size and weight of 720 g allows use in places where electricity is not available. A battery pack is available that is designed to enable more than 6-h of continuous operation. **Avantes**, Boulder, CO; www.avantes.com

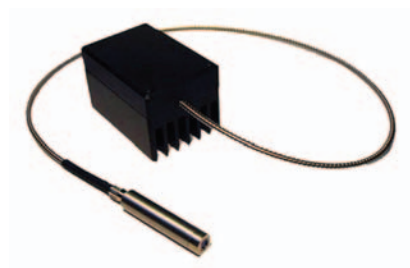
Circle 72



Turnaround time

SPEX CertiPrep's certified reference materials division announces a new turnaround time for inorganic custom standards. The old time frame was 14 days. The current turnaround time is seven days from order placement to the day of shipping. **SPEX CertiPrep**, Metuchen, NJ; www.spexcsp.com

Circle 71



Lasers

Miniature Q-Switched oscillators from RPMC Lasers are ultracompact, monolithic, short pulsed solid-state lasers with output wavelengths of 946, 1030, 1047, 1053 or 1064 nm or the second, third and fourth harmonics thereof, with peak powers of up to 50 kW. According to the company, they are configured to provide pulse widths of 0.1–10 ns with a diffraction limited beam and are capable of energies ranging from femtojoules to 40 μJ. **RPMC Lasers Inc.**, O'Fallon, MO; www.rpmclasers.com

Circle 74

FOSS

Software

VISION 3.40 software from FOSS is designed for use with process and laboratory NIR instruments. It is 21 CFR 11 compliant, offers PAT support, and has database and spreadsheet compatibility. The electronic manual offers hands-on tutorials for users.

FOSS NIRSystems, Inc., Laurel, MD; www.foss.dk

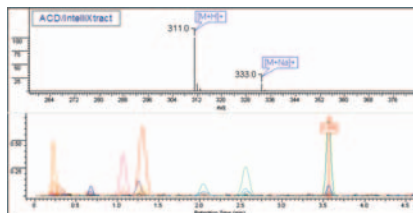
Circle 73



Shutters and machine vision

Melles Griot's electronic shutters for laboratory and OEM applications include IES shutters, which have an adjustable iris diaphragm, UltraThin shutters, which are designed to fit in restricted spaces, and ExtremeService shutters, which are designed for use in harsh environmental conditions. The company's telecentric lenses are designed to provide low optical distortion and a high degree of telecentricity. **Melles Griot**, Carlsbad, CA; www.mellesgriot.com

Circle 75



LC-MS software

ACD/IntelliXtract vendor-neutral LC-MS software from ACD/Labs is designed for automated molecular weight determination, sensitive chromatographic component extraction, and sample comparison. The software considers ion adducts, multimers $^{12}\text{C}/^{13}\text{C}$ ratios, isotopes, and fragment ions. The software can be used for metabolism studies, impurity and degradant identification, patent protection, and other research areas.

ACD/Labs, Toronto, Ontario, Canada; www.acdlabs.com

Circle 78



Brochure

PI/Acton offers a brochure with a complete product list that also features applications for the products. The brochure contains information about products such as camera systems, spectrometers, optical designs, spectroscopy software, and hybrid sensors.

PI/Acton, Trenton, NJ; www.piacton.com

Circle 76



Raman microscope

Renishaw offers its Raman microscope with additional confocal laser scanning microscopy capabilities. The confocal laser scanning (CLS) microscope is designed to combine the imaging, resolution, contrast, and optical sectioning capabilities of CLS microscopy with the characterization power of Raman spectroscopy. **Renishaw**, Hoffman Estates, IL; www.renishaw.com

Circle 77



Nano flow sensor

Upchurch's noninvasive nano flow sensor, developed in cooperation with Honeywell, reports flow rates in the nanoliter through low microliter-per-minute range. According to the company, the sensor uses MEMS-based thermal anemometry to measure the mass-flow rate of liquids in an isolated flow channel and display it on an LCD readout. The sensor reportedly provides high sensitivity, ultrafast response, high accuracy, and low drift. **Upchurch Scientific**, Oak Harbor, WA; www.upchurch.com

Circle 79

To register for upcoming live e-seminars or to purchase previous events in CD format, visit our Education Center at: www.spectroscopymag.com/e-Education