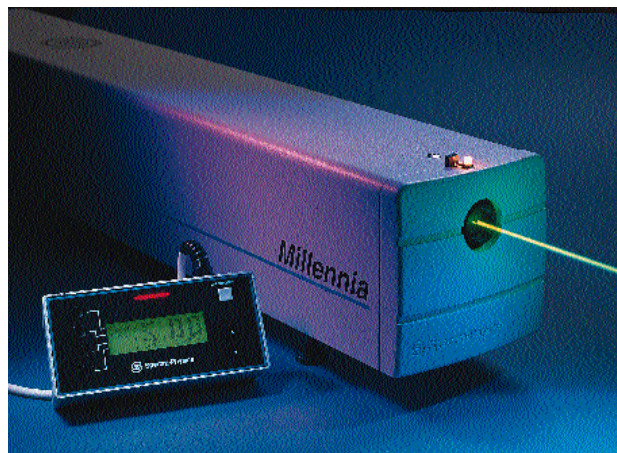


Diode-pumped visible laser



Spectra-Physics announces Millennia, a new diode-pumped, high-power, visible laser. This 110-volt laser provides 5 watts of green (532 nm) TEM₀₀ output. Moreover, Spectra-Physics says that the Millennia's all solid state design generates power stability and beam-pointing performance that matches actively stabilized high-end ion lasers, and the Millennia offers superior spatial mode, 10 times better peak-to-peak amplitude noise, and 100 times improved wall-plug efficiency. This laser works well for a range of applications, such as spectroscopy, medical procedures, semiconductor inspection, and reprographics, and is suitable for industrial projects.

Spectra-Physics Lasers, Inc.
1334 Terra Bella Ave.
Mountain View, CA 94039
Circle No. 180 on Reader Service Card

High-speed centrifuge

Jouan calls its SR12.22 the world's only laboratory-scale centrifuge capable of spinning 6 × 1 liter at 14,000 × g, making it useful for processing large volumes at high speed. This centrifuge runs under the control of a microprocessor that provides 100



of ± 40° at 550 nm, allowing it to accept off-axis radiation. In addition, the probe requires no distance correction and is chrome-plated to provide heat protection up to 572°F. This probe can be used with the company's field-portable IL1400A radiometer. It comes with an SEL detector and a P8 adaptor. International Light says the probe is ideal for UV-curing applications.

memories and a display of important parameters. Jouan says that this centrifuge's built-in integrator, with self-calculation of control values, provides the ultimate in run-to-run reproducibility. This instrument will prove useful both in operations that harvest large volumes of cells and in applications for paint and chemical development.

Jouan, Inc.
110-B Industrial Dr.
Winchester, VA 22602

Circle No. 181 on Reader Service Card

Dipstick radiometer probe

Small and intense sources of radiation in hostile environments can be measured, according to International Light, with the RAMP Micro Probe. This dipstick-style radiometer probe spans just 5 mm², making it easy to aim. It includes a quartz right-angle sensing aperture with an acceptance angle

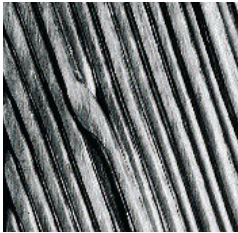


of ± 40° at 550 nm, allowing it to accept off-axis radiation. In addition, the probe requires no distance correction and is chrome-plated to provide heat protection up to 572°F. This probe can be used with the company's field-portable IL1400A radiometer. It comes with an SEL detector and a P8 adaptor. International Light says the probe is ideal for UV-curing applications.

International Light, Inc.
17 Graf Rd.
Newburyport, MA 01950
Circle No. 182 on Reader Service Card

Superconducting-cable inspector

SE Systems announces an automated inspection system for real-time, nondestructive detection of defects in flat superconducting cable as it emerges from a high-speed assembly operation. This system uses the smartEDDY 3.0 eddy-current test and measurement system, along with specially designed probes. The smartEDDY 3.0 software and instrument modules convert a PC-based 386, 486, or Pentium computer into a multiple-frequency and low-noise eddy-current testing, measuring, and imaging system. SE Systems says that this device automatically detects broken and missing strands, crossovers, and missing welds on cable edges, as well as broken and missing strands and crossovers on cable sides.



SE Systems, Inc.
26203 Production Ave., #10
Hayward, CA 94545
Circle No. 183 on Reader Service Card

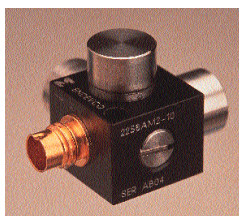
Wavelength meter

New Focus's Model 7711 Fizeau wavelength meter can measure the wavelength of pulsed- or continuous-wave light sources from 400 to 1,000 nm with a wavelength accuracy of 0.01 nm. New Focus says that this device's Fizeau-interferometer design provides high resolution with no working parts and a minimum of optical systems. The measured wavelength is available through a GPIB interface, and it can be displayed in nanometers or wave numbers. New Focus calls this meter an affordable, compact instrument.

New Focus, Inc.
2630 Walsh Ave.
Santa Clara, CA 95051
Circle No. 184 on Reader Service Card

Triaxial accelerometers

The Model 2258AM2 series consists of two Isotron piezoelectric accelerometers, which include internal electronics. These devices can measure vibrations in three orthogonal axes on a small



structure. If an axis gets damaged, it can be replaced at the factory. These accelerometers provide a bandwidth of 1–20,000 Hz and weigh only 15 g. The Model 2258AM2-10 provides an output sensitivity of 10 mV/g, and the Model 2258AM2-100 puts out 100 mV/g. Endevco calls these accelerometers ideal for measurements on automobiles, commercial aircraft, fighter jets, and satellites.

Endevco Corp.
30700 Rancho Viejo Rd.
San Juan Capistrano, CA 92675
Circle No. 185 on Reader Service Card

Continuous convection gauge

Vacuum Research Corporation says that its VRC convection gauge is the lowest-cost instrument that has the capability of continuously monitoring and controlling a vacuum system from atmospheric pressure down to 1 mtorr. An internal temperature compensator virtually eliminates errors caused by changes in the ambient temperature. This gauge can be used with mercury and fluorine. Stainless steel construction makes this instrument useful for out-



door applications as well as in corrosive environments, the company says.

Vacuum Research Corp.
2401 Smallman St.
Pittsburgh, PA 15222
Circle No. 186 on Reader Service Card

Helmholtz-coil systems

Helmholtz-coil systems from Walker Scientific include single, dual, or triaxial configurations and produce uniform magnetic fields. Typically, the field ranges from 0.001 to more than 1,000 Gauss. These systems come in all sizes, from a few inches to more than 8 feet in diameter, and can be round, square, or rectangular. The company also offers custom coil systems, which are developed with finite-elements analysis. Walker suggests using these coils for many applications, such as CRT and navigational equipment calibration, magnetic-immunity testing, biological experiments, and compass-test procedures.

Walker Scientific Inc.
Rockdale Street.
Worcester, MA 01606
Circle No. 187 on Reader Service Card

Infrared gas analyzers

The Ultramat 21/O₂ and 22/O₂ measure various gases, such as CO, CO₂, SO₂, CH₄, and O₂. The Ultramat 21 has one measuring channel for one gas, and the Ultramat 22 offers two channels for two gases. Both instruments provide linearization of the calibration curve, self-diagnostics, and automatic zero calibration with ambient air. Siemens says that both devices work well down to measurements in the parts-per-million range. These instruments can be used in many applications, such as monitoring exhaust

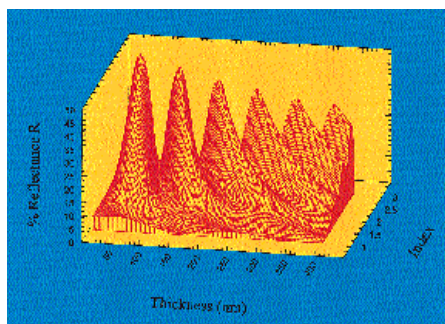
gases, determining pipeline leakage, checking the composition of fermentation gases, as well as in engine testing.

Siemens Energy and Automation, Inc.
100 Technology Dr.
Alpharetta, GA 30202
Circle No. 188 on Reader Service Card

NEW SOFTWARE

Professional Film Wizard

The professional version of *Film Wizard* software provides characterization of thin-film materials and design of optical coatings. This software package includes regression analysis of reflectance, transmittance, and ellipsometric data to determine the thick-



ness, refractive indices, and mixing of individual layers in multilayer thin films. The package also provides design, evaluation, and optimization of optical coatings. Scientific Computing International notes that graphics capabilities and custom-program utilities further enhance this software.

Scientific Computing International
910 Monte Mira Dr.
Encinitas, CA 92024
Circle No. 192 on Reader Service Card

NEW LITERATURE

Infotech directory

The 1996 *Computer Review* delivers 384 pages of companies and products in the world of information technology. This publication covers 1,000 computer, telecommunication, and new-media companies, examining the strengths and weaknesses of 500 of them as well as describing their products,

services, and joint ventures. This directory also includes company contact information: regular-mail and Internet addresses, telephone and fax numbers.

Computer Review
19 Pleasant St.
Gloucester, MA 01930
Circle No. 189 on Reader Service Card

Metals-and-materials catalog

The "1995-96 Goodfellow Catalog of Metals and Materials for Research and Industry" lists nearly 4,000 items, with technical specifications and comparative data. This 560-page catalog features alloys, ceramics, composites, honeycombs, polymers, and pure metals. Goodfellow says that all products are available in an extremely wide range of forms and sizes.

Goodfellow Corp.
800 Lancaster Ave.
Berwyn, PA 19312
Circle No. 190 on Reader Service Card

Catalog of connectors

A new brochure from Ceramaseal describes its new series of ceramic-metal Type D connectors. Ceramaseal says that these connectors provide high pin densities and superior performance at extremely high and low temperatures as well as in an ultra-high vacuum. The connectors come with 9 to 50 pins and stainless steel hardware. This brochure provides material descriptions and configuration options

Ceramaseal Corp.
P.O. Box 260
New Lebanon, NY 12125

The descriptions of new products listed in this section are based on information supplied by the manufacturers, and in some cases by independent sources. *The Industrial Physicist* can assume no responsibility for their accuracy. To facilitate inquiries about a particular product, a Reader Service Card is attached between pages 38 and 39.