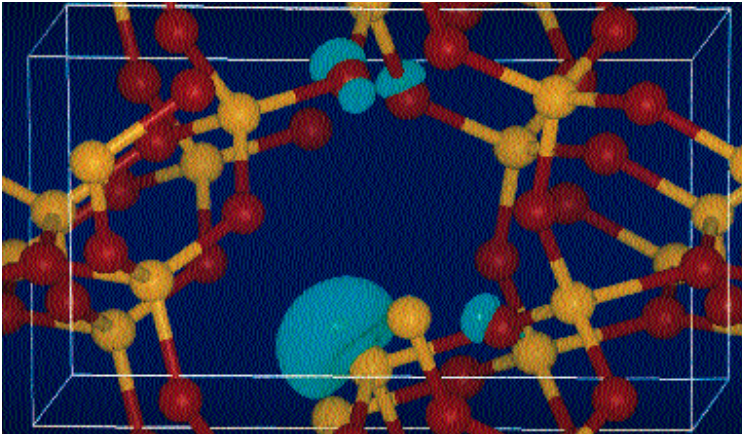


## Electronics-modeling tools



**M**olecular Simulations, Inc., says that microminiaturization of electronic devices requires improved processes and materials to manufacture semiconductors, disk drives, and other products. Molecular Simulations offers software that can be

used to analyze the chemistry of CVD reactors, model the integrity of thin oxide layers, explore the properties of defects and dopants, and investigate magnetic properties of disk-drive materials. For more information, visit the company's World Wide Web page (<http://www.msi.com>).

**Molecular Simulations, Inc.**  
9685 Scranton Rd.

San Diego, CA 92121-3752

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## Laser-diode module

Vector Technology's beta EC is a controllable-intensity laser-diode module. The beta EC has an input that offers linear control of the beam's intensity, by using an external current source. This module also includes several preset intensity levels. Vector Technology says the module has been tested in



applications throughout Europe, including a fog-guidance system being evaluated on Italian roads.

**Vector Technology Ltd.**

5/6 Roseheyworth Business Park

Abertillery

Gwent, NP3 1SP

UK

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## In-line tensiometers

Sensotec, Inc., announces its new line of tensiometers. The units provide  $\pm 0.25\%$  accuracy over a full scale of ranges from 50–10,000 g. In addition, these devices withstand temperatures of 60–160 °F, are splashproof, and provide an overload capability of 200%. These tensiometers can be designed for position or endpoint sensing. Sensotec recommends its tensiometers for many applications including the production of textile fibers and filaments, wire and cable, and composite manufacturing. To learn more, visit Sensotec's homepage (<http://www.sensotec.com>).

**Sensotec, Inc.**

1200 Chesapeake Ave.

Columbus, OH 43212

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## Miniature K cells

Topac's KC3 is a miniature K cell, which can be used in various sorts of monolayer- and submonolayer-film preparation, growth studies, and interface and surface science. The KC3 includes a removable cartridge, allowing the heater, crucible, and liner to be removed quickly. The KC3 can achieve stable temperatures up to 1,500 °C. A tanta-

lum-foil element heats the graphite crucible, and an embedded thermocouple monitors the cell's internal temperature. The KC3's cell holds 0.5 cc. More information can be obtained from the company's Web site at (<http://www.topac.com>).

**Topac, Inc.**

99 Derby St., Suite 303

Hingham, MA 02043

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## Selector valves

Conant's Precision Selector Valves feature a wide variety of rotor and porting arrangements, thereby allowing multiple mixing, venting, and flow-directing functions from a single valve body. These valves come in stan-



dard and custom configurations that handle from two to 12 inputs and one output. Conant's valves include a stainless steel rotor, Teflon sleeves, and Viton O-ring seals. The valves can be manufactured from aluminum, brass, Hastelloy B, Inconel, 316 stainless steel, nickel, Carpenter 20Cb, and PVC. For more information, visit their Web page (<http://conantcontrols.com>).

**Conant Controls, Inc.**

427 Riverside Ave.

Medford, MA 02155

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## Micromachining lasers

Continuum recently introduced the L-26 laser series, which can be used for LCD and IC micromachining. This multiwavelength series provides energy levels up to 15 mJ at 1,064 nm, 5 mJ at 532 nm, and 2 mJ at 355 nm. These lasers also include vibration-free

air cooling, a field-replaceable flashlamp, a standard RS232 interface, and a selectable beam profile: flat or Gaussian. These lasers are designed for direct mounting on a microscope. A translation-and-tilt mount makes for easy initial alignment.

**Continuum**

3150 Central Expressway  
Santa Clara, CA 95051

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### Small pulsed-laser system

The MiniLase II is a series of small, pulsed, Nd:YAG laser systems. New Wave Research says these lasers can be used in industrial and scientific applications, including Raman- and UV-fluorescence studies, as pump sources for dye lasers, in



micromachining, and in particle-image velocimetry. These lasers include variable pulse-repetition rates (10, 20, and 30 Hz), a nominal wavelength of 1,064 nm (optional crystals can change the wavelength to 532, 355, or 266 nm), an energy output of 50 mJ at 1,064 nm and more than 2.5 mJ at 266 nm, and closed-loop cooling.

**New Wave Research**

495 Mercury Drive  
Sunnyvale, CA 94086

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### Plasma etching

Oxford Instrument's Plasmalab<sup>System100</sup> cryo etch provides low-temperature plasma etching of silicon for applications in micro electrical mechanical systems. It includes a sample-plate temperature-control system that controls the sample's temperature between ambient and  $-150^{\circ}\text{C}$ . Oxford says this system enables high etch rates (up to  $3.0\ \mu\text{m}/\text{min}$ ), high selectivity to the chosen mask material, high aspect-ratio capability

(>20:1), and good uniformity. This system uses thermodynamic suppression of lateral etching and nontoxic, environmentally acceptable fluorine-based chemistry.

**Oxford Instruments Ltd.**

Registered Office Old Station Way  
Eynsham

Witney, Oxon, UK OX8 1TL

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### Color oscilloscopes

LeCroy announces six new high-performance color digital storage oscilloscopes, the LC334 and LC534 families. These scopes include a 9-inch color display, 2 megabytes of data-acquisition memory per channel in four-channel operation or 8 megabytes for a single channel, a 96-MHz PowerPC micro-processor, up to 64 megabytes of RAM, and tools for measuring more than 40 signal parameters. The LC534 provides 1-GHz bandwidth, and the LC334 provides 500-MHz bandwidth. Data can be saved to a floppy disk, GPIB, RS232, or internal memory. Options are available for saving data to a PC memory card, 170-megabyte PCMCIA portable hard drive, or an internal high-speed graphics printer.

**LeCroy**

700 Chestnut Ridge Rd.

Chestnut Ridge, NY 10977

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### Fiber-optic oxygen sensor

Ocean Optics now offers a spectrometer-coupled fiber-optic oxygen sensor that provides real-time, full-spectral analysis of dissolved- or gaseous-oxygen concentration. This sensor consists of a fiber-optic fluorescence probe with a proprietary thin-film coating on its tip and a blue LED as the excitation source. The system includes Ocean Optics's S2000 high-sensitivity fiber-optic spectrometer and Windows-based software. See the homepage at [http://ourworld.com/puserve.com/homepages/ocean\\_optics](http://ourworld.com/puserve.com/homepages/ocean_optics).

**Ocean Optics, Inc.**

1237 Lady Marion Lane

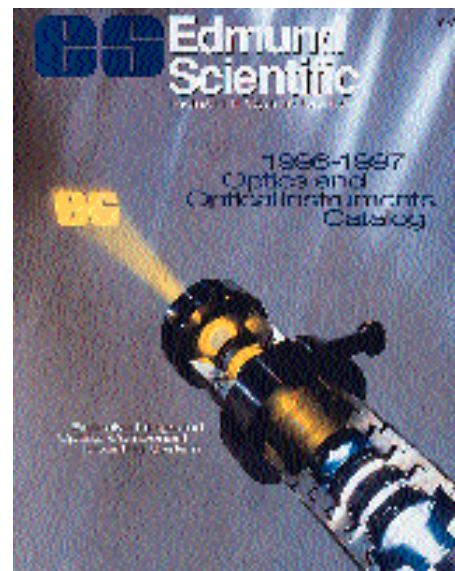
Dunedin, FL 34698-5314

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## New Literature

### Optics Catalog

Edmund Scientific announces its new "1996-1997 Optics and Optical Instruments Catalog." This 260-page catalog features more than 8,000 optical and scientific



products, including a complete line of lasers, optics, positioning equipment, fiber optics, video-microscopy systems, microscopes, telescopes, magnifiers, machine vision, lab equipment, and other accessories. You can order this catalog by e-mail ([indopt@edsci.com](mailto:indopt@edsci.com)), telephone (609-573-6280), or fax (609-573-6233). You can also visit Edmund's homepage (<http://www.edsci.com>).

Edmund Scientific Co.

101 E. Gloucester Pike

Barrington, NJ 08007-1380

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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.