Products & Materials

Supercritical Fluid Chromatography

The SPA/SFC is a supercritical fluid sample preparation accessory and chromatograph. The user loads the raw sample into a heat-controlled extraction vessel, pressurizes the unit with dense gas solvent, and collects pure material in a low-pressure separator vessel. The mixture may then be fed on-line to any of several analytical instruments such as a gas chromatograph or a mass spectrometer. The operator may equip the system with the Critical Extraction Monitor, a tunable ultraviolet-visible absorbance monitor with which compounds may be quantified. Milton Roy, Flow Control Division. Circle 538.

Vibration Isolation

EVIS (Electronic Vibration Isolation System) is an active vibration control system. Other systems have used passive processes to control vibrations and thus suffer from two drawbacks: (i) they "soft-mount" the equipment and (ii) they are relatively ineffective against the effects of internal sources of vibration. By contrast, the EVIS electronically senses vibrations within the framework of the equipment and actively "nulls" them. EVIS is applicable to protecting all types of vibration-sensitive equipment, including aligners, inspection systems, and probe stations. They will be available both as retrofit platforms for protecting existing equipment and as frames to be incorporated into new equipment. Newport. Circle 531.

Time-of-Flight Mass Spectrometry

A series of surface analysis instruments is based on the design of an energy focusing time-of-flight mass spectrometer. Time-of-flight provides high mass range for the analysis of all elements and high molecular weight species up to 2000 atomic mass units. The time-of-flight analyzer includes an advanced electrostatic sector which provides high mass resolution and uniformly high transmission for all masses. Instruments based on the new analyzer include time-of-flight secondary ion mass spectrometer and laser microprobe. Each instrument is equally suited to the industrial laboratory or to research requiring rapid sample handling and high sample throughput. Applications of these techniques are important to a wide range of materials including polymers, semiconductors, metals, minerals, glasses, ceramics, and biological samples. VG Instruments. Circle 539.

Benchtop Centrifuge

Model B311 is a compact benchtop centrifuge. It is designed for laboratories that do not require the high tube-carrying capacities of large benchtop centrifuges. This economical unit can centrifuge up to 48 5-ml tubes at 3200 rpm (1630g). Adaptors are available for the 54 swinging bucket rotor to accommodate tube sizes ranging from microtubes through 180-ml bottles. Special carriers allow 15-ml and 50-ml conical tubes to be centrifuged. Aerosol containment covers are available to safely centrifuge toxic or pathogenic samples. B311 standard features include closed loop speed control, digital speed readout, dynamic electric braking, and imbalance detection and shutdown system. Jouan. Circle 540.

Objectives

The PL Fluotars comprise a series of flatfield semiapochromatic objectives. These objectives are flat-field corrected for a field of view index of 25 mm. These large flatfields of view allow for more efficient specimen scanning and increased image information. In addition to flatness, the PL Fluotar objectives offer superb contrast and neutral color rendition. Increased light transmission characteristics make PL Fluotars suitable for epifluorescence applications. PL Fluotar objectives are also available for phase contrast and interference contrast observation. E. Leitz. Circle 527.

Software for Nuclear Magnetic Resonance Spectrometry

PCNMR is an NMR work station sofware program for the IBM PC AT. It enables the computer to free the NMR spectrometer from processing spectra. Users may generate spectra and realize superior on-screen multicolor displays. Easily operated with standard DISNMR commands or mouse-driven pull-down menus, the program also provides full peak picking routines along with on-screen and plotted annotation of peaks and normalized integrals. Peak lists may be printed out or plotted directly onto the hard copy. Other features include on-screen directories, semiautomatic phase correction, and an on-screen axis with tic marks. Command stringing is available to make the processing of data in full 32-bit arithmetic both convenient and efficient. IBM Instruments. Circle 541.

Literature

Cell Growth and Molecular Biology Products describes research substances and materials and includes sources, methods of preparation, properties, and potential uses. Collaborative Research. Circle 533.

Optical Tables is a selection guide that specifies over 1300 standard and special optical tables for research applications. Technical Manufacturing. Circle 534.

Laboratory Products presents a line of meters and pH and ion-selective electrodes. Charts list complete specifications. Many accessories are also listed. Orion Research. Circle 535.

Autosampler Vials features accessories for gas and liquid chromatography. There are a dozen new products among these Type 1 borosilicate glass vessels. Chemical Research Supplies Division, LC. Circle 536.

Ultra Pure Chemicals includes specialty and reagent chemicals for biotechnology and genetic engineering. Certificates of Analysis are included with each shipment. American Research Products. Circle 537.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by Science or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.