Small Sample CO₂ and N₂O Computer

The micro-Capnometer can measure animal respiration with sampling rates as low as 5 ml/min, making it useful for studies involving rats, guinea pigs, and mice. At this low range, it can measure respiration rates of up to 150 breaths per minute. If the respiratory sampling volume is increased to 20 ml/min, the system can provide accurate measurements up to 300 breaths per minute. The micro-Capnometer measures carbon dioxide percentage, nitrous oxide percentage, and respiration rates and documents results, including waveforms, with its own Epson-compatible printer. When interfaced to an external IBM PC/AT-compatible computer, it displays data and waveforms on the computer monitor and can print and store data in user-defined intervals. Columbus Instruments. Circle 522.

Nonlinear Data Modeling Software

EDES/Model is a new program that allows nonlinear modeling of up to seven independent variables simultaneously. The program uses state-of-the-art programming and special functions to provide a nonlinear mathematical model for virtually any data. The result is a robust model of the system in any of five major levels of complexity, from linear to highly nonlinear. EDES/Model provides a full mathematical model of real-world experimental data. It also presents the model in Fortran source code for inclusion in other programs. The program runs on an IBM AT or 386-compatible personal computer. Schenkelberg and Associates. Circle 531.

High-Purity Water System

Millipore’s new water system allows complete control over water quality in research facilities that have no central feed water system. Tapwater is fed into the Milli-RO Plus pretreatment system, after which it is sent to the reservoir. Up to 150 liters per 8-hour day can be processed by the Milli-RO system. It is then final-polished through the Milli-Q Plus system at a flow rate of up to 1.5 liters per minute. Feed water is polished through the Milli-Q Plus system “on demand” as needed, eliminating the need for storage of final product water and the concern of degrading water quality. Millipore. Circle 527.

Fast and Reproducible Genomic Blotting

Vacugene XL, the second generation vacuum blotting unit from Pharmacia LKB, has an effective vacuum area of 20 by 30 cm. This facilitates convenient blotting of large format gels used in genomic DNA separations. A precision-controlled low-pressure vacuum pump is used to transfer the nucleic acid molecules rapidly and reproducibly from agarose gels to membranes. The vacuum pump maintains the exact transfer conditions required for blotting depurinated DNA fragments from 1 kb up to chromosome size. Gel handling and pretreatment are minimized. Depurination, denaturation, and neutralization are carried out inside the blotting unit and take only 10 min for each treatment. Pharmacia LKB. Circle 524.

Mutagenesis Kit

The T7-GEN In Vitro Mutagenesis Kit enables the user to achieve superior results in site-directed mutagenesis experiments. The kit uses the preferred enzyme for oligonucleotide-directed site-specific mutagenesis, native T7 DNA polymerase. The method is efficient and rapid, giving mutation frequencies of greater than 75% and allowing mutations to be identified directly by nucleotide sequencing. There is no need to purify the covalently closed circular DNA produced in the extension-ligation reaction. United States Biochemical. Circle 535.

Literature

ASPEC System Automatic Sample Preparation with Extraction Columns is an eight-page brochure that describes how the ASPEC system automates solid-phase extraction for both high-performance liquid chromatography and gas chromatography. Gilson Medical Electronics. Circle 554.

J. T. Baker High Purity Solvents is a 12-page publication that includes solvents for special applications such as DNA synthesis and volatile organics. J. T. Baker. Circle 555.

Laboratory Thermal Equipment is a 140-page catalog of autoclaves and sterilizers. The line represents the offerings of an experienced British company that are newly available in the United States. Harvard Apparatus. Circle 556.

The 1990 Molecular Biology Reagents catalog presents up-to-date technical information on an entire line of products. An expanded reference section contains restriction maps, restriction endonuclease tables, and troubleshooting guides. United States Biochemical Corp. Circle 557.


Selection Guide to Research Products is a 20-page catalog describing stirred autoclaves and catalytic reactors, pressure vessels, engineered systems, laboratory reactor systems, pumps and compressors, agitation and mixing equipment, and high-pressure valves, fittings, and pumps. Autoclave Engineers Group. Circle 560.

LABTECH NOTEBOOK and Related Products is a 20-page brochure that describes data acquisition analysis, and control software. Laboratory Technologies Corp. Circle 561.