Automated Amino Acid Analysis

AMINO SYSTEM 1 fully automates OPA (o-phthalaldehyde) and FMOC (fluorenylmethylcarbonyl) derivatizations, uses on-line membrane purification to clean the amplitude of the incoming analog signal up biological or food samples, and immediately injects each sample into a reversed-phase high-performance liquid chromatography column coupled with fluorometric detection. After derivatization, the system removes all interfering macromolecules and undissolved substances that can adversely affect column performance. Because the fluorophores are prepared just before injection, results are not affected by the rapid fluorescence decay of certain derivatives. Gilson Medical Electronics. Circle 441.

Hybridization Incubator

The Model 310 replaces water baths, plastic bags, and heat sealers with screw-capped glass bottles rotating inside a controlled temperature chamber for nucleic acid hybridizations and for screening plaque and colony blots. A unique mechanical action wets the filters with minimal volumes of probe and wash buffers. Temperature is precisely controlled by a digital microprocessor and the rotator assembly can be removed easily from the chamber. The rotator holds ten 38 by 300 mm or twenty 30 by 150 mm glass tubes. A recorder signal is provided for continuous monitoring of temperatures. Robbins Scientific Corp. Circle 439.

Spectropolarimeter System

The CD6 circular dichroism spectropolarimeter system automates the characterization of the optical activity of a compound. The performance of the system in the ultraviolet spectrum, as low as 180 nm, is useful in such genetic engineering applications as conformational studies of proteins, polypeptides, and polynucleotides. The CD6 optical design allows the use of cylindrical, rectangular, or microcords without the need for additional adapters. A wide range of accessories is available: wavelength range extender, linear dichroism attachment, thermostat sample holder, high-performance liquid chromatography attachment, and stopped-flow assembly. SPEX Industries. Circle 574.

Genetic Thermal Cycler

The GTC-1 Genetic Thermal Cycler can increase DNA amplification yields while maintaining consistent, reproducible results. The microprocessor-controlled unit can be programmed to store up to ten temperature profiles, each of which can consist of up to 99 steps. Ramping rate is 1°C per second. The GTC-1 operates from 25° to 100°C with a tap water hookup, and from 0° to 100°C with an external cooler. The unit has 48 0.5-ml sample wells for microcentrifuge tubes. VWR Scientific. Circle 570.

Microforge

The MF-9 is a microforge for polishing and shaping the tips of glass micropipettes for patch clamping and for producing microtools. The MF-9 contains a heater control that enables the user to adjust heat precisely so various sizes and compositions of glass capillaries can be accommodated. A micromanipulator is provided to facilitate positioning of the micropipette near the heating element, which can also be manipulated. Narishige USA. Circle 445.

Population Dynamics Software

RAMAS/age is a new version of a popular software package that simulates age-structured population dynamics for ecological research. Using RAMAS/age, one can construct population models by specifying information on survival, fecundity, migration, density dependence, and the amount of variation associated with these processes. RAMAS/age projects population size through time and provides a risk assessment calculated as the probability of the population falling below or rising above certain levels during the course of the simulation. The information can be used to answer questions regarding the design of nature preserves, different management regimes, and the capability of natural populations to recover from disturbance. The software package requires an IBM PC, XT, AT, or compatible; DOS 2 + ; 384 K random access memory; and CGA, EGA, VGA, or Hercules monographs. Applied Biomathematics. Circle 551.

Literature

Obermmt Wind Systems is a brochure describing a new generation of digital wind speed and direction measuring systems that enable users to build fully computerized systems communicating to any central point via common communications links. Science/ Electronics, Inc. Circle 463.


NALGENE Product News introduces 28 new labware products. It includes tubes and spacers to fit many vertical ultracentrifuges. Special tube plugs, spacers, a removal tool, and acrylic racks augment the line of centrifuge ware. New filter caps and right-to-know safety products are also described. Nalge Co. Circle 466.

Western Blotting . . . from Electrophoresis through Detection is a catalog of products for protein immunoblotting. The 24-page booklet includes a detailed chart of detection strategy and provides a quick reference to techniques, applications, and products for separating proteins, monitoring electrophoresis and protein transfer, gel staining, and blotting. Amersham Corp. Circle 467.


Retention Times is a free periodical on chromatography. The latest issue describes the 9000 Series gas chromatography (GC) analyzers and the Model 850 benchtop GC-mass spectrometry system. The publication also includes a listing of current reprints and application notes that are available on request. Tracor Instruments. Circle 498.