

Theorem-Proving Software

The Expert Thinker program solves problems on microcomputers by logical reasoning rather than by heuristic algorithms. It solved the "Schubert's Steamroller" problem in 13 minutes on a computer with a 16-MHz 80386 processor, and it can solve most problems in first-order predicate calculus. The user need only describe the problem; the program finds the solution itself. The program is written in Prolog, but, unlike Prolog, it features true negation, non-Horn clauses, staged depth-first searches, and Meson reduction and extension operations. Results can be output on the screen only or on a printer as well. Expert Thinker operates on IBM PC, XT, AT, PS/2, and compatible computers with 640 kilobytes of random-access memory. \$149. Transpower. Circle 555.

Membrane Filtration by Rotary Separation

The Benchmark Rotary Biopurification System is a benchtop biological filtration apparatus. Its membrane, constructed of a synthetic polymeric matrix, was designed to be hydrophilic, chemically stable, and physically durable. Separation by the rotary process reduces shear rates and improves fluid dynamics. These features enable the Benchmark Rotary Biopurification System to extract solvents, fractionate proteins, and recover labile biologicals. The membranes are available with molecular weight cut-offs from 10,000 to 1,000,000. Membrex. Circle 554.

Scanning Electron Microscope

The ESEM scanning electron microscope allows the direct observation of unprepared specimens. Wet specimens can be examined in their natural state, without drying, freezing, fracturing, or coating. The microscope's vacuum system permits continuous observation of wet samples, including liquids, under

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.

fully saturated water vapor conditions. Dynamic processes can be observed and recorded as they happen. The ESEM has a television-rate frame storing system and a VHS-compatible video signal output. ElectroScan. Circle 575.

Protein G

Recombinant protein G, an Fc-binding protein, is available. Cloned from *Streptococcus* sp. Lancefield group G, recombinant protein G is used in the production and purification of monoclonal antibodies. In-FerGene. Circle 576.

DNA Gel Documentation System

The Foto/Prep I illuminates DNA gels and produces instant hard-copy images. Its ultraviolet transilluminator has a high-intensity setting for analytical gels and a low-



intensity setting for preparative gels; both settings operate at 300 nm, an appropriate wavelength for fluorescing ethidium bromide-stained DNA gels. The camera system provides instant photographs with a choice of film types, speeds, and formats. FOTO-DYNE. Circle 436.

Warming Stages

The 51800 line of warming and heating stages for upright, inverted, and stereo microscopes is designed to control the temperature of living specimens. Stages are available for temperatures between ambient and 50°C, maintained within $\pm 0.3^\circ\text{C}$; between ambient and 100°C, $\pm 0.6^\circ\text{C}$; and

between ambient and 200°C, $\pm 1.0^\circ\text{C}$. A resistance heating element and thermistor within the warming stage control the temperature. An optional temperature probe enables the user to determine and control the actual sample temperature. The compact control unit features a liquid crystal digital display. Each stage consists of a fiber-reinforced silicone rubber heating pad embedded in an anodized aluminum stage plate. Frank E. Fryer. Circle 434.

Automated HPLC System

The LiChroGraph D-6000 is a high-performance liquid chromatography (HPLC) system with a personal computer for system control and data processing. Its accompanying software features soft keys and on-screen help windows. Because the system is modular, the user can purchase individual parts to combine with existing equipment, and upgrading is possible and simple. The LiChroGraph D-6000 can be based on either an IBM AT-compatible computer or an IBM PS/2 computer. EM Science. Circle 433.

Literature

Scintillation Cocktails and Vials is a catalog of cocktails, vials, standards, and other supplies for liquid scintillation counting. Beckman Instruments, SID Consumables. Circle 452.

The *Immunology Guide* describes streptavidin-biotin reagents, affinity-purified secondary antibodies, kits for hybridoma screening and enzyme-linked immunosorbent assay amplification, immunopurification reagents, enzyme substrates, and other immunology products. Bethesda Research Laboratories. Circle 453.

Ion Chromatography Notes is a twice-yearly 8-page newsletter of products and applications for ion chromatography. Waters Chromatography Division, Millipore. Circle 454.

Varistaltic Pumps is a product bulletin that features a line of tubing pumps for filtration, perfusion, infusion, electrophoresis, and sterile pumping. Manostat. Circle 455.

Catalog 8788 describes laboratory accessories, including pipette fillers, microtubing connectors, pipettes, vials, centrifuge tubes, stir bars, and spectrophotometer cells. Bolab. Circle 456.

Electrostatic Media describes opaque, velum, and translucent paper for electrostatic plotters. Versatec. Circle 457.

Radiation Sources is a 40-page catalog of radiation standards and sources for research and industrial applications. Isotope Products Laboratories. Circle 563.

Science

Products Materials

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