



Image Analyzer

The Micro-Plan II system is tablet-oriented. It measures length, area, center of area, form factor, Feret x-y, and maximum diameter of two-dimensional figures that are traced on its digitizing tablet. It then calculates totals and means and standard deviations of measurements. Values may be printed, stored, or transmitted through two RS232 ports. Results are printed in millimeters or other user-defined units based on tablet resolution of ten lines per millimeter. Tracing modes and scaling factors may be entered interactively. Laboratory Computer Systems. Circle 586.

Centrifugation Medium for Nucleic Acids

Isoptycnic centrifugation of RNA and DNA is practical with CsTFA (cesium trifluoroacetate). The trifluoroacetate anion causes the formation of dense solutions while it enhances deproteination of nucleic acids and inhibition of nucleases. Because it gently solubilizes and dissociates proteins from nucleic acids, one may prepare highly purified nucleic acids without phenol extraction. The CsTFA is supplied in solution (2 grams per milliliter). Pharmacia Fine Chemicals. Circle 589.

Microbore Flowmeter for Liquid Chromatography

The Microbore LC instrument accurately measures flow from 1.5 to 650 microliters per minute. It may be used to verify accuracy of pumps. Measurement

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 (on pages 1022A and 1094A) and placing it in a mailbox. Postage is free.

—RICHARD G. SOMMER

is delivered by a continuous monitoring of the time required to displace a known volume. The process is controlled by an integral Z80 microprocessor. The device is accurate to within 2 percent of the displayed reading with standard deviation of less than 0.5 percent. Phase Separations. Circle 590.

Waterproof Thermograph

Model J records time and temperature unattended for up to 90 days (model J-90) or up to 180 days (model J-180). It may be used to measure temperatures of water or ambient air. Operational parts are contained in the bottom of a sturdy casing. Top and bottom are coupled with a watertight seal. Casings are available in camouflage green or bright yellow. Fluctuations are measured by a flat-response probe and recorded on a pressure-sensitive chart 2 inches wide by 24 feet long. Charts are cartridge-mounted for ease of transfer. Five different ranges are available. Ryan Instruments. Circle 591.

Laboratory Ovens

Models are available in both gravity convection and forced (mechanical) air circulation in three of the most popular chamber sizes. All models feature electronic control. Forced air circulation ovens have LED temperature displays. Both versions have integral 24-hour timers. Various alarms and safeguards are also built in. Each unit has a reversible door that may be adjusted in the laboratory to open right or left as needed. All three chamber sizes come with half shelving and full shelving for increased versatility. Thermolyne. Circle 592.

Ion Chromatography Software

This software is offered as part of the standard chromatography package for the 4400 series multi-instrument data systems based on the HP200 desk-top

computer. Data from up to ten ion chromatographs (20 detectors) or conventional gas and liquid chromatographs may be processed simultaneously. Each instrument is connected to the 4416 data system through a 20-bit A/D converter. This interface collects and stores the data. Sampling rates range from one point per 10 seconds to 100 points per second. Methods that may be developed include peak detection algorithms in the software for negative peaks, changing the baseline treatments, and altering the bunching factors in a specific operation. Raw data is stored for later analysis. Nelson Analytical. Circle 588.

Pharmacology Software

Programs contain 33 of the computations and statistical procedures most frequently used to evaluate drug efficacy and safety in experiments on animals and humans. A concise description of the theory for each procedure is provided, followed by a presentation of the formulas needed and a fully worked example. Each calculation is self-contained and requires no prior programming knowledge. Included are dosage and concentration; drug stock solutions; mean, standard deviation, and confidence limits; linear regression; graded dose response; enzyme kinetics II—competitive inhibition; *t*-test II—paired data; and Mann-Whitney *U* test and others. Life Science Associates. Circle 587.

Literature

Disposable Laboratory Ware includes pipette tips, sample cups, centrifuge tubes, probe covers, and sample mailers. Helena Plastics. Circle 579.

Electrophoresis Catalog offers a portable scanning densitometer for protein separations, vertical and horizontal units, and a jacketed sequencer for temperature regulation. A technical manual introduces techniques and protocols. Hoefer Scientific Instruments. Circle 580.

Chromatography Refrigerators features two models and their accessories specifically manufactured for liquid chromatography applications. Jewett Refrigerator. Circle 583.

Energy Dispersive X-ray Microanalysis is a primer that expounds on the history and development of these research techniques. Sections include physics, the electron column, x-ray instrumentation, and analysis. KeveX. Circle 584.

Science

PRODUCTS and MATERIALS

Science **223** (4640), 1094.
DOI: 10.1126/science.223.4640.1094

ARTICLE TOOLS <http://science.sciencemag.org/content/223/4640/1094.citation>

PERMISSIONS <http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science* is a registered trademark of AAAS.

Copyright © 1984 The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works.