Growth Factors

Growth factors are mitogens for organ and cell culture. Seven products are available. Epidermal Growth Factor stimulates epidermal cells and others. Some cell membranes also have receptor sites for this mitogen. Fibroblastic Growth Factor works on mesodermal cells and primary endothelial cells in conjunction with Human Thrombin and Endothelial Mitogen. Endothelial Mitogen increases growth in cell number among endothelial cells of umbilical veins. Human Thrombin potentiates Fibroblastic Growth Factor and Endothelial Mitogen. Fibronec-toin, Collagen, and Polylysine increase planing and cloning efficiency for fastidious cells. This permits cell growth on glass, plastic, and microcarrier beads. When these products are used with vitamins they eliminate or reduce significantly the amount of serum required for cell culture. Kor Biochemicals. Circle 817.

Microtome

The Bright 5030 rotary microtome is designed to section specimens embedded in paraffin or in plastic. Sectioning steps range from 0.20 to 60 micrometers. Section area is 50 by 50 millimeters and either steel or glass knives may be employed. The device operates on a rocking principle to retract the blade after a section is cut. This compensates for the specimen’s tendency to be compressed during each cut. The 5030 will also cut ribbon style for serial sections. This microtome operates at temperatures down to \(-80°C\). Hacker Instruments. Circle 818.

Spectrophotometers

The UVikon model 810 offers wavelengths from 185 to 900 nanometers with halogen and deuterium light sources. The standard 2-nanometer bandwidth may be reset manually to 0.5, 1, or 4 nanometers. Model 820 offers keyboard selection of bandwidth. These double-beam, ultraviolet-visible spectrophotometers have ten separate memory files. The operator may select any program via keyboard. All operating functions from selection of wavelength to integration of results may be keyed. The monochromator features resolution of 1500 lines per millimeter. Kontron Analytical. Circle 814.

Software

Reliance II is an integrated transaction-processing software system that runs on Perkin-Elmer’s 32-bit Megamina computers and controls up to 128 trans-action-processing terminals on each computer. Interactive Query System IQ/32 provides a user interface for inquiries to a data base. Although they are designed for business applications, these two software systems are adaptable for use in large academic, government, or industrial research centers to coordinate the use, purchase, and disbursement of laboratory apparatus and supplies. Perkin-Elmer Computer Systems. Circle 816.

Spectrometer

The Unispec System 55 analyzer collects, reduces, and displays data obtained simultaneously with energy-dispersive x-ray spectrometry and surface and thin-film techniques including Auger, photoelectron, and secondary ion mass spectroscopy. A mainframe houses memory and signal-processing electronics and a control console with keyboard and color video display. Data reduction and quantitation programs for various techniques are stored on a disk and a second disk is available for data storage. Results from separate techniques are obtained, compared, and contrasted simultaneously to rapidly identify and quantify samples. Kevex. Circle 819.

Sterilizers

Four models comprise the Ritter line that features Latch Lock insulated doors, which have no exposed metal. The operator lifts the latch to open and lowers the latch to close the door. The sterilizers do not operate unless their doors are locked, nor will they open until steam is expelled at the end of a cycle. The timers do not start until sterilization temperature is achieved and the temperature must be maintained to continue the cycle. Sybron Medical Products. Circle 815.

Literature

Centrifugal Air Sampler describes a hand-held device for estimating the number of microbial colony-forming units in room air. Folex-Biotest-Schleussner. Circle 808.

Teflon Products includes many items for scientific research laboratories. Berg-hof/America. Circle 810.

Osmometers is devoted to multisample, automatic, single-sample, and research models. There is a discussion of the merits of freezing-point osmometry and the measurement of osmolality. Advanced Instruments. Circle 811.


Laboratory Products includes balances, automated systems for wet chemical analyses, and equipment for thermal analysis. Mettler Instrument. Circle 822.


Measuring and Electrical Testing Instruments offers more than five dozen products for measuring electric energy and maintaining electronic laboratory apparatus. James G. Biddle. Circle 827.