Acoustic Microscope

The Sonomicrope explores the elastic properties of living tissue with ultrasound (100 x 10^4 hertz). A high-resolution, scanning laser beam microphone relays information to a television screen. This may be compared with a conventional optical image broadcast simultaneously. Sonoscan. Circle 716.

Pyranometer Sensor and Integrator

The L1500 integrator and L1200S pyranometer sensor facilitate the collection of global sun and sky radiation data. The devices collect data as daily totals or for periods up to 1 year long. The system is weatherproof and accurate even in untended field applications. Lambda Instruments. Circle 708.

Gonio-Microreflectometer Systems

The systems (models 2900JR and 2400JR) consist of a double goniomicroscope head, an adjustable sample stage, a scanning monochromator, a photomultiplier detector, and a digital photometer with an X-Y recorder. They measure the spectral reflectance of small surfaces in the range of 400 to 800 nanometers. Model 2900JR features autoring. Binary coded decimal output is included on both sensitivity and range channels for data logging applications. It also has an automatic dark current cancellation by means of an electronic servo circuit. Model 2400JR does not have these automatic features but it does offer the binary coded decimal output from the main digital display. Gamma Scientific. Circle 714.

Laboratory Instrument Programmer

Program-a-Lab sequentially operates up to eight pieces of equipment in up to 100 specific steps, each of which may last from 1 second to 99 minutes. The system may be set up to allow manual intervention at any point to facilitate program changes, alteration of configuration, or for any other purpose. These feats are accomplished by a solid-state control unit with a standby rechargeable battery to prevent program loss in the event of a power failure. Buchler Instruments. Circle 705.

Disposable Culture Tubes

Tubes feature uniform walls, fire-polished rims, and uniformly round bottoms. They are made of borosilicate glass and are available in eight different sizes. They are packaged in a fashion that prevents contamination, clouding, and scratching. Curtin Matheson Scientific. Circle 709.

Cell Culturing Station

The Trans-a-Flex station (Fig. 1) is suited to anaerobic or aerobic procedures. It features rapid flameless sterilization of gas delivery cannula and an integral inoculum dispenser and control housing. Accessories include electric burners, flameless inoculating loops, and uniquely stoppered roll tubes. Kontes. Circle 707.

Liquid Sample Concentrator

Model LSC-1 permits the detection and measurement of organohalide pollutants in water in the parts per billion (micrograms per liter) range in conjunction with gas chromatography-mass spectrometry. A carrier gas such as helium or nitrogen is bubbled through a sample to carry organic pollutants to a trap where they are selectively absorbed on a porous polymeric material. After the sample is purified, the trap is heated and the trapped organic materials are thermally desorbed into the chromatograph injection port. Tekmar. Circle 712.

Rotational Viscometer

The Rheotron operates on a "couette" measuring principle. The outer cylinder rotates at a fixed or variable speed and shear stress is sensed at the fixed inner cylinder. The major advantage is its ability to measure instantly the effect of an applied deformation. The drive mechanism responds promptly to accelerate or deceleration at rates of 100 revolutions per minute in 20 milliseconds. The minimum deflection angle is 0.25° for full-scale response. Attachments allow the Rheotron to operate on the cone and plate principle as well. The measuring chamber jacketed and temperature may be controlled from -3° to 300° C. Brabender Instruments. Circle 713.

Hematocrit Centrifuge

Model C401 is designed for microhematocrit applications. It is available with a 24-place detachable head and electronic brake. It also offers an interlock safety system for the cover which turns the device off when the cover is opened. Rotation speed is 13,000 revolutions per minute and a typical analysis would require approximately 4 minutes. Adam David. Circle 715.

Radioimmunoassay Instrumentation

RIA-pac (Fig. 2) is an assay system that includes an automatic gamma counter, a fluid aspirator, and an automatic small-volume pipet. The gamma counter offers a data printout unit and a five-digit display. It automatically counts each of up to 190 samples one, two, or three times. Counting modes include background preset counts, and preset time. It will accommodate a variety of tube sizes as well. The fluid aspirator serves as a ready source of partial vacuum suitable for many purposes. A disposable bag receives the waste fluid. The
Acoustic Microscope

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