New Products

Dilatometers for study of thermal characteristics of materials are described in an 8-page brochure. The instruments are used to determine the expansion and contraction characteristics of materials that are subjected to increases or decreases of temperature below or above ambient temperature. This is accomplished by measuring the change in length of a test body either mechanically or electronically, depending on the required sensitivity. The dilatometer functions independently of such sample properties as transparency, hardness, or crystalline structure. Tests can be conducted under normal and controlled atmospheres or in vacuum. Fully automatic operation is normally supplied unless hand operation is specified. Accuracy is said to be better than ±1 percent of total scale deflection for all ranges.—J.S. (Brinkmann Instruments, Inc., Dept. S299, 115 Cutter Mill Rd., Great Neck, L.I., N.Y.)

Laboratory filter (model 12) designed for general-purpose laboratory requirements handles either gas or liquid. Capable of flowrates of 8.9 lit./min of gas or 26.9 ml/min of liquid (with a 13.5-lb/in.^{2} pressure drop), the unit removes particles from 100-mμ size (±8 mμ) and larger. Constructed of an aluminum body with an Alodyne finish and a pressure-sealing cap secured by four machine screws, the filter is 2½ inches in diameter by 5 inches long. Inlet and outlet fittings are ¼-inch normal-pressure-and-temperature connectors for ¼-inch inside-diameter flexible tubing. Inside, a stainless-steel supporting screen and tensioning-ring arrangement insures that the filter membrane is properly taut. A Teflon ring completes the seal against the end cap, providing a 34-mm clear diameter of working filter. (cost, $62.00).—R.L.B. (Royco Instruments Inc., Dept. S310, 440 Olive St., Palo Alto, Calif.)

The material in this section is prepared by the following contributing writers:

Robert L. Bowman (R.L.B.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment).

Joshua Stern (J.S.), Basic Instrumentation Section, National Bureau of Standards, Washington 25, D.C. (physics, computing, electronics, and nuclear equipment).

The information reported is obtained from manufacturers and other sources considered reliable. Neither *Science* nor any of the writers assumes responsibility for the accuracy of the information.

Address inquiries to the manufacturer, mentioning *Science* and the department number.

Segmental recorder (model 156) is designed to provide data plotting with d-c mv signal input. The instrument has a capacity of 192 channels of thermocouple input at 2 channels per second. Accuracy is said to be ± 1 percent of full scale. Separate graphs for each channel are visible while the test is in progress, permitting visual monitoring of all channels. System options include a total run time adjustable between 4 and 40 hours and selection of transducer input for up to five different groups or five ranges of millivolt or thermocouple input.—J.S. (Gilmore Industries Inc., Dept. S279, 3355 Richmond Rd., Cleveland 22, Ohio)

Magnetic logic breadboards are designed to serve the fields of education, research, and design of logic circuits. The breadboard provides for demonstration of all logic circuits, evaluation of core-logic systems for compatibility with other circuitry, life test, marginal test, examination of operating margins, signal-to-noise ratio, and so forth. Breadboards are available with operating repetition rates of 0 to 25, 0 to 50, 0 to 100, and 0 to 150 kilobits per second. Intercommunication between modules is made with 150 patch cords furnished. A separate power supply is available, or any 12-v, ½-amp d-c source with ± 10 percent regulation may be used.—J.S. (Di/An Controls, Inc., Dept. S280, 944 Dorchester Ave., Boston 25, Mass.)

The model LH-2 **laser** is a low-cost unit adaptable for liquid-nitrogen cooling. It is flexible in design to accommodate crystals up to 3 inches long and ¼ inch in diameter; the crystals can be interchanged quickly in its polished cavity. Uncooled, the LH-2 threshold is 100 joules input. At 500 joules input, uncooled, the output energy is 1 joule. By adding a cooling accessory, the threshold can be lowered, energy output increased to 3 joules, and bandwidth narrowed. Another laser (model LH-3 (uses an elliptical cavity designed for optimum pumping efficiency with a given ruby and flash-tube diameter. When pumped with 2000 joules input to the flash tube, the output is 7 to 10 joules, uncooled. When cooled to liquid-nitrogen temperature, the output climbs to 15 to 20 joules. Outputs are measured by means of photographic, photoconductive, and calorimetric techniques. —J.S. (Raytheon Company, Dept. S349, Winter St., Waltham, Mass.)

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Our company currently has a need for a Ph.D. or equivalent background in biostatistics for our Statistical Quality Control Department. This position entails problem solving in the area of biologicals. We would like this person to have a knowledge of parallel line assays, slope-ratio assays, probit analysis, serial dilution, plate counts, as well as having a sound, basic background in probability and statistics. Experience is not necessary, but could be helpful. The location of the position is Detroit, Michigan. Salary open. Please send résumé and salary requirements to: Personnel Department, **Parke, Davis & Company**, Joseph Campau at the River, Detroit 32, Michigan.

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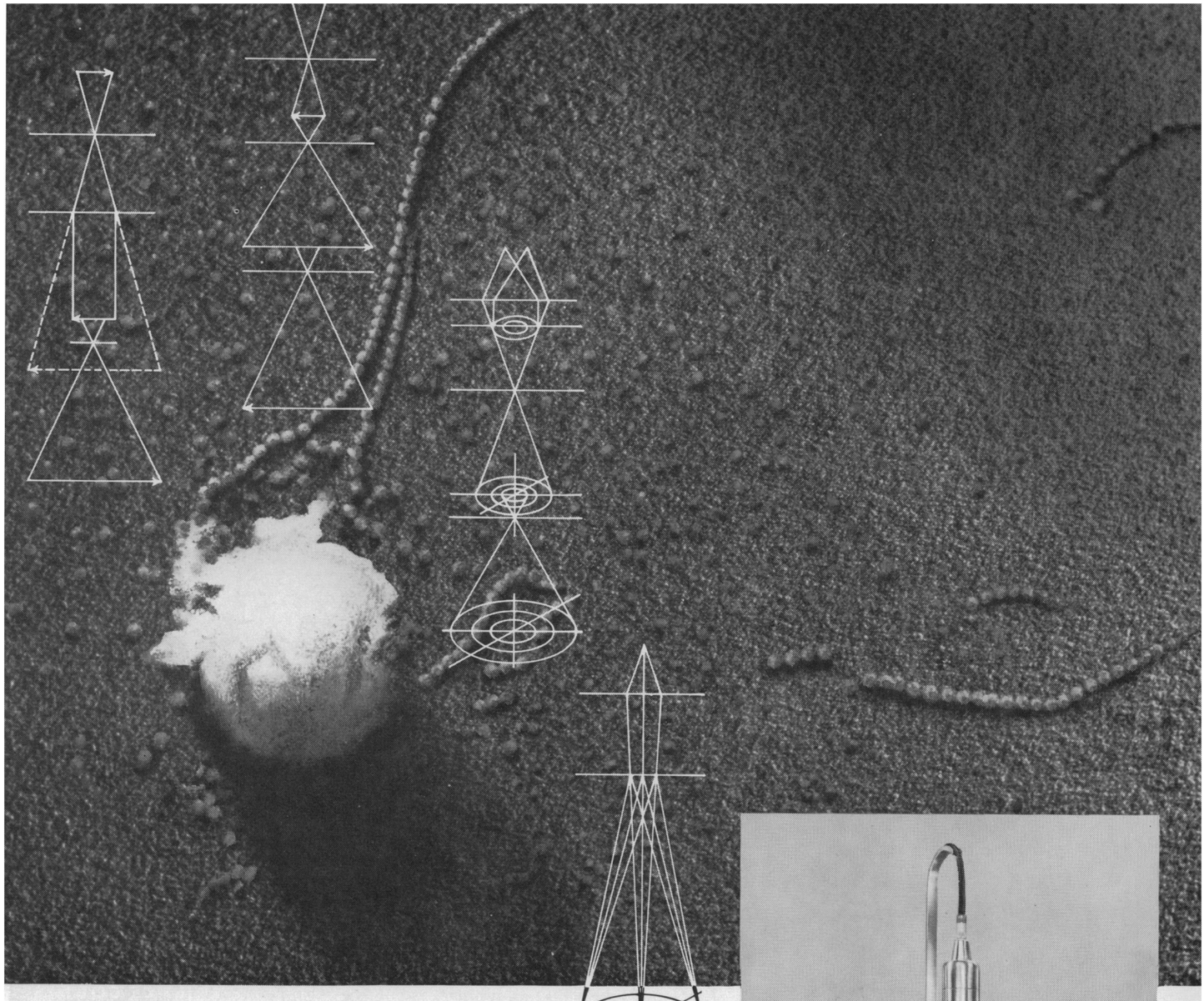

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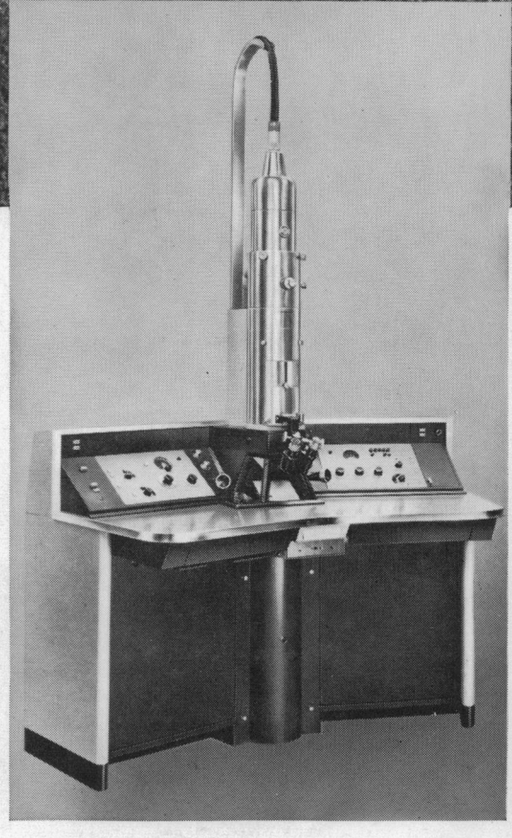

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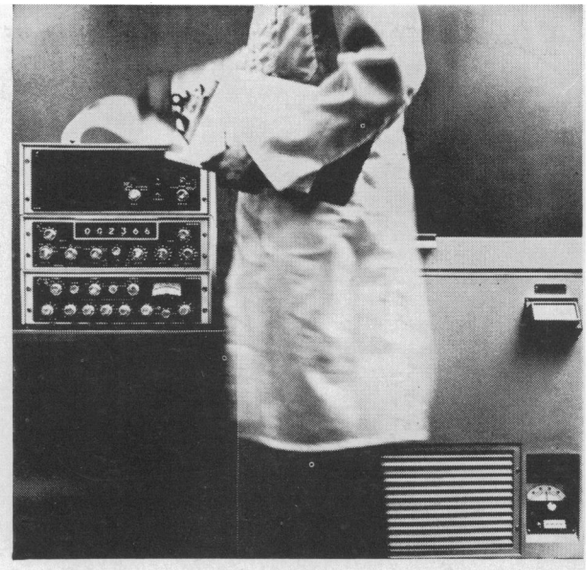

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