# new products

#### **Electron microscope**



the inexperienced operator, Philips Electronic Instruments has developed an electron microscope that will produce images with a guaranteed resolution of 9 angstroms, simply and rapidly. The Model EM 201 gives the operator an unobstructed view of the main 4.7-inch diameter fluorescent screen through a 5.5-inch diameter window.

Electrical controls are on two desk panels covering the major racks of circuitry. Magnification on the photographic plates can be selected in 14 steps from 1,500x to 200,000x and are digitally read out. Selection magnification of 14,000x for selected area diffraction is provided, as well as 200x scanning magnification. Lens currents are adapted automatically for each of four high voltage steps: 40, 60, 80 and 100 kilovolts.

Three cameras—35-millimeter, 70millimeter, and a plate type-each vacuum housed, are provided to handle maximum magnifications of 66,000x, 200,000x and 200,000x, respectively.

Philips Electronic Instruments Dept. SN 750 S. Fulton Ave. Mount Vernon, N.Y. 10550 Circle No. 97 on Reader Service Card

# Pressure intensifier

For educational and industrial laboratory use, McGraw-Edison has developed a simply operated intensifier for the study of high-pressure effects

on liquid viscosities and freezing curves, magnetic and electric transitions, electrolyte conductivity or biological specimens. Operation requires only the manipulation of a hydraulic pump and two manual valves.

Its half-cubic-inch test cavity is fabricated of hardened, nonmagnetic, beryllium-copper alloy. Rated capacity is 36,000 pounds per square inch.

Power Systems Division McGraw-Edison Dept. SN P.O. Box 440 Canonsburg, Pa. 15317 Circle No. 99 on Reader Service Card

## IR Pyrometer

The Model HSA-1D Heat Spy Automatic from William Wahl Corp. is a pistol-like thermometer for obtaining rapid non-contact surface measure-ments of solids or liquids from 0 to 600 degrees F. Using an optical sight, it can be aimed at stationary or moving targets to measure infrared energy. It features a dual scale (Centigrade, Fahrenheit) and automatic needle lock. Battery operated, its accuracy is to 1 percent; it can be used directly with a chart recorder. Applications include research and quality control.

Heat Spy Division William Wahl Corporation Dept. SN 12908 Panama Street Los Angeles, Calif. 90066 Circle No. 102 on Reader Service Card

### NMR Spectrometer

Varian has announced a Nuclear Magnetic Resonance Spectrometer for college laboratories costing one-fourth those conventionally used in education. The simplified, high-resolution instrument can produce from 70 to 100 identifiable spectra a day on most compounds handled by costlier systems. Uses include proton analysis, mixture analysis, organic structural determinations and functional group indentification.

Varian Associates Dept. SN 611 Hansen Way Palo Alto, Calif. 94303 Circle No. 103 on Reader Service Card

#### Impact tester

A helium-neon gas laser coupled with a photo-diode triggering circuit are key components of an impact testing device available from Visco Tech,

Inc. The measurement process involves the pneumatic release of a steel dart, of sufficient weight to penetrate the specimen, from a height of 66.0 centimeters; velocity-time variations are recorded successively as the dart passes through the specimen and then as it triggers the laser switching circuit. A direct-readout high speed digital counter, with a range to 0.999999 second, holds the result until the next test. Energy absorbed by the sample during its destruction is directly related to the measured reduction of dart velocity, and computer cross-tables are provided.

Visco Tech, Inc. Dept. SN P.O. Box 222 Downingtown, Pa. 19335 Circle No. 98 on Reader Service Card

# Caliper

A practical direct-reading caliper for both inside and outside measurements is now being marketed by Indicating Caliper Co. Capable of giving either type linear measurements for up to 15 centimeters, the Dual Indicating Caliper can be locked at any reading by means of a thumbnut at the center of rotation of the legs. Direct readings provide a more reliable indication than the more conventional method of using a separate graduated steel rule.

Indicating Caliper Co. Dept. SN P.O. Box 51 Oak Park, Ill. 60303 Circle No. 101 on Reader Service Card

#### **Pollution monitor**

An instrument system for monitoring metal, nonmetal and organic pollutants has been announced by The Bendix Corp. Called the PPB, it combines atomic-absorption and cathoderay polarographic techniques to detect pollutants in nearly any material that can be put in liquid form. Detection limits to 10 parts in a billion or less are claimed

Intended for both industrial and research applications, the PPB can readily identify such substances as arsenic, fluorides, chlorides, lead, cyanide, selenium, sulfates, chlorinated insecticides and organic-phosphorus pesticides.

Scientific Instruments & Equipment Division The Bendix Corp. Dept. SN 1775 Mount Read Blvd. Rochester, N.Y. 14503 Circle No. 100 on Reader Service Card

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