Equipment News

■ MICROGASOMETER adapts Van Slyke method to microanalyses. Quantitative determinations of carbon dioxide, oxygen, carbon monoxide, and nitrogen in blood plasma or other fluids may be obtained for 0.03-ml samples. (Scientific Industries, Inc., Dept. Sci., 132 Front St., New York 5)

■ FAUCET ION EXCHANGER is portable, nonmechanical, pressure-operated, and produces 2 gal. of demineralized water per minute. The reservoir housing and working parts are polyethylene, and the resins, which may be replaced, change color to indicate exhaustion. The unit has a grain-removal capacity of approximately 1750 grains as sodium chloride. (Crystal Research Laboratories, Inc., Dept. Sci., 29 Allyn St., Hartford, Conn.)

■ PORTABLE SCINTILLATION COUNTER with external probes for use in small laboratories and hospitals has been designed by Universal Atomics. The instrument operates either from line current or from four nickel-cadmium batteries. Batteries are automatically recharged when the unit is plugged into an alternating-current socket. A discriminator circuit enables the operator to determine different energy levels, such as those emanating from radium and radioactive iodine, gold, or cobalt. (Universal Atomics Corp., Dept. Sci., 19 E. 48 St., New York 17)

■ ELECTRONIC THERMOMETER permits rapid temperature measurements on an indicator that is calibrated in Centigrade and Fahrenheit. The probe is sterilizable. (Tri-R Instruments, Dept. Sci., 24–15 44 Rd., Long Island City, N.Y.)

■ TUBE HEATERS have interchangeable blocks and aluminum reducing sleeves for heating tubes of various sizes. Each unit has a wide temperature range. The thermostat control is variable up to 300°C and permits temperature maintenance at just a few degrees below the boiling point of reaction mixtures. (American Hospital Supply Corp., Dept. Sci., Evanston, Ill.)

■ DISTILLATION ASSEMBLIES may be constructed from standard units for different fractional-distillation jobs. Working efficiencies of up to 75 theoretical plates at 600 ml/hr of distillate are attainable. All types of distillations may thus be performed in the 50°-to-250°C range to above 350°C under reduced pressure. An entire operation is run from a single bank of interchangeable electric controls. Parts include a still head, still pot and heater, receiver, support rack, and whatever controls are needed. The same cold-finger condenser head fits all columns. It employs a swinging funnel to remove the distillate. Adiabatic conditions are achieved through electrically heated, double-aluminum shields inside the evacuated jacket of the columns. (Fisher Scientific Co., Dept. Sci., 418 Forbes St., Pittsburgh 19, Pa.)

■ RECORDING DIFFERENTIAL REFRACTOMETER for continuous analysis of binary-liquid streams features temperature compensation and a sensitivity that is 10 times higher than that of laboratory-type refractometers. The instrument is adjustable from 10^{-1} to 4×10^{-4} refractive index units, and the minimum detectable change in refractive index is 1 percent of full scale at any span. Concentrations of both gases and solids in solution can be determined. (Manufacturers Engineering and Equipment Corp., Dept. Sci., Hatboro, Pa.)

■ FREQUENCY METER, model 802, covering the range of the most-used microwave frequencies, 2400 to 10,200 Mcy/sec, has been developed by Narda. Through the entire band, the loaded Q is in excess of 750 from 2400 to 6500 Mcy/sec and in excess of 1500 from 6500 to 10,200 Mcy/sec. A nomograph-type calibration chart incorporated in the instrument's lid provides frequency data without calculations or written interpolation at any point in the entire frequency range to the rated accuracy of 0.2 percent. (Narda Corp., Dept. Sci., Mineola, N.Y.)

■ LABORATORY GLAND is made of Teflon, is chemically inert, and provides a vacuum-tight seal. It may be utilized at temperatures up to 200°C and sealed to a vacuum of 5×10^{-6} mm-Hg. (Arthur F. Smith Co., Dept. Sci., Rochester 3, N.Y.)