

bration, Chicago, Ill. (Office of Public Relations, Univ. of Chicago, Ill.)

24-29. First All-India Cong. of Zoology, Jabalpur. (B. S. Chauhan, Zoological Survey of India, 34 Chittaranjan Ave., Calcutta 12.)

27-27. Griseofulvin and Dermatomycoses, intern. symp., Miami, Fla. (H. Blank, Dept. of Dermatology, Univ. of Miami School of Medicine, Miami 36.)

26-28. Aeronautical and Navigation Electronics, IRE conf., Baltimore, Md. (L. G. Cumming, IRE, 1 E. 79 St., New York 21.)

26-28. Analytical Chemistry in Nuclear Reactor Technology, 3rd conf., Gatlinburg, Tenn. (C. D. Susano, Oak Ridge

Natl. Lab., P.O. Box Y, Oak Ridge, Tenn.)

26-28. Gas Lubricated Bearings, 1st intern. symp., Washington, D.C. (S. W. Doroff, Power Branch, Office of Naval Research, Washington 25.)

26-28. National Rehabilitation Assoc., Boston, Mass. (E. D. Callahan, 14 Court Square, Boston 8.)

26-28. Society of Automotive Engineers, natl. transportation meeting, Chicago, Ill. (R. W. Crory, SAE, 485 Lexington Ave., New York 17.)

26-30. Society of Photographic Scientists and Engineers, natl. conf., Chicago, Ill. (SPSE, Box 1609, Main Post Office, Washington, D.C.)

New Products

The information reported here is obtained from manufacturers and from other sources considered to be reliable, and it reflects the claims of the manufacturer or other source. Neither Science nor the writer assumes responsibility for the accuracy of the information. A coupon for use in making inquiries concerning the items listed appears on page 470.

■ **VECTOR IMPEDANCE LOCUS PLOTTER** is a portable laboratory instrument designed to measure continuously and plot automatically and simultaneously the rectangular components, resistance and reactance, of the equivalent complex impedance of any passive electrical element. (Chesapeake Instrument Corp., Dept. 1)

■ **RANDOM NOISE SOURCE** provides a choice of balanced or unbalanced calibrated output, each with several impedances. Noise figure, defined as the ratio of actual noise power to ideal-system noise power, may be read directly from a meter. Frequency range is 5 to 220 Mc/sec. Noise-figure range is 0 to 16 db at nominal 50-ohm impedance and 0 to 23.8 db at 300 ohm. The indicating meter is calibrated logarithmically in decibels for noise figure and linearly in milliamperes d-c. (Kay Electric Co., Dept. 2)

■ **COMPACTOR** uses kneading action to prepare samples of bituminous mixes, asphaltic concrete, soils, and similar materials. Compaction pressure, time of dwell, and rate of compaction are adjustable. Two molds (4 and 6 in. in diameter) are provided. A heated-foot assembly is available, as an accessory. Manual or automatic electrohydraulic operation is provided. (Soiltest, Dept. 3)

■ **COMPARISON BRIDGE** measures resistance, capacitance, and inductance at 60 cy/sec. Resistance range is 3 ohm to 5 megohm; capacitance 500 pf to 1000 μ f; inductance 3 mh to 10,000 hy. Five meter ranges indicate full-scale differences from 1 to 25 percent. Accuracy on range 1 is ± 0.1 percent. A switch that may be foot-operated protects the meter circuit during insertion or removal of components. (Metronix Inc., Dept. 4)

■ **RESONANT REED RELAY** responds by contact closure, for a fraction of each cycle, to signals of proper frequency. A typical relay provides 32 channels from 30 to 1000 cy/sec with bandwidths less than 1.5 percent and sensitivity of 1.5 mw. Frequency variation with temperature is less than ± 0.5 percent from -60° to $+150^\circ$ F. The device is resistant to vibration up to 10 g in the plane of reed motion and to 20 g in the other axes for vibration frequencies between 20 and 800 cy/sec. Size is $\frac{1}{2}$ in.² by $1\frac{1}{8}$ in. (Wurlitzer, Dept. 8)

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■ **FUNCTION GENERATOR** contains up to ten curves, each printed on a thin plastic sheet, all of which are pressed together into a single laminated sheet approximately 3/64 in. thick. The laminated sheet is made to fit the manufacturer's recorder-curve follower. A cable-connected switch unit permits selection of individual curves to be followed. Any desired function can be printed. An initial model contains ten common functions. (F. L. Moseley, Dept. 6)

■ **X-Y RECORDER** consists of an 11-by-17-in. plotter with separate input modules for general-purpose, computer, low-level differential, time-base, curve-following, and other specialized functions. Function modules are remotely operated. Internal calibration, accurate to ± 0.05 percent, is provided by a Zener diode reference. Record paper is held down by vacuum. (Electro Instruments, Dept. 5)

■ **POWER SUPPLY** for cathode-ray tubes provides all power required for high-intensity cathode-ray tubes with pre- and post-acceleration, including focus and intensity controls and coupling condensers, in a space less than 2.5 by 4 by 5.5 in. The unit can be operated at altitudes up to more than 70,000 ft without pressurization. Input is 115 v, 380 to 1500 cy/sec; outputs are 6.3 v at 1 amp, 2.5 kv at 100 μ a, and -2.5 kv up to 500 μ a. Ripple value in a typical circuit is said to be less than 1 percent. (Avionics Research Products, Dept. 13)

■ **INTEGRATING MANOMETER** reads average of pressures indicated by 2 to 49 manometers. Averaging is accomplished by using precision-bore tubing and providing cross-manifold, cross-reservoir, and guillotine-type valves for individual tubes. The unit may be used without modification as a standard multibank manometer. (Dynametrics, Dept. 10)

■ **ESTERS** are described in 48-page booklet which outlines the properties and applications of 26 esters. Basic reference data are provided by 27 graphs and tables which show evaporation rates, viscosities of solutions, dilution ratios, specific gravities, constant boiling mixtures, and other properties. A detailed bibliography is included (Union Carbide Chemicals, Dept. 15)

■ **ENVIRONMENTAL TEST CHAMBER** is designed to fit into a standard 19-in. relay rack. Chamber volume is 1.5 ft³. The unit is furnished with indicating controller, forced-air circulator, electric heating, and direct refrigeration; it is available mounted or separate. (Conrad, Dept. 14)

JOSHUA STERN

National Bureau of Standards,
Washington, D.C.

21 AUGUST 1959

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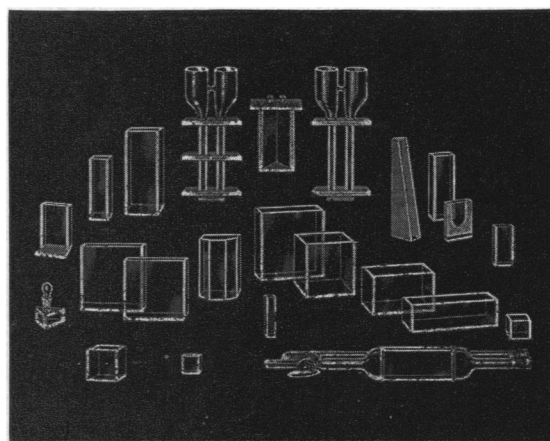
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