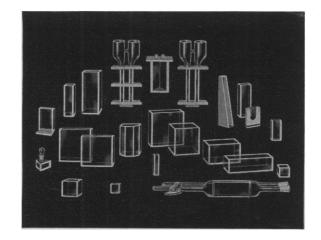
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Vacuum desiccator maintains drying temperatures up to  $150^{\circ}$ C with accuracy said to be  $\pm 1^{\circ}$ C. The apparatus consists of a sheet-metal base, carrying electrical controls, and a glass assembly. The latter includes the heating and drying chambers and the desiccant chamber with side arm and stopcock for vacuum connection. Heating oil is kept below its boiling point so that a cooling system is unnecessary. (Brinkmann Instruments, Inc., Dept. Sci342, 115 Cutter Mill Rd., Great Neck, N.Y.)

Oscilloscope camera, which uses the Polaroid-Land camera principle, allows up to nine trace exposures per print. Full-size prints may also be obtained. The camera uses a f/1.9 Wollensak Oscillo-Raptar 75-mm coated anastigmatic lens. (Electronic Tube Corp., Dept. Sci309, 1200 E. Mermaid Lane, Philadelphia 18, Pa.)

Temperature controller uses as sensor a 500-ohm platinum-resistance transducer. Output is a set of relay contact closures that can be set from 2 to 15 amp at 115 volts a-c. Range of the instrument is 0° to 2000°F. Temperature differential between on and off is said to be less than 2.5°F over the entire range. A nulling meter indicates deviation from set point in degrees Fahrenheit; resolution is ±0.5°F. (Winsco Instruments and Controls Co., Dept. Sci281, 11789 W. Pico Blvd., Los Angeles 64, Calif.)

Impedance bridge measures capacitance and dissipation factor of capacitors, inductance and storage factor of inductors, and a-c and d-c resistance of resistors. Resistance is measured from 0 to 12 megohms in eight ranges with accuracy said to be  $\pm (0.1 \text{ percent} + 1)$ div.). Capacitance is measured in seven ranges from 0 to 1200 µf with accuracy of  $\pm$  (0.2 percent + 1 div.). Inductance range is 0 to 1200 hy in seven steps with accuracy of  $\pm (0.3 \text{ percent} + 1)$ div.). Dissipation factor and storage factor are measured from 0 to 1000 at 1 kcy/sec with accuracy  $\pm$ (2 percent + 0.005). (John Fluke Manufacturing Co., Dept. Sci311, Mountlake Ter., Wash.)

Phase generator-shifter consists of a tuning-fork oscillator, filter circuit, resistance-capacitance phase shifting networks, an electron-tube phase inverter, and two cathode followers. Phase angle is continuously variable from 0 to 360 deg. For direct phase reading, frequency is normally 400 or 800 cv/sec. Other frequencies from 50 to 1000 cy/sec. are available. Accuracy is said to be  $\pm 0.1$  deg relative and 0.25 deg absolute. Impedances looking into the output terminals are 300 ohms nominal shunting resistance and 2  $\mu f$  series capacitance for d-c blocking. Variation of load impedance is said to have no effect on accurancy of phase shift. (Ad-Yu Electronics Lab., Inc., Dept. Sci344, 249-259 Terhune Ave., Passaic, N.J.)

JOSHUA STERN

National Bureau of Standards, Washington, D.C.



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Further particulars and conditions of appointment may be obtained from the Registrar, University of Melbourne, Parkville, N.2, Victoria, Australia, and applications should reach him by October 15, 1961.

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paid.

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1) The New Zealand Scientific Liaison Office B.C.S.O., Africa House, Kingsway, London W.C.2, England.

2) The New Zealand Embassy, 19 Observatory Circle, Washington 6, D.C., U.S.A.

3) The Office of the High Commissioner for New Zealand, Suite 804, Commonwealth Buildings, 77 Metcalf Street, Ottawa, Ontario, Canada.

4) The Department of Scientific and Industrial Research, P.O. Box 8018, Wellington, New Zealand.

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