(P. H. Robbins, NSPE, 309 Bancroft Bldg., Univ. of Nebraska, Lincoln.)

16-17. Association of Midwest College Biology Teachers, conf., Notre Dame, Ind. (G. R. Bernard, Dept. of Biology, Univ. of Notre Dame, Notre Dame, Ind.)

17-18. American Acad. of Psychotherapists, 4th annual conf., New York, N.Y. (AAP, 30 Fifth Ave., New York 11.)

17-25. Plastics Industry, intern. fair, Düsseldorf, Germany. (Nordwestdeutsche Ausstellungs Gesellschaft (NOWEA), Ehrenhof 4, Düsseldorf.)

18-22. Electrochemical Soc., Columbus, Ohio. (R. K. Shannon, ES Inc., 216 W. 102 St., New York 25.)

18-23. American School Health Assoc., Atlantic City, N.J. (A. O. DeWeese, 515 E. Main St., Kent, Ohio.)

18-23. American Soc. of Plastic and Reconstructive Surgery, Miami Beach, Fla. (T. R. Broadbent, 508 E. South Temple, Salt Lake City, Utah.)

19-21. High Polymer, 9th Canadian, Toronto, Ontario, Canada. (K. E. Russell, Dept. of Chemistry, Queen's Univ., Kingston, Ontario.)

19-22. Semiconductor Symp. (Electrochemical Soc.), Columbus, Ohio. (A. C. Beer, Battelle Memorial Inst., 505 King Ave., Columbus 1, Ohio.)

19-23. American Public Health Assoc., 87th annual, Atlantic City, N.J. (B. F. Mattison, 1790 Broadway, New York 19.)

19-23. American Soc. of Civil Engineers, annual conv., Washington, D.C. (W. H. Wisley, ASCE, 33 W. 39 St., New York 18.)

19-23. Radioisotopes in the Biosphere, symp., Minneapolis, Minn. (R. B. Caldecott, Center for Continuation Study, Univ. of Minnesota, Minneapolis 14.)

19-31. International Cong. of Therapeutics, Strasbourg, France. (Prof. Fontaine, Dayen de la Faulte de Strasbourg, France.)

19-31. Pan American Medical Assoc., 10th conf., Mexico, D.F., Mexico. (J. Eller, PAMCA, 745 Fifth Ave., New York 22.)

20-21. Reprocessing of Nuclear Fuels, AEC symp., Richland, Wash. (J. T. Christy, Hanford Operations Office, U.S. Atomic Energy Commission, Richland, Wash.)

20-22. Standards, 10th natl. conf., Detroit, Mich. (K. G. Ellsworth, American Standards Assoc., 70 E. 45 St., New York 17.)

20-23. Clean Air, intern. conf., London, England. (National Soc. for Clean Air, Palace Chambers, Bridge St. London, S.W.1, England.)

22–24. Acoustical Soc. of America, fall meeting, Cleveland, Ohio. (W. Waterfall, ASA, 335 E. 45 St., New York 17.)

22-24. American Documentation Inst., annual, Bethlehem, Pa. (C. G. LaHood, Jr., Library of Congress, Washington 25.)

22–25. British Medical Assoc., annual clinical, Norwich, England. (W. Hedgcock, BMA House, Tavistock Sq., London, W.C.1, England.)

23-24. Canadian Soc. for the Study of Fertility, Montreal, Canada. (J. F. Campbell, 238 Queen's Ave., London, Ont., Canada.)

23-25. American College of Cardiology, 8th annual, Philadelphia, Pa. (P. 11 SEPTEMBER 1959

Reichert, ACC, Empire State Bldg., New York 1.)

23–27. American Heart Assoc., annual, Philadelphia, Pa. (W. F. McGlone, AHA, 44 E. 23 St., New York 10.)

24–29. Darwin Centennial, intern. celebration, 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.)

26-27. American Cancer Soc., New York, N.Y. (ACS, 521 W. 57 St., New York 19.)

26-27. Griseofulvin and Dermatomy-

coses, 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., 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.)

(See issue of 21 August for comprehensive list)



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**Special Apparatus Section** 



The information reported here is obtained

from manufacturers and from other sources con-sidered 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 mak-ing inquiries concerning the items listed appears on page 646.

**New Products** 

CLOSED-CIRCUIT TELEVISION CAMERA is designed to be inserted into tubes 3 in. or more in diameter for inspection of inside surfaces. The television monitor and the camera-control-power unit, which complete the closed circuit system, are mounted on a cart. (Diamond Power Specialty Corp., Dept. 37)

■ INFRARED ABSORPTION CELL CONSISTS OF a single block of rock salt in which a cavity has been produced by ultrasonic machining. Faces of the cell are cleaved. Thicknesses range from 0.1 to 5 mm. The cavities are filled and cleaned by hypodermic syringe and are stoppered with polyethylene. Adapters are available for use with any commercial infrared spectrometer. (Connecticut Instrument Corp., Dept. 38)

SPECTROPHOTOMETER ACCESSORIES for the manufacturer's ultraviolet-visiblenear-infrared spectrophotometer include a specular-reflectance attachment and a diffuse-reflectance-sphere attachment. The specular-reflectance attachment, suitable for measuring flat surfaces, provides a sample beam that strikes the sample at incident angle of 20 deg. The diffuse-reflectance sphere permits measurements of solid samples as well as liquid or solid scattering samples. Beam size at the sample is 25 by 32 mm. The specular component can be retained or rejected. (Perkin-Elmer Corp., Dept. 39)

TELEMETERING SIGNAL GENERATOR has radio-frequency of range 195 to 270 Mcy/sec. Three frequency-deviation ranges, 0 to 24, 0 to 80, and 0 to 240 kcy/sec, are each continuously adjustable. Internal amplitude modulation from 0 to 50 percent is available. Overall FM distortion at 75 kcy/sec is less than 2 percent; at 240 kcy/sec it is less than 1 percent. Maximum open-circuit output voltage is 0.4 v. Accuracy is  $\pm 0.5$ percent after warm-up. (Boonton Radio Corp., Dept. 42)

TAPE PERFORATOR has punching speed of 40 columns per second. As the drive shaft of the device completes half of the revolution required to punch each column, the perforator will accept the signal from the next column. Tape up to 1-in. wide is accepted with code column up to eight channels. Models with up to 30 channels are available on special order. (Telecomputing Corp., Dept. 44)

# Carcinogenesis by Ultraviolet

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Explores the process by which ultraviolet light induces cancer, discusses some practical aspects regarding skin cancer in man, and offers a new viewpoint on this disease. After describing the course of carcinogenesis, based on experimental data, Dr. Blum does not hesitate to speculate boldly-always being careful to remain within the limits set by experimental evidence. He bases his challenging speculations on the bedrock of quantitative data, and presents his arguments in readable, non-mathematical form. Investigations in the Biological Sciences, No. 2. \$6.50

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SCIENCE, VOL. 130

640

• SEQUENCE TIMER, operated by battery, is reported to have a very low power requirement. The unit is of cam-operated microswitch type. It is driven by a motor with speed regulation accurate within  $\pm 1$  percent for voltage drops up to 50 percent. Switch capacity may be 5 or 20 amp. (Brailsford & Co., Dept. 41)

■ PRESSURE-RATIO COMPUTER measures compressor inlet and outlet pressures, indicates pressure ratio on an integral scale, and generates a pneumatic signal proportional to the ratio. Pressure. elements are available for use over a continuous range from 0 absolute to 500 lb/in.<sup>2</sup> gage. Ratios of 1 to 5 can be measured throughout a pressure-turndown range of 20 to 1. (Hagan Chemicals & Controls, Inc., Dept. 45)

■ METERING PUMP features volume-perstroke adjustability while running. Pump bodies are made of ceramic, tempered glass, or Teflon. Plungers are ceramic. Stroke rate is 95 per minute; stroke length is adjustable from 0 to 19/32 in. The pump will operate against back pressure of 28.5 lb/in<sup>2</sup>. (C. H. Stoelting Co., Dept. 49)

• ULTRASONIC FLAW DETECTOR is a portable instrument offering choice of any frequency of operation between 0.4 and 10 Mcy/sec, depending on the transducer selected. Adjustment to any frequency within the range is automatic. An optional flaw alarm signals that test limits have been exceeded. (Branson Instruments, Inc., Dept. 50)

CLOSED-CIRCUIT TELEVISION SYSTEM provides 1000-line horizontal resolution and 700-line vertical resolution. Bandwidth for the complete system is 20 Mcy/sec. The system is available with preset line rates of 675, 875, or 1035 lines per frame at 60 fields, 30 frames per second. Aspect ratio is variable between 1:1 and 3:4 (height to width). Variations of line voltage  $\pm$  10 percent of nominal 117 v do not cause picture deterioration. (General Precision Laboratories, Inc., Dept. 51)

IMPEDANCE BRIDGE measures inductance and Q of inductors, capacitance and dissipation factor of capacitors, and a-c and d-c resistance. Resistance range is 1 milliohm to 10 megohm; capacitance 1 pf to 1000  $\mu$ f; inductance 1  $\mu$ h to 1000 h. Dissipation factor D of capacitors is measured from 0.001 to 50 at 1 kcy/sec. Q of inductors is measured from 0.02 to 1000 at 1 kcy/sec. Accuracies of  $\pm$ 1 percent for R, C, and Land  $\pm$ 5 percent for Q and D are claimed. (General Radio Co., Dept. 54) JOSHUA STERN

National Bureau of Standards, Washington, D.C.

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