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8-11. American Helicopter Soc., 13th annual, Washington, D.C. (H. M. Lounsbury, AHS, 2 E. 64 St., New York 21.)

9. Dietary Essential Fatty Acids, Assoc. of Vitamin Chemists, Chicago, Ill. (M. Freed, Dawe's Laboratories, Inc., 4800 S. Richmond St., Chicago 32.)

9-10. Microwave Ferrites and Related Devices and Their Applications, New York, N.Y. (S. Weisbaum, Bell Telephone Laboratories, Murray Hill, N.J.)

9-10. Operations Research Soc. of America, 5th annual, Philadelphia, Pa. (M. L. Ernst, P.O. Box 2176, Potomac Sta., Alexandria, Va.)

9-11. Drugs in Psychotherapy, internat. symp., Milan, Italy. (Secretary, Pharmacology Inst., Via Andrea del Sarto 21, Milan.)

9-11. Virginia Acad. of Science, Old Point Comfort. (F. F. Smith, Box 1420, Richmond, Va.)

9-12. American Psychoanalytic Assoc., Chicago, Ill. (J. N. McVeigh, APA, 36 W. 44 St., New York 36.)

10-11. Indiana Acad. of Science, Turkey Run State Park, Ind. (H. Crull, Dept. of Mathematics, Butler Univ., Indianapolis 7.)

10-11. Vocational Training and Rehabilitation of the Mentally and Physically Handicapped, Woods Schools Conf., Chicago, Ill. (J. M. MacDonald, Woods Schools, Langhorne, Pa.)

12-13. International Soc. of Bronchosopology, cong., Philadelphia, Pa. (C. L. Jackson, 1901 Walnut St., Philadelphia 3.)

12-16. Electrochemical Soc., Washington, D.C. (H. B. Linford, 216 W. 102 St., New York 25.)

12-16. Institute of Food Technologists, annual, Pittsburgh, Pa. (C. S. Lawrence, IFT, 176 West Adams St., Chicago 3, Ill.)

13-15. Industrial Waste Conf., 12th Lafayette, Ind. (D. E. Bloodgood, Purdue Univ., Lafayette.)

13-15. Radiation Research Soc., annual, Rochester, N.Y. (A. Adelman, Nuclear Science and Engineering Corp., P.O. Box 10901, Pittsburgh 36, Pa.)

13-15. Recent Developments in Research Methods and Instrumentation, symp., Bethesda, Md. (J. A. Shannon, National Institutes of Health, Bethesda.)

13-15. Structure of Electrolytic Solutions, NSF symp., Washington, D.C. (H. B. Linford, Electrochemical Soc., 216 W. 102 St., New York 25.)

13-16. American Orthodontic Assoc., New Orleans, La. (S. D. Goal, 1037 Maison Blanche Bldg., New Orleans.)

13-16. Semiconductor Symposium, 5th annual, Washington, D.C. (H. M. Pollack, Semiconductor Div., RCA, 415 S. 5 St., Harrison, N.J.)

13-17. American Psychiatric Assoc. annual, Chicago, Ill. (D. Blain, APA, 1785 Massachusetts Ave., NW, Washington 6.)

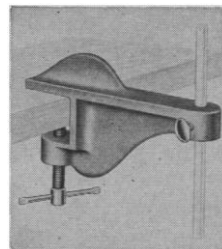
13-17. Inter-American Symposium on the Peaceful Uses of Nuclear Energy, Brookhaven, L.I., N.Y. (S. Tucker, Brookhaven National Lab., Brookhaven, L.I.)

14-16. Industrial Nuclear Technology Conf., Chicago, Ill. (L. Reiffel, Armour Research Foundation, Illinois Inst. of Technology, 10 West 35 St., Chicago 16.)

14-16. International Soc. of Audiology,

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cong., St. Louis, Mo. (S. R. Silverman, 818 S. Kingshighway, St. Louis 10.)

14-18. Biochemistry of Cancer, symp. of International Union against Cancer, London, England. (E. Boyland, Chester Beatty Research Inst., Royal Cancer Hospital, Fulham Rd., London, S.W.3.)

15-16. Space Age Symposium, Southern Research Inst., Birmingham, Ala. (R. D. Osgood, Jr., Southern Research Inst., 917 S. 20 St., Birmingham 5.)

15-18. American College of Cardiology, Washington, D.C. (S. Fiske, 150 E. 71 St., New York 21.)

15-18. Work and the Heart Medical Conf., Milwaukee, Wis. (E. L. Belknap, Dept. of Occupational and Environmental Medicine, Marquette School of Medicine, Milwaukee.)

16-17. Space Age Symp., Southern Research Inst., Birmingham, Ala. (R. D. Osgood, Jr., Southern Research Inst., 2000 Ninth Ave. South, Birmingham 5.)

16-18. Engineering Industries Exposition, New York, N.Y. (H. Becher, New York State Soc. of Professional Engineers, 1941 Grand Central Terminal Bldg., New York 17.)

16-18. Society of Naval Architects and Marine Engineers, spring, Long Beach, Calif. (W. N. Landers, SNAME, 74 Trinity Pl., New York 6.)

17. Maryland Acad. of Sciences, annual, Baltimore, Md. (T. King, Maryland Acad. of Sciences, Enoch Pratt Free Library Bldg., Baltimore 1.)

17-19. American Inst. of Industrial Engineers, 8th annual, New York, N.Y. (J. L. Southern, AIIE, 145 N. High St., Room 303, Columbus 15, Ohio.)

19-21. Heat Transfer and Fluid Mechanics Inst., Pasadena, Calif. (P. P. Wegener, Jet Propulsion Lab., California Inst. of Technology, 4800 Oak Grove Dr., Pasadena 3.)

19-23. American Assoc. of Cereal Chemists, annual, San Francisco, Calif. (C. L. Brooke, Merck & Co., Inc., Rahway, N.J.)

19-24. National Conf. on Social Welfare, annual, Philadelphia, Pa. (F. Schmidt, NCSW, 22 W. Gay St., Columbus 15, Ohio.)

20-21. Society of American Military Engineers, annual, Washington, D.C. (National Headquarters, SAME, 808 Mills Bldg., Washington 6.)

20-22. International Voice Conf., Chicago, Ill. (H. Von Leden, 30 N. Michigan Ave., Chicago 2.)

20-24. Correctional Psychiatry and Group Counseling, joint institute, Poughkeepsie, N.Y. (P. H. Hoch, Commissioner of Mental Hygiene, State Office Bldg., Albany, N.Y.)

20-24. Mass Spectrometry, New York, N.Y. (R. A. Friedel, U.S. Bureau of Mines, 4800 Forbes St., Pittsburgh 13, Pa.)

20-25. International Conf. of Epizootics, annual, Paris, France. (12, rue de Prony, Paris 17^e.)

20-31. International Federation of Agricultural Producers, 9th general assembly, Lafayette, Ind. (IFAP, 712 Jackson Pl., NW, Washington, D.C.)

21-25. American Assoc. on Mental Deficiency, Hartford, Conn. (T. L. McCulloch, Letchworth Village, Thiells, N.Y.)



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22-24. American Inst. of Chemists, annual, Akron, Ohio. (L. Van Doren, AIC, 60 E. 42 St., New York 17.)

22-24. American Soc. for Quality Control, annual, Detroit, Mich. (L. S. Eichelberger, A. O. Smith Corp., Milwaukee 1, Wisc.)

22-25. International Scientific Radio Union, national spring mtg., Washington, D.C. (J. P. Hagen, U.S.A. National Committee URSI, National Acad. of Sciences, 2101 Constitution Ave., NW, Washington 25.)

23-25. Acoustical Soc. of America, New York, N.Y. (W. Waterfall, ASA, 57 E. 55 St., New York 22.)

25-26. International Cong. for the Study of the Bronchi, Lisbon, Portugal.

(F. Lopo de Carvalho, 138 rua de Junqueira, Lisbon.)

25-28. International Cong. of Acupuncture, 9th, Vienna, Austria. (Austrian Assoc. for Acupuncture, 57 Schwenderstrasse, Vienna.)

26-30. Special Libraries Assoc., annual, Boston, Mass. (Miss M. E. Lucius, SLA, 31 E. 10 St., New York 3.)

29-2. American College of Chest Physicians, annual, New York, N.Y. (M. Kornfeld, ACCP, 112 E. Chestnut St., Chicago 11, Ill.)

30-31. Rheology of Elastomers, conf., Welwyn Garden City, Herts., England. (N. Wookey, British Soc. of Rheology, 52, Tavistock Rd., Edgware, Middlesex, England.)

30-1. American Acad. of Dental Medicine, 11th annual, Boston, Mass. (R. Diamond, 100 Boylston St., Boston.)

30-1. American Malacological Union, Pacific meeting, Santa Barbara, Calif. (Miss M. C. Teskey, P.O. Box 238, Marinette, Wis.)

30-1. Endocrine Soc., 39th annual, New York, N.Y. (H. H. Turner, 1200 N. Walker St., Oklahoma City 3, Okla.)

31-2. American Soc. for the Study of Sterility, New York, N.Y. (H. Thomas, 920 S. 19 St., Birmingham 5, Ala.)

31-2. Social Medicine, internatl. cong., Vienna, Austria. (T. Antoine, Spitalgasse 23, Vienna 9.)

31-2. Society for Applied Anthropology, annual, East Lansing, Mich. (W. F. Whyte, New York State School of Industrial and Labor Relations, Cornell Univ., Ithaca, N.Y.)

June

1-2. American Diabetes Assoc., 17th annual, New York, N.Y. (ADA, 1 E. 45 St., New York 17.)

1-2. Soc. for Investigative Dermatology, annual, New York, N.Y. (H. Beerman, 255 S. 17 St., Philadelphia 3, Pa.)

2-6. Air Pollution Control Assoc., golden anniversary, St. Louis, Mo. Jointly with American Meteorological Soc., American Soc. of Heating and Air Conditioning Engineers, American Inst. of Chemical Engineers, and American Soc. of Mechanical Engineers. (H. C. Ballman, APCA, 4400 Fifth Ave., Pittsburgh 13, Pa.)

2-7. Society of Automotive Engineers, summer, Atlantic City, N.J. (Meetings Division, SAE, 29 West 39 St., New York 18.)

2-8. International Cong. of Photobiology, 2nd, Turin, Italy. (G. Matli, Istituto di Fisica dell'Universita di Torino, Via Pietro Giuria 1, Corso Massimo d'Azeglio 46, Turin.)

3-5. American Soc. of Refrigerating Engineers, Miami Beach, Fla. (R. C. Cross, ASRE, 234 Fifth Ave., New York 1.)

3-5. Chemical Inst. of Canada, 40th annual, Vancouver, B.C. (CIC, 18 Rideau St., Ottawa 2, Ont.)

3-7. American Medical Assoc., annual, New York, N.Y. (G. F. Lull, AMA, 535 N. Dearborn St., Chicago 10, Ill.)

3-7. American Soc. of Civil Engineers, Buffalo, N.Y. (W. H. Wisely, ASCE, 33 W. 39 St., New York 18.)

3-7. Hospital Cong., 10th international, Lisbon, Portugal. (J. E. Stone, 10 Old Jewry, London, E.C.2, England.)

3-8. Microbiological Inst., 10th annual, Lafayette, Ind. (C. L. Porter, Dept. of Biological Sciences, Purdue Univ., Lafayette.)

3-12. Quantitative Biology, 22nd Cold Spring Harbor Symp., Cold Spring Harbor, N.Y. (B. Wallace, Biological Laboratory, Cold Spring Harbor.)

4-9. Blood Circulation, international symp., London, England. (D. G. James, c/o 11 Chandos St., London, W.1.)

5-7. Therapeutics, 5th international cong., Utrecht, Netherlands. (F. A. Nelemens, Bureau Provisoire, Vondellaan 6, Utrecht.)

(See issue of 15 March for comprehensive list)

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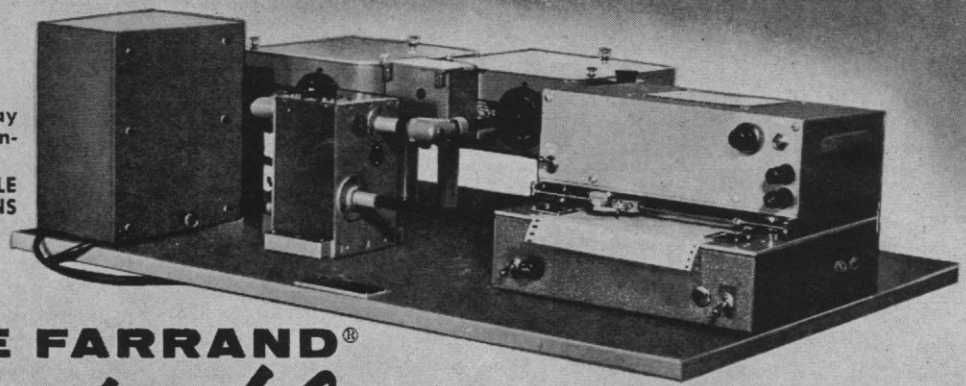
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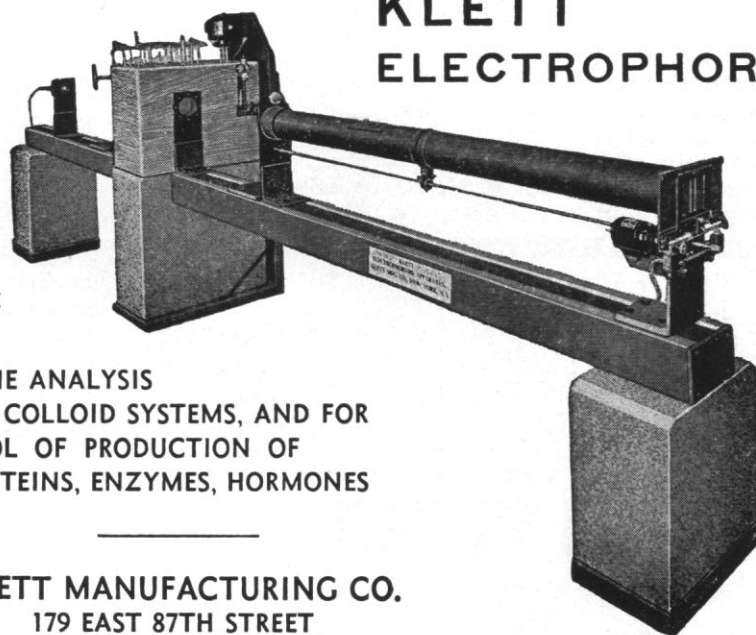


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The information reported here is obtained from manufacturers and from other sources considered to be reliable. Science does not assume responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to Science, Room 740, 11 W. 42 St., New York 36, N.Y. Include the name(s) of the manufacturer(s) and the department number(s).

■ **MEASURING MICROSCOPE** features a built-in illuminating system that permits both the surface and the contour of objects to be observed. The cross-slide measuring stage has a maximum range of 1 × 2 inches. Motion is controlled by micrometer screws. Standard magnification is 35, but various objective and eyepiece combinations can be used to provide other magnifications. A protractor eyepiece and object-supporting centers are available as accessories. (Bausch and Lomb Optical Co., Dept. S234)

■ **HIGH-TEMPERATURE ALLOYS**, as well as the effect of precise metallurgical control on their design and fabrication properties and information for selection for service at elevated temperatures, are described in a 20-page booklet. (Carpenter Steel Co., Dept. S223)

■ **OXYGEN ANALYZER** employs a colorimetric differential-photometer method for continuous detection and measurement of trace amounts of oxygen in gas streams. Full-scale sensitivity of the instrument can be adjusted to any oxygen value between 0 to 50 and 0 to 1000 ppm. Precision is said to be better than ± 2 percent of full scale in the absence of interfering constituents. The colorimetric reagent used is an alkaline solution of sodium anthraquinone-2-sulfonate, which has a deep red color in the reduced state. Passage over zinc amalgam regenerates the reduced reagent. Available accessories include two types of calibrator, traps, and filters. (Consolidated Electro-dynamics Corp., Dept. S233)

■ **SOLID-SOLUTION PLASTIC FLUOR** for use in scintillation counters is a cast "alloy" of polystyrene with small percentages of *p*-terphenyl and tetraphenylbutadiene. It is available in rod form in diameters from 3 to 18 in., in lengths up to 36 in. Availability in sheets 24 by 24 in., ½ to 5 in. thick, is contemplated. Light-output efficiency, relative to anthracene crystals, is 0.36. Wavelength of fluorescent emissions is in the range 4200 to 4600 Å. Decay time, measured by pulsed x-ray excitation, is approximately 4×10^{-9} sec. (Cadillac Plastic and Chemical Co., Dept. S235)

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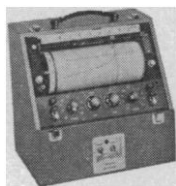
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National Bureau of Standards

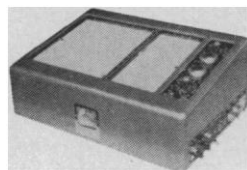
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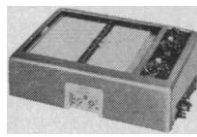
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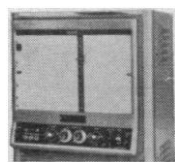
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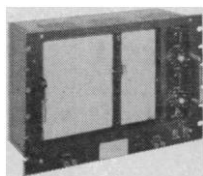
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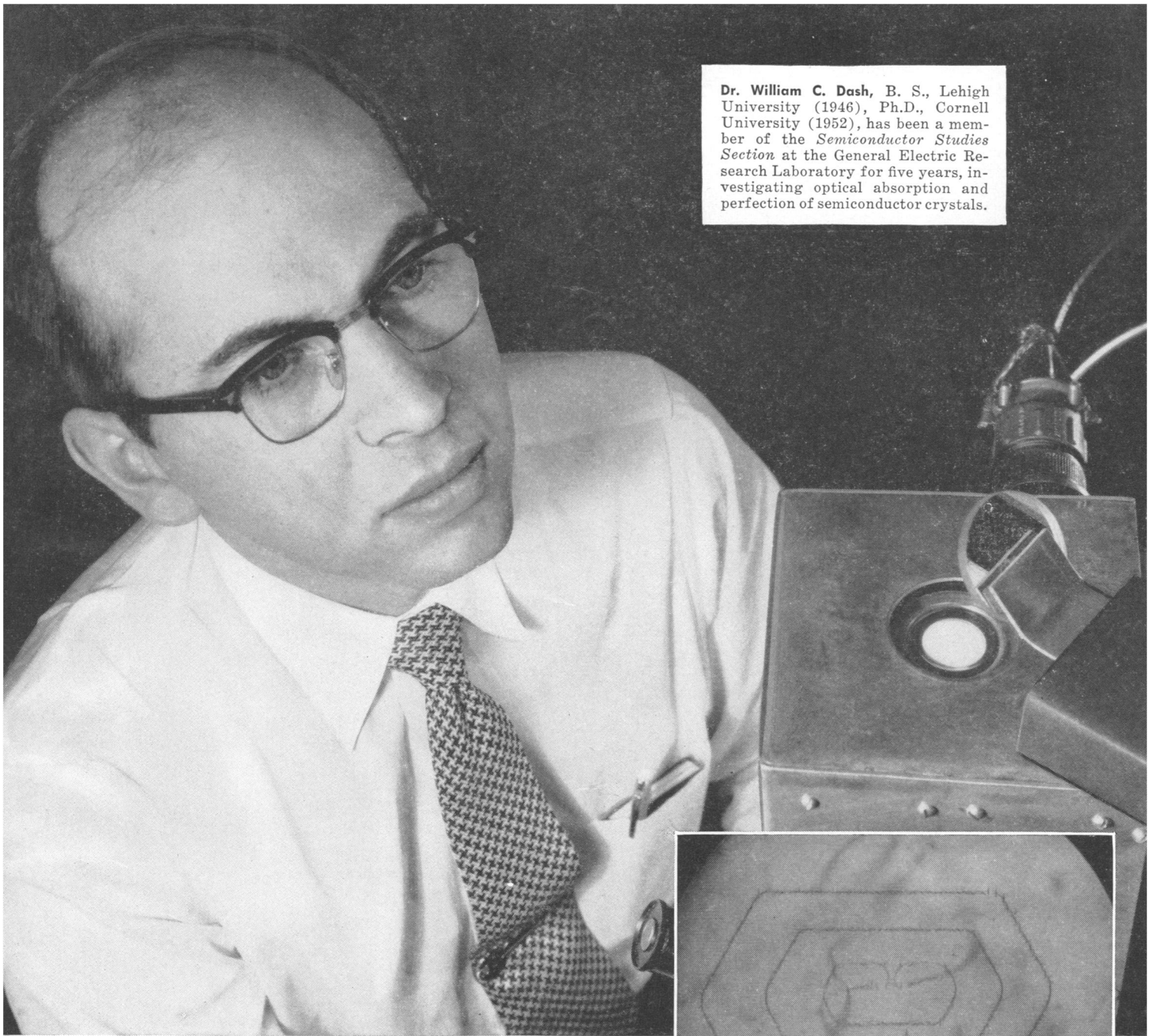
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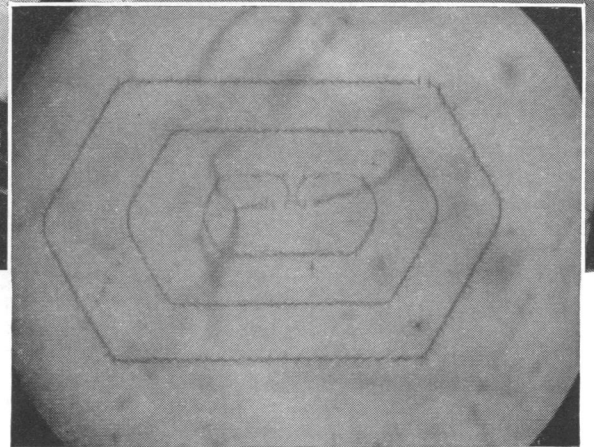
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Dr. William C. Dash, B. S., Lehigh University (1946), Ph.D., Cornell University (1952), has been a member of the *Semiconductor Studies Section* at the General Electric Research Laboratory for five years, investigating optical absorption and perfection of semiconductor crystals.

Looking into silicon

Dr. William C. Dash of General Electric develops a new technique for studying dislocations in silicon crystals



Infrared light passes through silicon and reveals pattern of dislocations on the screen of the "snooperscope."

Silvery wafers of silicon used in semiconductor research — and in the manufacture of transistors — are as opaque as a brick wall to visible light, but highly transparent to infrared. Dr. William C. Dash of the General Electric Research Laboratory has adapted the "snooperscope," an infrared-sensitive device developed during World War II, as a convenient means of looking into silicon crystals.

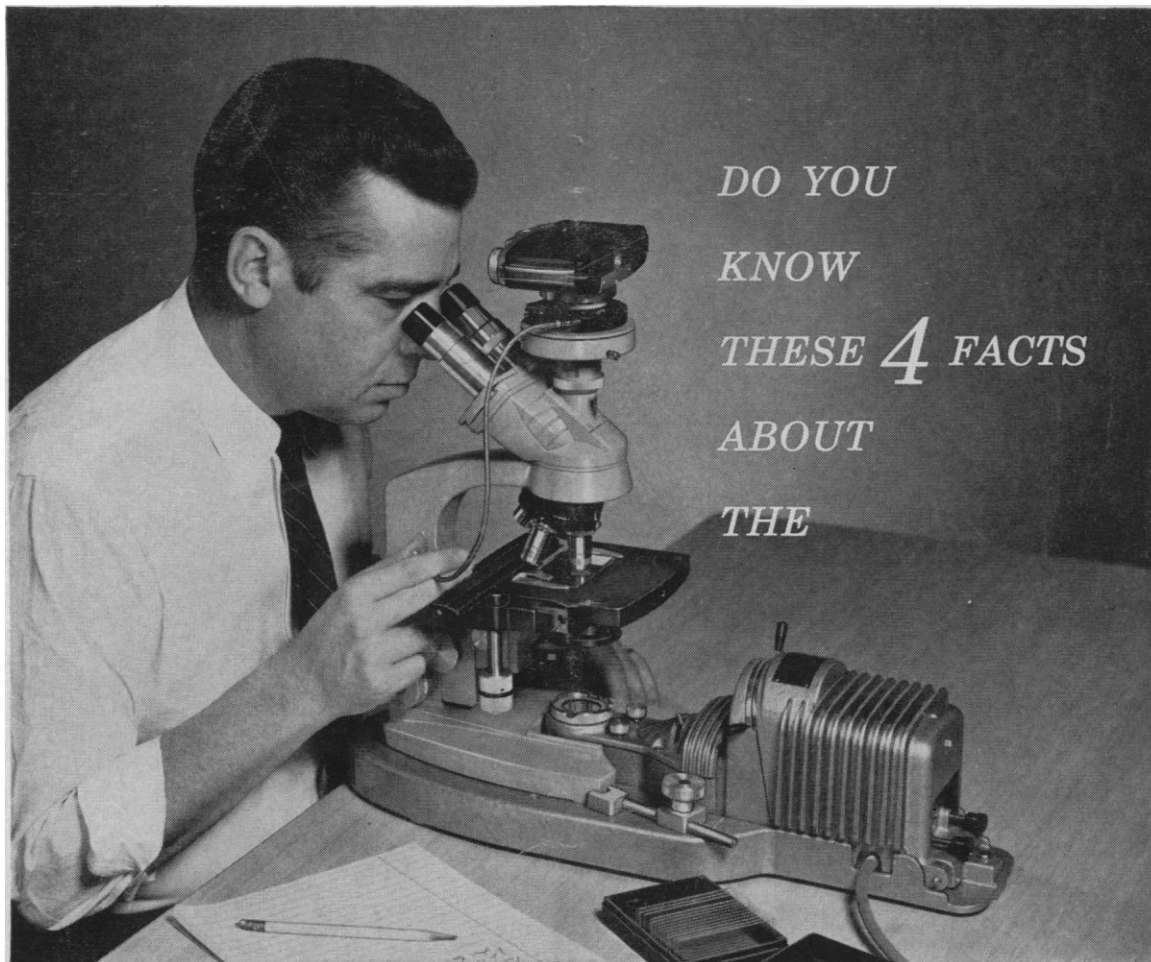
Recently Dr. Dash and his associates devised a method of precipitating copper along the rows of out-of-line atoms inside silicon crystals so that these flaws — called *dislocations* — can be seen by the snooperscope. Since physicists now explain many aspects of crystal behavior — how they grow and why they bend

— in terms of dislocations, the Dash technique is an important new tool for learning more about the solid state. Dislocation patterns predicted by theory have actually been seen for the first time on the screen of Dr. Dash's snooperscope.

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