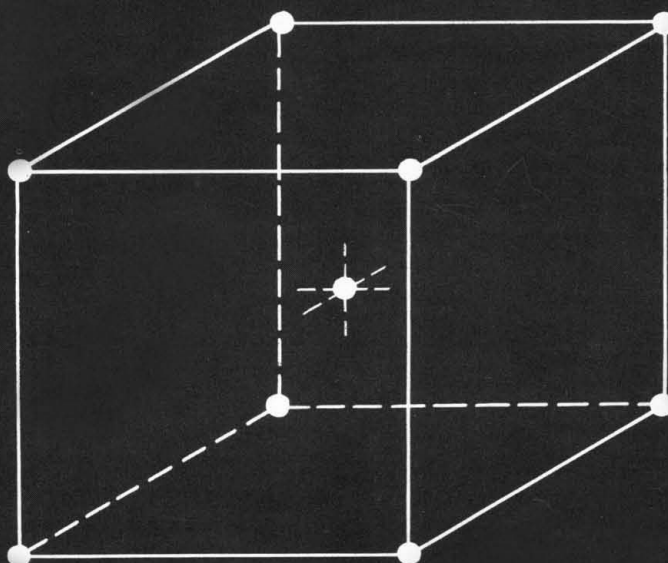
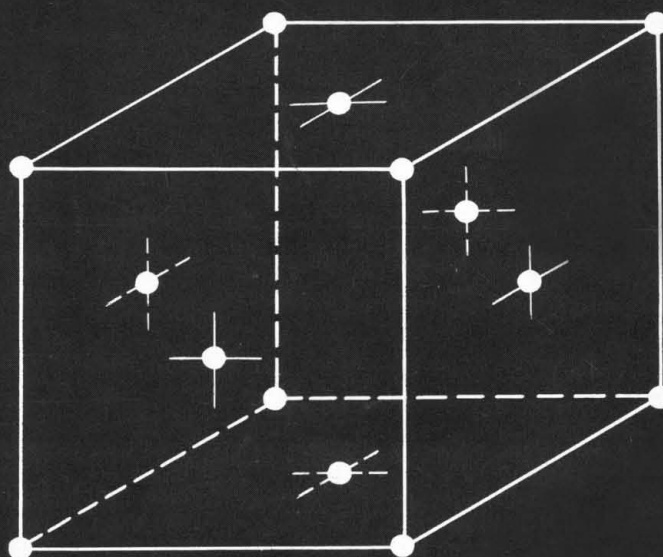


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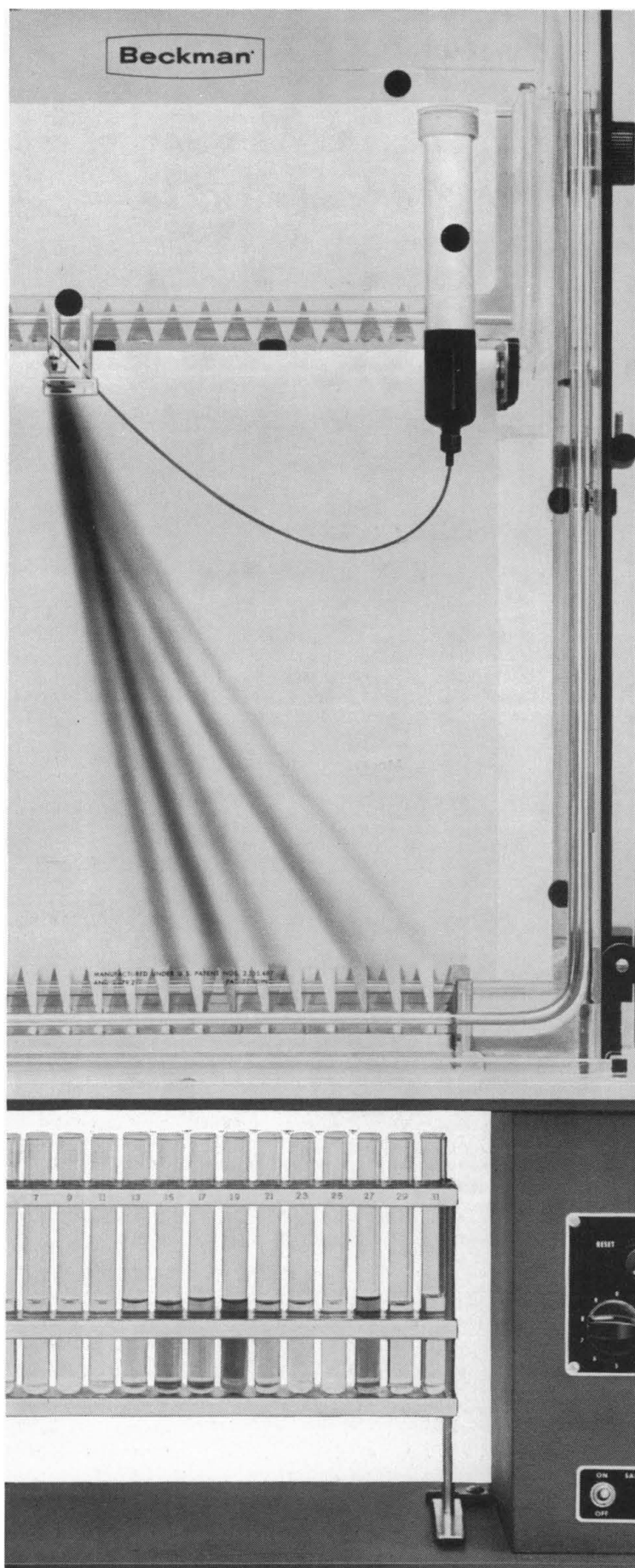
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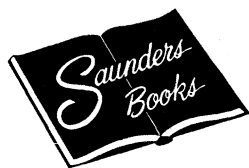
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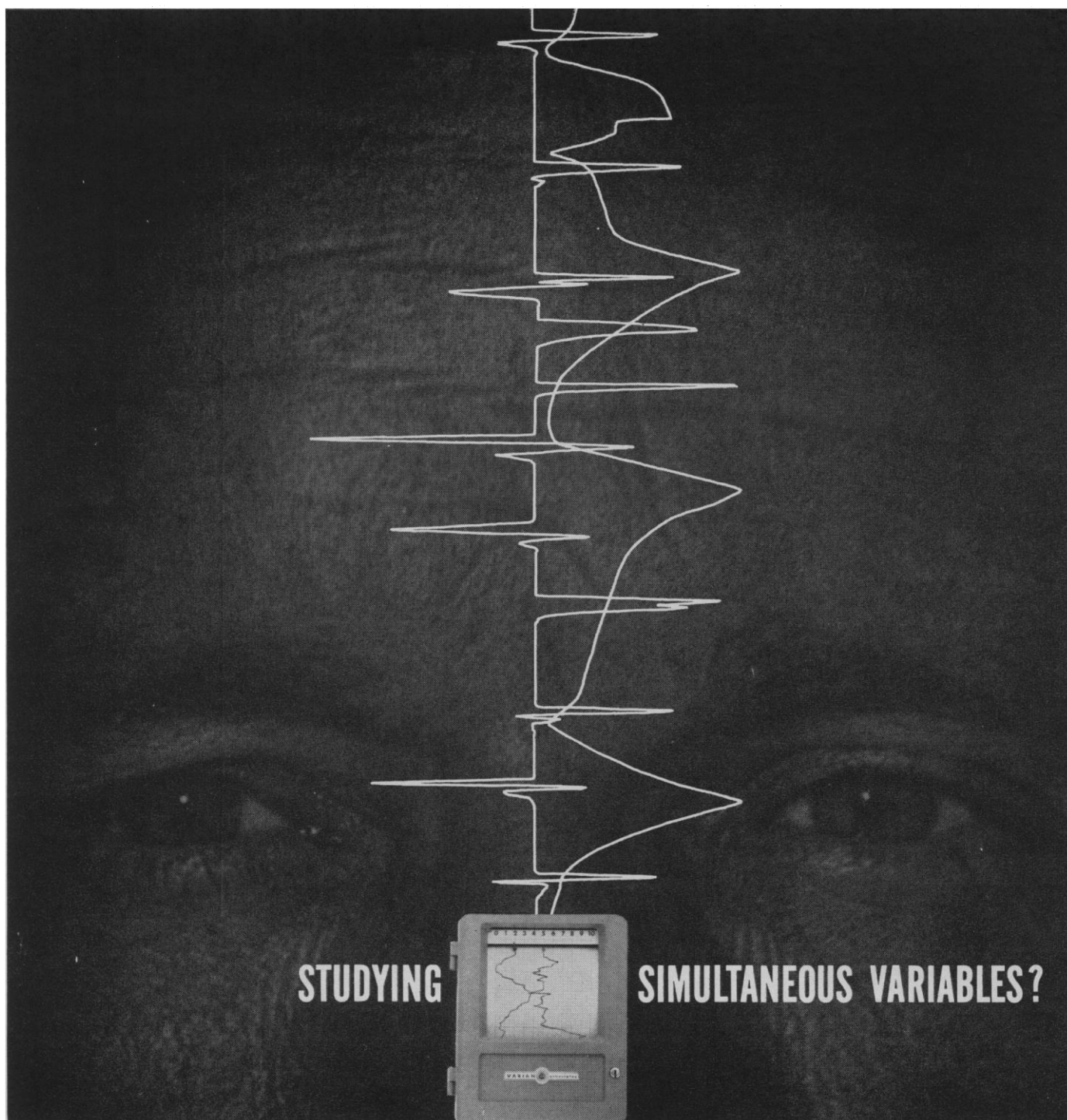
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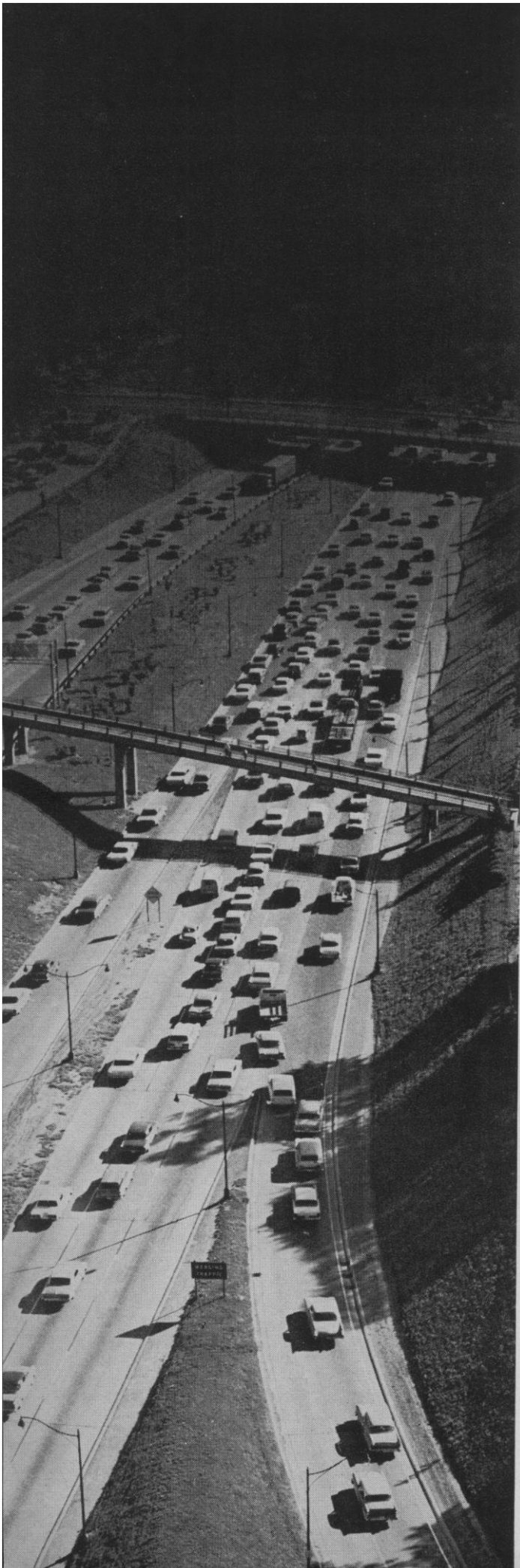


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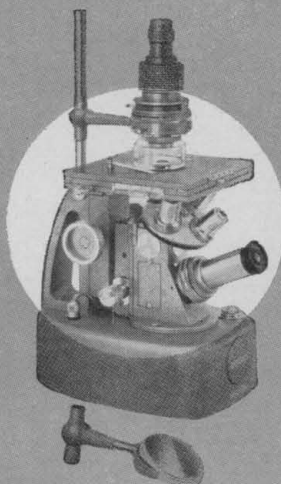
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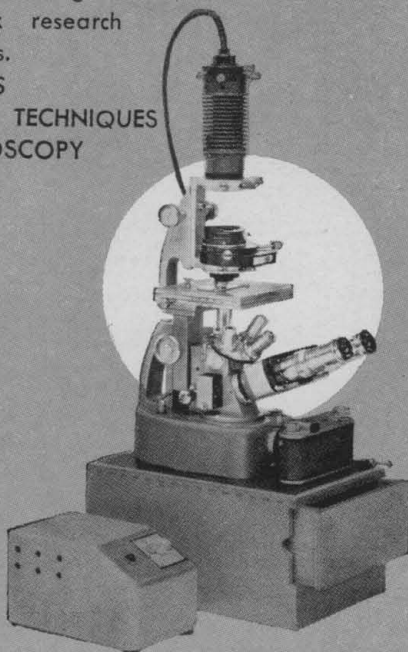
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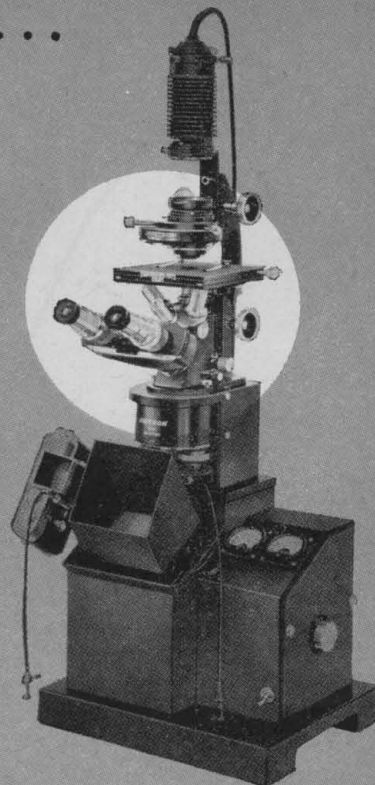
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Manpower or Mind Power

Numbers are the standard yardstick in studies of scientific personnel. They are the measure employed in comparisons of our scientific effort with the Russians' and are commonly used in government reports. This emphasis is disturbing. It carries the implication that scientists, like nuts and bolts, are interchangeable and can be mass-produced. The latest report exemplifying this tendency is entitled "Meeting Manpower Needs in Science and Technology" and was released 12 December by the President's Science Advisory Committee. The document calls for an increase in the number of Ph.D. degrees granted in the engineering, mathematical, and physical sciences from 2,900 in 1960 to 7,500 in 1970. To reach this goal the report proposes increased subsidies for graduate students. Given sufficient federal support, large numbers of men can be persuaded to undertake graduate study. Will such a program produce excellence?

Unfortunately the report barely mentions quality and offers no other inducement to scholarship than financial security. This is not astonishing. All of us can understand numbers and money. But who can measure or inspire creative genius? Scientists vary greatly in their effectiveness. One Enrico Fermi is more valuable to the nation than a thousand ordinary Ph.D.'s. When we increase the number of Ph.D.'s do we increase or do we diminish the probability of fostering such geniuses? I suspect that in the recent expansion of science quality has been diluted. This impression is based in part on my evaluation of some recent Ph.D. theses which would barely have earned an M.S. degree in an earlier period. Many papers today seem pedestrian. The experimental equipment employed usually is superb; the idea content too often is thin. Some graduate students in more than one eastern school are on the job only 40 hours a week. A desirable standard is more like 70 to 90 hours. This development indicates lack of motivation. A gifted individual has nothing if he is without drive and a sense of direction. A man of moderate endowment may show flashes of genius if he struggles hard enough. Some of the great scientists of the past were comparatively free from financial pressures; others were creative in spite of adversity. Most individuals seem to need a hardening experience to bring out their best. Giving such people financial security is as likely to hurt them as to help them. The Great Depression was a valuable experience for some scientists who were in their formative years at the time. Turning away from the negative aspects of lack of money, they emphasized the search for truth, the love of knowledge, the joy of discovery, the esteem of colleagues. Will these values seem important to the additional students who are lured into graduate school by increased subsidies? Implementation of the report should produce a fine crop of technologists for industry. It may diminish the number of gifted individuals with the necessary motivation to be truly creative. We hope that in planning for future manpower less attention will be directed toward numbers and more toward quality. The current report is the first in a series. Perhaps a later document will deal with these difficult but more important aspects of this national problem.—P.H.A.



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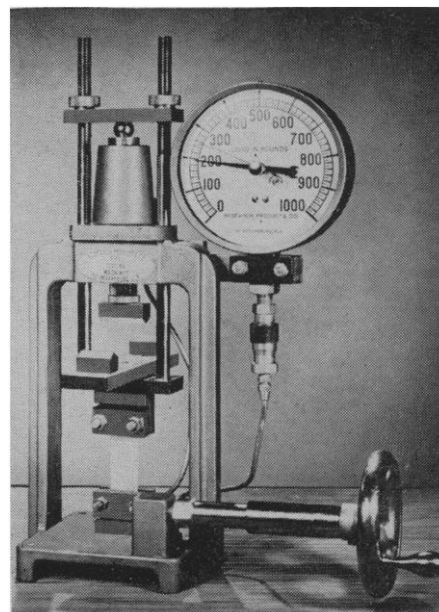
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Portable moisture monitor for hydrogen or oxygen gas overcomes the difficulty that, once hydrogen and oxygen are freed from water by electrolysis, the products of electrolysis readily recombine with the sample gas to produce more water. The type 26-304 moisture monitor operates on the dual-flow method in which readings are taken at two different sample flow rates. The difference between the two readings is said to be the true moisture content of the sample gas with accuracy of ± 5 percent of full scale. Flow rates are automatically changed from 20 to 40 ml/min and back in 15-min cycles by a solenoid valve and timer. A zero suppress circuit nulls the total signal at the 20 ml/min flow rate so that when the flow rate is switched to 40 ml/min the instrument reads moisture content from 1 to 1000 ppm. A manual switch permits the instrument to be used for measurement of moisture of gases other than oxygen and hydrogen. The most sensitive range is 10 ppm full scale. Time for 63-percent response to a large step change at the inlet, either up-scale or down-scale, is 30 sec.—J.S. (Consolidated Electrodynamics Corp., Dept. S533, Pasadena, Calif.)

Catalog of digital modules provides 412 pages of information on specifications and application data of modules for construction of digital instruments and instrument systems. An introductory section of 7 pages provides a brief description of analog and digital computers and number systems. A 56-page section describes basic digital circuits that permit construction of a variety of general and special-purpose logic circuits using the modules. Four appendixes that provide additional background to digital techniques are titled: "Binary-coded decimal codes and arithmetic," "Boolean algebra," "Pulse train techniques," and "Bibliography of digital logic." The last includes introductory books and reference works. The remainder of the catalog presents detailed specifications of all of the manufacturer's modules and accessory equipment.—J.S. (Digital Equipment Corp., Dept. S573, Maynard, Mass.)

Testing machine for tensile and compression testing of materials at loads up to 1000 lb is compact and portable, but rugged enough for industrial use for quality control. The instrument is a desk-top device operated by a hydraulic piston and hand-operated screw pump, equipped with jigs and fixtures for a variety of tensile, flexural, or compressional testing applications. Hydraulic pressures are indicated on a 6-inch dial gauge that can be had in various ranges from 0 to 100 to 0 to 1000 lb/in.² While intended for testing industrial materials, the range and size of the instrument make it suitable for many biological applications, such as homogenizing by pressure sieving or sudden



The material in this section is prepared by the following contributing writers:

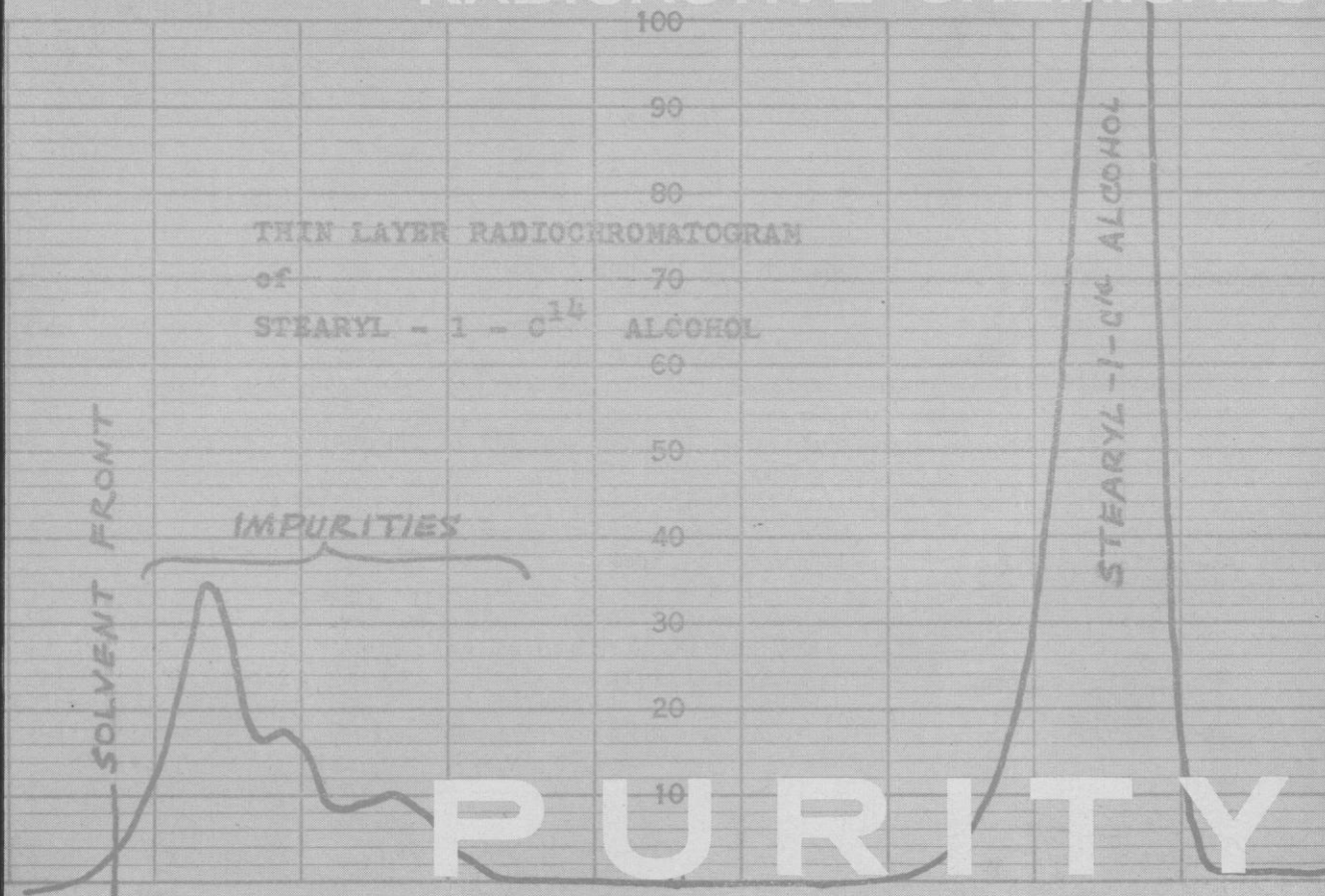
Robert L. Bowman (R.L.B.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment).

Joshua Stern (J.S.), Basic Instrumentation Section, National Bureau of Standards, Washington 25, D.C. (physics, computing, electronics, and nuclear equipment).

The information reported is obtained from manufacturers and other sources considered reliable. Neither *Science* nor any of the writers assumes responsibility for the accuracy of the information.

Address inquiries to the manufacturer, mentioning *Science* and the department number.

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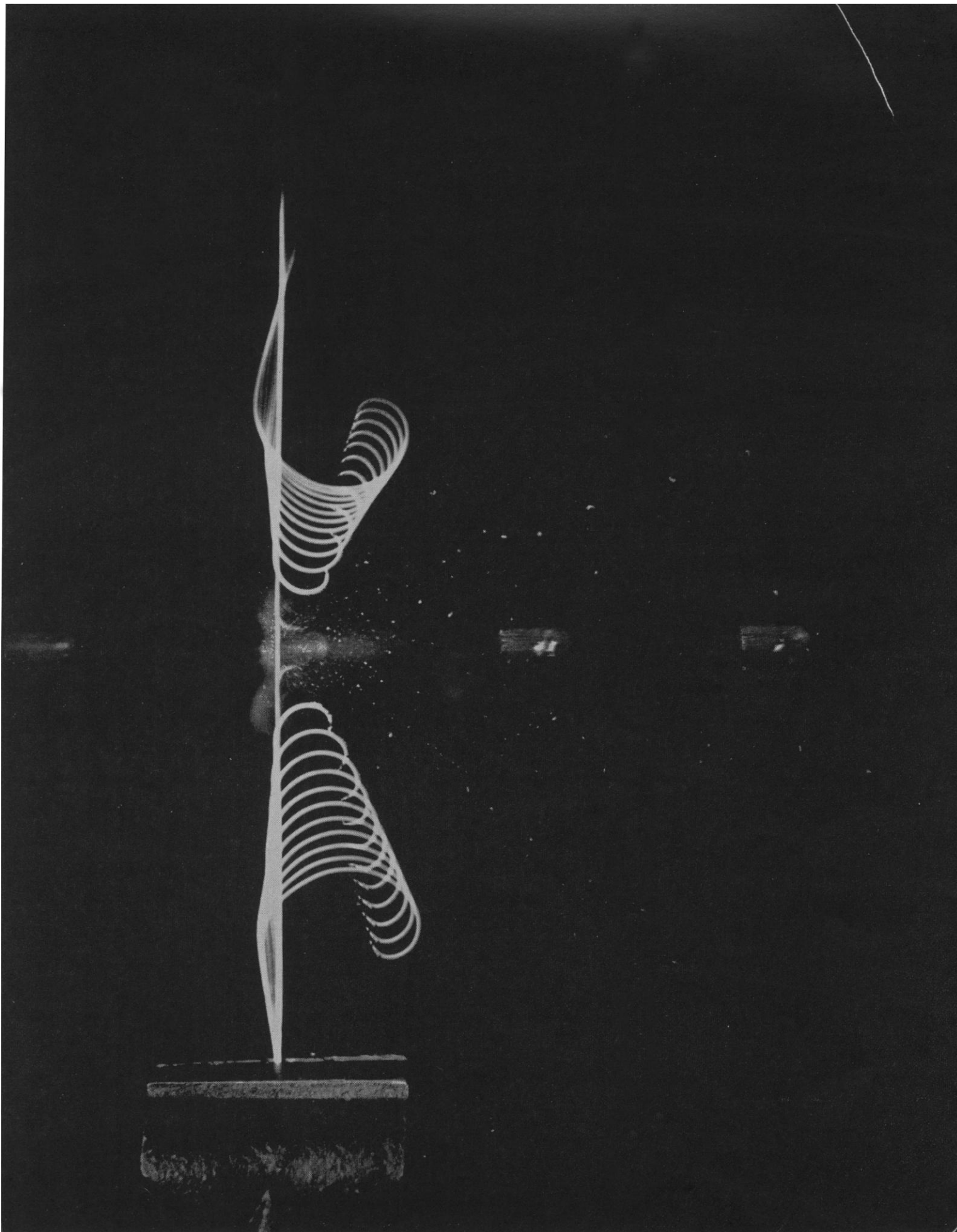
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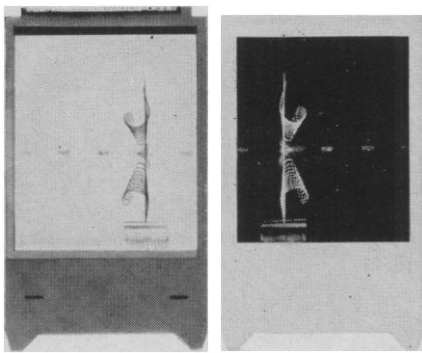
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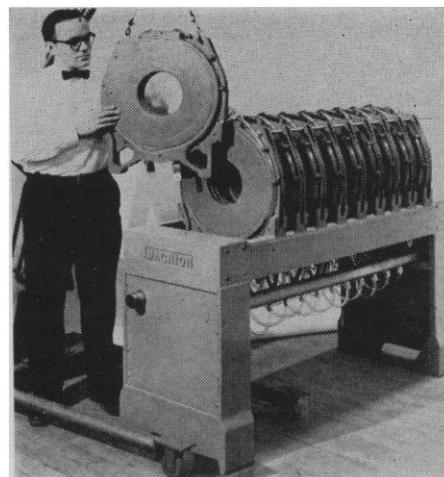
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decompression, as well as the application to the testing of tensile and compression strengths of bone, tendon, and other tissues.—R.L.B. (Research Products Co., Dept. S548, P.O. Box 1047, 1415 Third St., South, St. Petersburg 31, Florida)

Melting point apparatus provides a simple, accurate means for determining the melting points of single crystals, micro or macro particles. Determinations may be made up to 360°C with an accuracy of $\pm 0.5^\circ\text{C}$. A unique feature of the apparatus is a thermometer with a specially formed bulb having a depression for receiving the sample under test. This eliminates errors due to temperature differential between the sample and the thermometer. Changes in a single crystal weighing as little as 10 μg can be observed before, during, and after melting. A cover glass shields the thermometer bulb and sample from air currents. The National Melting Point Apparatus consists of a 75 \times microscope, with a built-in oblique-light illuminator, 330-watt variable transformer equipped with a voltmeter and ammeter, heating stage, and the 0 to 360°C thermometer. The variable transformer may be used separately for controlling the voltage of heating mantles and other electrical apparatus within its rated capacity.—R.L.B. (National Instrument Co., Dept. S547, 4119 Fordleigh Rd., Baltimore 15, Md.)

Bioamplifier is a compact, packaged plug-in unit with a voltage gain of 6000, intended for picking up electrical activity, such as EEG, EKG, EMG, and fetal EKG for monitoring these activities in clinical or research applications. The amplifier has an input impedance of 0.5 megohm, differential input, at least 80 db common mode rejection, and 3 μV peak to peak noise level. Frequency response is 0.4 cy to 5 kcy/sec and output impedance is 30,000 ohms. The volume of the unit without batteries is 0.675 in.³ and it weighs ½ oz. It requires +7 and -7 volts at 1 ma.—R.L.B. (Biocom, Inc., Dept. S543, 5883 Blackwelder St., Culver City, Calif.)

The Plasmaflux is an **integrated air-core solenoid system** designed for plasma dynamics experiments and the like. Continuous fields of up to 30 kgauss are said to be achieved in a bore 7-inches in diameter. Solenoid systems are available with inside diameters ranging from 1 to 12 inches. Static axial field ripple of less than 1 part in 10⁸ are



obtained with 1-inch spacing between coil assemblies. Overall space factors, including all coolant passages and insulation, are said to be better than 90 percent and heat transfer rates exceed 250 w/in.—J.S. (Magnion Inc., Dept. S550, 195 Albany St., Cambridge 39, Mass.)

A line of **adjustable leaks** is designed for control of pressure down to 10⁻⁹ torr, control of signal intensity in mass spectrometers, gas tube back filling, gas flushing during bake-out operations, and other applications. Controlled flow range from 5 $\times 10^{-7}$ to 10⁻² standard milliliter of air per second at 1 atm differential pressure is available in the model 72 unit. The model 11 covers the range from 5 $\times 10^{-2}$ to 10 standard ml/sec. Intermediate ranges are available. Controlled flow below the limit of detection with a mass spectrometer is said to be achieved by lowering inlet pressure. The adjustable leak is available with either bakable or nonbakable valves. The device is fabricated without organic materials. Setting is made by adjustment of a micrometer head.—J.S. (Andonian Associates, Inc., Dept. S541, 26 Thayer Rd., Waltham 54, Mass.)

Digital printer (model 1000) features printing speed of 20 lines per second with up to 20 columns of print. Spacing is six lines per inch. The printer accepts a 10-line coded input. A variety of input control signal voltage levels can be accommodated by selection of plug-in accessories. An inhibiting signal prevents change of data while the printer is in the print phase of its cycle. The instrument is completely solid state in design and operates on 115-volt, 60 cy/sec power. Either folded paper or rolled paper may be used.—J.S. (Franklin Electronics, Inc., Dept. S570, Bridgeport, Pa.)

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Vector vacuum-tube voltmeter (model 300A) measures in-phase, quadrature, and r.m.s. voltage. An electronic multiplier is used to drive a phase-sensitive instrument with characteristics similar to an electrodynamic wattmeter. The instrument responds only to the fundamental input frequency of a complex signal when the reference terminals have a sine wave of that frequency applied to them. The in-phase meter deflection associated with the wattmeter is transformed into a quadrature meter deflection by the inclusion of a self-calibrated 90-deg phase shifter. By using the electronic multiplier as a squaring device, r.m.s. readings are obtained. An internal calibrating voltage can be used to check accuracy of the instrument. Voltage range is 1 mv to 300 volts. Accuracy is said to be ± 2 percent of full scale. Frequency range is 15 cy to 30 kcy/sec. Signal input impedance is 2 megohms and reference input impedance is 1 megohm. Reference voltage may be 0.25 to 220 volts.—J.S. (Industrial Test Equipment Co., Dept S553, 55 E. 11th St., New York 3)

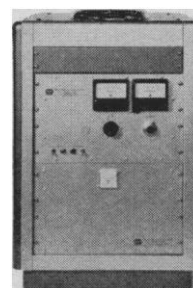
Silicon semiconductor strain-gage load cell (type 210) is used in measuring and monitoring tension of equipment used in a variety of underseas applications. The cells are available for force ranges from 0 to 100 to 0 to 100,000 lb. Piezoresistive transducers used are provided with temperature compensation and are designed to provide output levels of 250 mv to drive indicators and recorders directly without amplification.—J.S. (Braincon Corp., Dept. S566, Box 312, Marion, Mass.)



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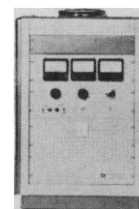
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 Edited by: Sidney H. Gould.
 "... strongly recommended to all who are in search of facts and source material on the sciences in China."—*Science*, 22 September 1961

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#67. Oceanography.

1961. 2nd printing, 1962. 665 pages. 146 illustrations.
 Edited by: Mary Sears.
 "I know of no other volume that so well defines oceanography, its purpose, opportunities and requirements."—*Science*, 9 June 1961

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#66. Germ Plasm Resources.

1961. 394 pages. 59 illustrations.
 Edited by: Ralph E. Hodgson.
 "This book will be of interest to nonplant and animal breeders, for the rather general treatment of various topics . . . allows for rapid perusal."—*Bulletin of the Entomological Society of America*, September 1961

Retail Price: \$9.75. AAAS Member's Cash Price: \$8.50.

#65. Aging . . . Some Social and Biological Aspects.

1960. 436 pages. 65 illustrations.
 Edited by: Nathan W. Shock.
 "The 26 contributors include many of the most respected names in American gerontology, and the chapters cover a wealth of material."—*Journal of Gerontology*

Retail Price: \$8.50. AAAS Member's Cash Price: \$7.50.

#64. Calcification in Biological Systems.

1960. 526 pages. 283 illustrations.
 Edited by: R. F. Sognnaes.
 "Those interested in current concepts of mineralization of calcified tissues will find in this text the sources of current knowledge on the subject."—*American Journal of Orthodontics*, May 1961

Retail Price: \$9.75. AAAS Member's Cash Price: \$8.50.

#63. Congenital Heart Disease.

1960. 372 pages. 147 illustrations.
 Edited by: Allan D. Bass and Gordon K. Moe.
 "Should serve as a valuable and concise summation of the more important aspects of congenital heart disease."—*American Journal of Cardiology*, August 1961

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Meetings

Gordon Research Conference

A Winter Gordon Research Conference on polymers will be held from 4 to 8 February 1963 in Santa Barbara, California, at the Miramar Hotel. The Polymer Group of the Southern California Section of the American Chemical Society developed the early plans for this conference. The purpose of the Gordon Research Conferences is to stimulate research in universities, research foundations, and industrial laboratories. The Summer conferences are held in New Hampshire [see *Science* 135, 932 (1962)].

Attendance at the conference, limited to approximately 100, is by application. Individuals interested in attending should apply immediately to the director of the conferences, Dr. W. George Parks, University of Rhode Island, Kingston. Applications must be submitted in duplicate on the standard form, which may be obtained from the office of the director. The applications will be reviewed by the Conference

Committee. This committee, in selecting the participants, will distribute the attendance as widely as possible among the institutions and laboratories represented by the applications. A registration card will be mailed to those selected. Advance registration by mail is required; this is completed when the registration card, with a deposit of \$15, is received in the office of the director. A registration card not accompanied by the \$15 deposit will not be accepted. This advance deposit is not required of scientists from foreign countries.

A fixed fee of \$115 has been established for resident conferees, covering registration, room, and meals. This fee was established to encourage attendance for the entire conference and to increase the special fund that is available to the conference chairman for assisting participants who attend the conference wholly or in part at their own expense.

The participants are expected to live at the conference location because one of the objectives of the conference is to provide a place where scientists can get together informally to discuss scientific research. All participants are urged to attend the conference for the entire week. Under special circumstances conferees will be permitted to stay at locations other than the site of the conference. Such nonresident conferees will be charged a registration fee of \$50.

Conferees living at the conference location who will pay all or part of the fixed fee as a personal expense may request a reduction of \$25 in the fixed fee. Application for this special fee must be made when the registration card is returned to the director.

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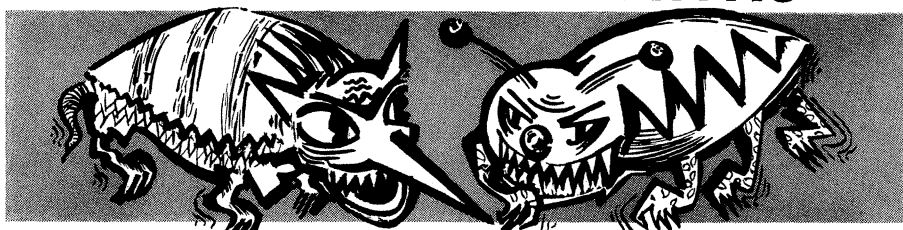
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Maurice L. Huggins, *vice chairman*

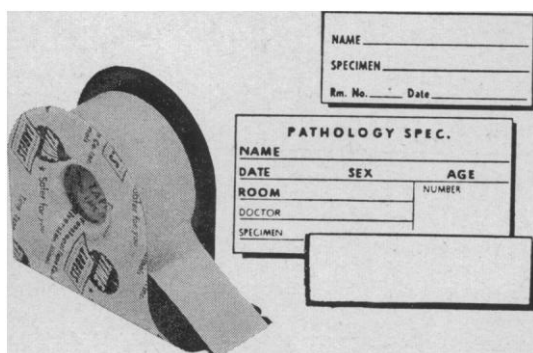
4 Feb. J. R. Van Wazer, "Random and non-random reorganization, including functionality changes; application to inorganic systems"; C. A. Klein, "Crystal structure and physical properties of pyrolytic graphites"; L. A. Wall, "Some remarks on high temperature polymers."

5 Feb. J. D. Ferry, "The role of free volume in the dependence of viscoelastic properties on molecular weight dis-

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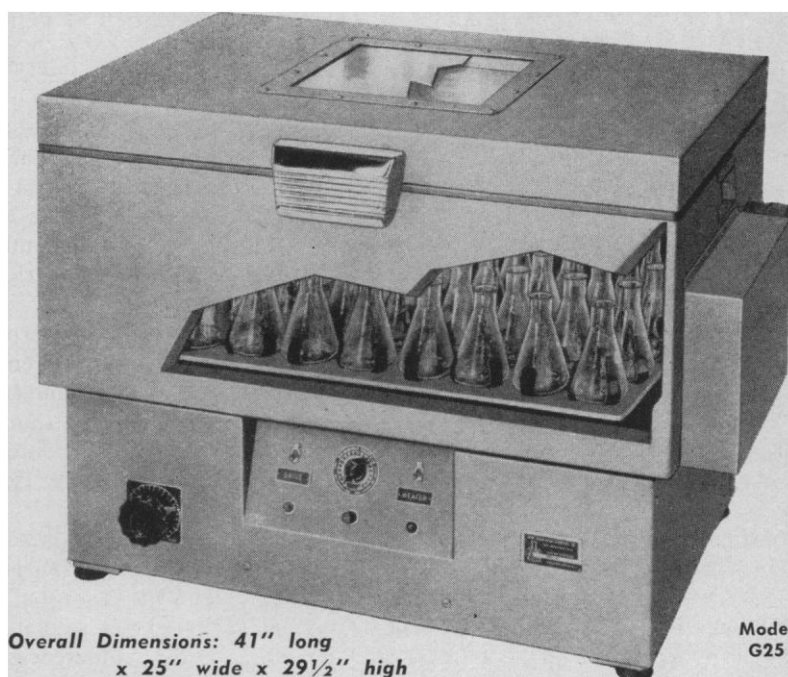
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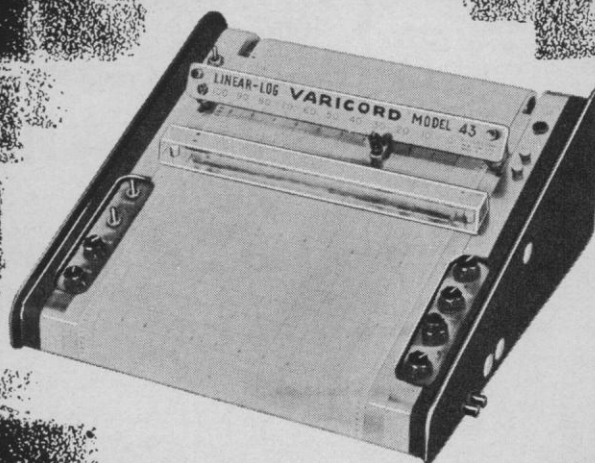
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tribution and in time-dependent viscoelastic properties near the glass transition temperature"; T. G. Fox, "Free volume, chain entanglements and the properties of concentrated polymer systems."

6 Feb. J. Vinograd, "Equilibrium sedimentation of biological macromolecules in a density gradient"; J. J. Hermans, "Application of density gradient centrifugation to synthetic polymers"; R. L. Baldwin, "Physical chemistry of synthetic DNA's."

7 Feb. B. H. Zimm, "Theory of uncoiling of DNA molecules"; E. P. Geiduschek, "Physico-chemical and biological properties of cross-linked DNA molecules"; H. F. Mark, "Recent progress in polymer research"; business session.

8 Feb. Contributions on recent research.

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Forthcoming Events

February

4-8. **Rice Genetics and Cytogenetics**, symp., Los Baños, Laguna, Philippines. (Intern. Rice Research Inst., Manila Hotel, Manila, Philippines)

4-9. **Recent Trends in Iron and Steel Technology**, symp., Jamshedpur, India. (Secretary, Indian Inst. of Metals, 31 Chowringhee Rd., Calcutta, India)

4-20. **Application of Science and Technology for the Benefit of Less Developed Areas**, U.N. conference, Geneva, Switzerland. (Science Conference Staff, Agency for International Development, 826 State Dept. Annex 1, Washington 25)

5-14. **International Radio Consultative Committee**, Plan Subcommittee for Asia, New Delhi, India. (V. Barthoni, 128 rue de Lausanne, Geneva, Switzerland)

6-9. **American College of Radiology**, Chicago, Ill. (F. H. Squire, Presbyterian-St. Luke's Hospital, 1753 W. Congress St., Chicago 12)

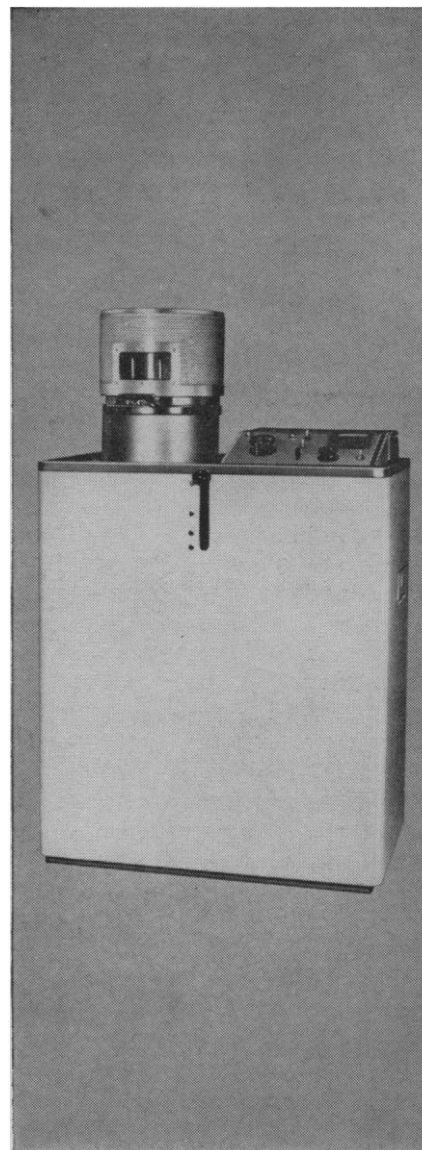
7-8. **Industrial Pharmacy**, 2nd seminar, Austin, Tex. (L. R. Parker, Pharmacy Extension Service, Univ. of Texas, Austin 12)

8-18. **United Nations Committee on Industry and Natural Resources in Asia and the Far East**, Bangkok, Thailand. (S. Santitham, Rajadamnern Ave., Bangkok)

10-15. **Management Function in Research and Development**, conf., Pasadena, Calif. (Management Development Section, Industrial Relations Center, California Inst. of Technology, Pasadena)

10-16. **Planned Parenthood**, intern. conf., Singapore. (V. Houghton, Intern. Planned Parenthood Federation, 69 Eccleston Sq., London, S.W.1, England)

11-14. **American Soc. of Heating, Refrigerating, and Air-Conditioning Engineers**, New York, N.Y. (R. C. Cross, 345 E. 47th St., New York 17)



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11-14. **Industrial Lubrication**, intern. conf. and exhibit, London, England. (E. V. Paterson, Scientific Lubrication, 217a Kensington High St., London W.8)

11-15. **Quantum Electronics**, intern. symp., Paris, France. (Secrétariat, Troisième Congrès International d'Electronique Quantique, 7 rue de Madrid, Paris 8^e)

12-14. **Lysozomes**, symp. (by invitation), London, England. (Ciba Foundation, 41 Portland Pl., London W.1)

13-15. **Electrochemistry**, 1st Australian conf., part I, Sydney, Australia. (F. Gutmann, Physical Chemistry Dept., Univ. of New South Wales, Kensington, N.S.W., Australia)

13-16. **National Soc. of College Teachers of Education**, Chicago, Ill. (E. J. Clark, Indiana State College, Terre Haute)

14-15. **American Soc. for Quality Control**, Textile and Needles Trades Div., annual conf., Clemson, S.C. (H. F. Littleton, c/o Charles H. Bacon Co., Lenoir City, Tenn.)

15-14 Apr. **Aeronautics and Space**, intern. exhibition, São Paulo, Brazil. (Santos Dumont Foundation, Avenida Ipiranga N°. 84, São Paulo)

16-23. **Caribbean Dental Convention**, Port of Spain, Trinidad. (A. V. Awon, 43-45 Frederick St., Port of Spain)

17-21. **Technical Assoc. of the Pulp and Paper Industry**, annual, New York, N.Y. (TAPPI, 360 Lexington Ave., New York 17)

18-20. **American Standards Assoc.**, natl. conf., New York, N.Y. (ASA, 10 E. 40 St., New York 16)

18-20. **Biophysical Soc.**, annual, New York, N.Y. (A. Mauro, Rockefeller Inst., New York)

18-20. **Electrochemistry**, 1st Australian conf., part II, Hobart, Tasmania. (J. N. Baxter, Chemistry Dept., Univ. of Tasmania, Hobart)

18-25. **Expert Committee on Food Additives**, FOA/WHO, Rome, Italy. (Intern. Agency Liaison Branch, Office of the Director General, Food and Agriculture Organization, Viale delle Terme di Caracalla, Rome)

19-22. **Radiochemistry**, inter-American conf., Montevideo, Uruguay. (Pan American Union, Washington 6)

20-22. **Fundamental Cancer Research**, annual symp., Houston, Tex. (L. Dmochowski, Section of Virology and Electron Microscopy, M. D. Anderson Hospital, Houston 25)

20-22. **Solid-State Circuits**, intern. conf., Philadelphia, Pa. (F. J. Witt, Bell Telephone Laboratories, Inc., Murray Hill, N.J.)

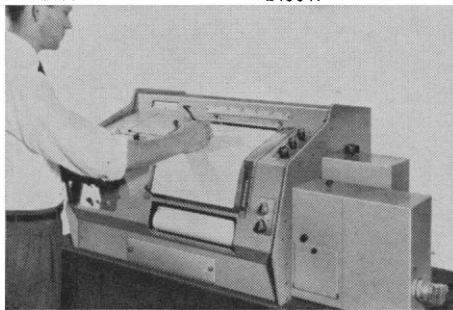
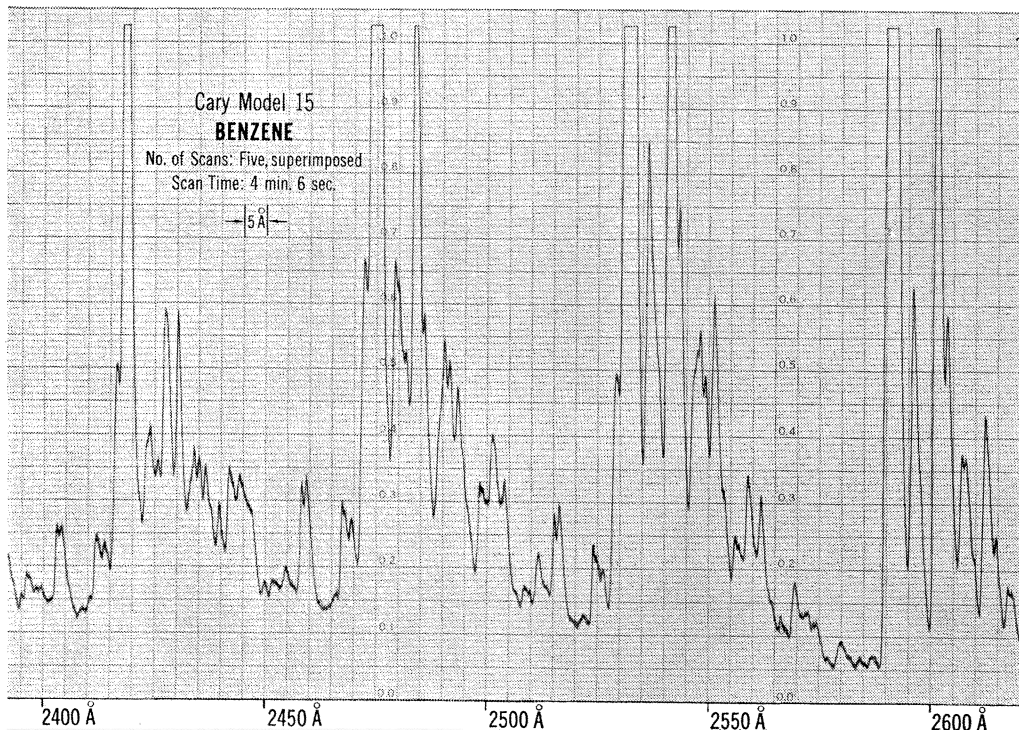
20-23. **National Assoc. for Research in Science Teaching**, Washington, D.C. (J. D. Novak, Biological Science Dept., Purdue Univ., Lafayette, Ind.)

20-24. **Diseases of the Chest**, intern. congr., New Delhi, India. (M. Kornfeld, American College of Chest Physicians, 112 E. Chestnut St., Chicago 11, Ill.)

21-22. **American Soc. for Quality Control**, regional conf., Las Vegas, Nev. (S. R. Wood, Dept. 61, Bldg. 160, Aerojet-General Corp., Azusa, Calif.)

22-23. **American Psychopathological Assoc.**, annual, New York, N.Y. (F. A.

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23-28. American Soc. for **Testing and Materials**, Atlantic City, N.J. (H. H. Hamilton, 1916 Race St., Philadelphia 3, Pa.)

24-25. Unit Processes in **Hydrometallurgy**, symp., Dallas, Tex. (F. T. David, Colorado School of Mines, Golden)

24-27. **Diffusion**, intern. conf., Palm Springs, Calif. (J. A. Biles, Univ. of Southern California, School of Pharmacy, Los Angeles 7)

24-28. American Inst. of **Mining, Metallurgical, and Petroleum Engineers**, annual, Dallas, Tex. (E. Kirkendall, AIME, 345 E. 47 St., New York 17)

25-27. Advanced **Marine Engineering** Concepts for Increased Reliability, symp., Ann Arbor, Mich. (G. L. West, Jr., Dept. of Marine and Nuclear Engineering, Univ. of Michigan, Ann Arbor)

25-1. **Environmental Engineering**, natl. conf., Atlanta, Ga. (W. H. Wisely, American Soc. of Civil Engineers, 345 E. 47 St., New York, N.Y.)

26-27. **Dairy Engineering**, natl. conf., East Lansing, Mich. (C. W. Hall, Dept. of Agricultural Engineering, Michigan State Univ., East Lansing)

26-1. Society of **Plastics Engineers**, annual technical conf., Los Angeles, Calif. (G. P. Kovach, Foster Grant Co., 289 N. Main St., Leominster, Mass.)

27-3. American College of **Cardiology**, Los Angeles, Calif. (D. Scherf, 55 E. 86 St., New York 27)

28-2. Experimental Aspects of **NMR Spectroscopy**, Pittsburgh, Pa. (W. A. Straub, Applied Research Laboratory, U.S. Steel Corp., Monroeville, Pa.)

March

1-3. **Developing Brain and Binding Sites** of Brain Biogenic Amines, intern. symp., Galesburg, Ill. (H. E. Himwich, Research Div., Galesburg State Research Hospital, Galesburg)

2-6. Canadian Assoc. of **Radiologists**, annual, Quebec, Canada. (J. L. Léger, 1555 Summerhill Ave., Montreal 25, P.Q., Canada)

4-6. Association of **Iron and Steel Engineers**, western meeting, Los Angeles, Calif. (T. J. Ess, 1010 Empire Bldg., Pittsburgh 22, Pa.)

4-6. **Wildlife Management** Inst., Detroit, Mich. (C. R. Gutermuth, 709 Wire Bldg., Washington 5)

4-8. **Analytical Chemistry and Applied Spectroscopy**, 14th annual, Pittsburgh, Pa. (W. A. Straub, Applied Research Laboratory, U.S. Steel Corp., Monroeville, Pa.)

4-9. **Astronautics**, 3rd Inter-American symp., São Paulo, Brazil. (Symp. Secretariat, Sociedade Interplanetaria Brasileira, Caixa Postal 6450, São Paulo)

5-7. **Plant Engineering and Maintenance**, 4th southeastern seminar, Charlotte, N.C. (A. Brown, Service Engineering Associates, Inc., P.O. Box 2665, Atlanta, Ga.)

5-8. Committee on **Textile Materials**, New York, N.Y. (American Soc. for Testing and Materials, 1916 Race St., Philadelphia 3, Pa.)

5-9. Application of **Radioisotopes in Hydrology**, symp., Tokyo, Japan. (IAEA, 11 Kärntner Ring, Vienna 1, Austria)

6. American Assoc. of **Psychiatric Clinics for Children**, annual, Washington, D.C. (American Psychiatric Assoc., 1700 18th St., NW, Washington 9)

6-9. American **Orthopsychiatric** Assoc., annual, Washington, D.C. (American Psychiatric Assoc., 1700 18th St., NW, Washington 9)

7-9. German Soc. of **Endocrinology**, 10th symp., Vienna, Austria. (H. Nowakowski, Deutsche Gesellschaft für Endokrinologie, c/o II. Medizinische Universitätsklinik, Hamburg-Eppendorf, Germany)

9. **Linguistics**, 8th annual, New York, N.Y. (L. Pap, State Univ. College, New Paltz, N.Y.)

10-13. American Inst. of **Chemical Engineers**, New Orleans, La. (J. Henry, 345 E. 47th St., New York, N.Y.)

10-20. **Nutrition** Problems in Latin America, 5th U.N. Food and Agriculture Organization conf., Lima, Peru. (Intern. Agency Liaison Branch, Office of the Director General, Viale della Terme di Caracalla, Rome, Italy)

11-16. Numerical **Weather Forecasting**, World Meteorological Organization/International Union of Geodesy and Geophysics, intern. symp., Oslo, Norway. (World Meteorological Organization, Geneva, Switzerland)

14. Assoc. of **Vitamin Chemists**, Chicago, Ill. (H. C. Spruth, Abbott Laboratories, 14th and Sheridan, North Chicago)

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