

Forthcoming Events

December

16-17. **Computers and Scanning**, New Orleans, La. (S. Crain, University College, Tulane Univ., New Orleans 70118)

19-21. **Middle East Neurological Soc.**, Jerusalem, Jordan. (F. S. Haddad, Orient Hospital, Beirut, Lebanon)

19-23. **Indian Statistical Inst.**, Malleswaram, Bangalore. (S. R. Ranganathan, Indian Statistical Inst., Documentation Research and Training Centre, 112 Cross Rd. 11, Malleswaram)

20-21. **Molecular Transport and Rate Phenomena**, 32nd annual chemical engineering symp., Stanford Univ., Stanford, Calif. (A. Acrivos, Dept. of Chemical Engineering, Stanford Univ., Stanford, Calif.)

20-21. **Nuclear Medicine**, 2nd natl. congr., Tel Aviv, Israel. (P. Czerniak, Israel Atomic Commission, Soreq Nuclear Research Center, Doar Yavne)

20-22. **British Biophysical Soc.**, 20th winter meeting, London, England. (R. E. Burge, Physics Dept., Queen Elizabeth College, Campden Hill Rd., London W.8)

20-22. **American Physical Soc.**, Los Angeles, Calif. (W. Whaling, California Inst. of Technology, Pasadena 91109)

26-31. **American Assoc. for the Advancement of Science**, annual, Berkeley, Calif. (R. L. Taylor, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005)

In addition to the 20 sections of the Association and five AAAS committees, the following organizations have arranged sessions at the AAAS annual meeting 26-31 December at Berkeley:

Mathematics

American Mathematical Soc. (R. S. Pierce, Univ. of Washington, Seattle)

Association for Computing Machinery. (H. D. Huskey, Univ. of California, Berkeley)

National Council of Teachers of Mathematics. (J. D. Gates, 1201 16 St., NW, Washington, D.C.)

Society for Industrial and Applied Mathematics (J. H. Griesmer, IBM, Yorktown Heights, N.Y.)

Physics

American Astronautical Soc. (P. B. Richards, General Precision, Little Falls, N.J.)

Chemistry

American Chemical Soc., California Section. (R. L. LeTourneau, Chevron Research Co., Richmond, Calif.)

Astronomy

American Astronomical Soc. (G. C. McVittie, Univ. of Illinois, Urbana)

Geology and Geography

Association of American Geographers. (M. Mikesell, Univ. of Chicago, Chicago, Ill.)

National Geographic Soc. (R. Gray, 17th & M Sts., NW, Washington, D.C.)

National Speleological Soc. (G. W. Moore, U.S. Geological Survey, Menlo Park, Calif.)

MOMENTUM BOOKS

a series of paperbound books in the Physical Sciences for supplementary reading at the undergraduate level, are published for the *Commission on College Physics*, under the general editorship of Walter C. Michels, Bryn Mawr College.

#1 Elementary Particles

by David H. Frisch and Alan M. Thorndike \$1.75

#2 Radio Exploration of the Planetary System

by Alexander G. Smith and T. D. Carr \$1.50

#3 The Discovery of the Electron: The Development of the Atomic Concept of Electricity

by David L. Anderson \$1.50

#4 Waves and Oscillations

by R. A. Waldron \$1.75

#5 Crystals and Light: An Introduction to Optical Crystallography

by Elizabeth A. Wood \$1.95

#6 Temperatures Very Low and Very High

by Mark W. Zemansky \$1.50

#7 Polarized Light

by William A. Shurcliff and Stanley S. Ballard \$1.50

#8 Structure of Atomic Nuclei

by C. Sharp Cook \$1.50

#9 An Introduction to the Special Theory of Relativity

by Robert Katz \$1.50

NEW TITLES

#10 Radioactivity and its Measurements

by W. B. Mann, Chief of Radioactivity Section, National Bureau of Standards and S. B. Garfinkel, Physicist, Radioactivity Section, National Bureau of Standards

Written for use in second-year university courses in radioactivity, radiochemistry, or atomic and nuclear physics, this book chronicles the discovery of radio activity, the historic research of the Curies, Rutherfords and other pioneers, and the methods of measuring radioactivity. \$1.75

#11 Plasmas—Laboratory and Cosmic

by Forrest I. Boley, Professor of Physics and Astronomy, Dartmouth College

Explaining a vital topic of modern physics, this new text surveys aspects of plasma physics in a form suitable for nonspecialist reading. It describes the physics of various plasma phenomena that occur under laboratory conditions and in astronomical systems. \$1.75

#12 Infrared Radiation

by Ivan Simon, Senior Physicist, Arthur D. Little, Inc.

This concise introduction to infrared radiation follows a descriptive and historical pattern. It seeks to give the student a reasonably complete picture, providing sufficient background for deeper study. Pertinent references and a selected bibliography are included. \$1.50

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The Biology of Viruses

By KENNETH M. SMITH, *University of Texas*

Selecting several viruses whose study has led to a discovery of some importance or to the development of new techniques, Dr. Smith describes their life history. It is his hope to preserve some of the romance of scientific research which is so often bogged down in technical detail. 12 halftones. \$2.00

Spore Liberation

By C. T. INGOLD, *University of London*

Although this book deals with problems of spore liberation, particularly in fungi, it is not a new edition of the author's *Dispersal in Fungi*. The form and function of spores is described, with a full account of spore liberation in Mucorales, toadstools, Gasteromycetes, and sordaria. The book's theme is that an understanding of the form of fungal fruit bodies and bryophyte sporangia involves a consideration of spore liberation. 121 figures. \$5.60

Mathematics for Science

By W. L. FERRAR, *Hertford College, Oxford*

The author provides the mathematical foundation, at undergraduate level, for technical courses. There are two main sections: non-calculus and calculus. The first part contains chapters on trigonometric and hyperbolic functions, complex numbers, inequalities, analytical geometry, and vectors. The second part has two chapters on differential calculus and a chapter apiece on Maclaurin and Taylor expansions, the indefinite integral, the definite integral, applications of the definite integral, differential equations, integration by parts, and partial differentiation. 115 figures. \$4.50

Physical Properties of Diamond

Edited by R. BERMAN, *University College, Oxford*

This work consists of 15 chapters, each written by a research scientist on a particular aspect of diamond. After an introduction, the chapters cover: X-ray diffraction studies; X-ray topography; transmission electron microscopy; optical studies; ring cracks on diamond surfaces; deformation, friction and wear of diamond; hardness and wear during grinding and polishing; electronic structure; paramagnetic resonance; optical properties of natural diamonds; semiconducting diamond; the counting properties of diamonds under ionizing radiations; thermal properties; and radiation damage in diamond. 286 figures. \$12.00

Oxford University Press
New York

Zoological Sciences

American Fisheries Soc. (H. K. Chadwick, California Dept. of Fish and Game, Sacramento)

American Soc. of Zoologists. (A. G. Richards, Univ. of Minnesota, St. Paul)

Animal Behavior Soc. (E. M. Banks, Univ. of Illinois, Urbana)

Herpetologists' League. (F. B. Turner, Univ. of California, Los Angeles)

Society of Systematic Zoology. (J. G. Rozen, Jr., American Museum of Natural History, New York, N.Y.)

Zoological and Botanical Sciences

American Soc. of Naturalists. (C. Hubbs, Scripps Inst. of Oceanography, La Jolla, Calif.)

Ecological Soc. of America (G. M. Woodwell, Brookhaven Natl. Laboratory, Upton, L.I., N.Y.)

Western Soc. of Naturalists. (J. M. Craig, San Jose State College, San Jose, Calif.)

Psychology

Western Psychological Assoc. (G. A. Mendelsohn, Univ. of California, Berkeley)

Social and Economic Sciences

American Economic Assoc. (R. R. Nelson, RAND Corp., Santa Monica, Calif.)

American Political Science Assoc. (J. F. Triska, Stanford Univ., Stanford, Calif.)

American Soc. of Criminology. (C. Newman, Univ. of Louisville, Louisville, Ky.)

American Sociological Assoc. (W. Form, Michigan State Univ., East Lansing)

Metric Assoc. (R. Fischelis, Ohio Northern Univ., Ada)

National Inst. of Social and Behavioral Science. (D. P. Ray, 863 Benjamin Franklin Station, Washington, D.C.)

Population Assoc. of America (E. S. Lee, Univ. of Pennsylvania, Philadelphia)

Society for the Scientific Study of Religion. (C. Y. Glock, Univ. of California, Berkeley)

History and Philosophy of Science

Philosophy of Science Assoc. (C. W. Churchman, Univ. of California, Berkeley)

Society for General Systems Research. (H. Thal-Larsen, Univ. of California, Berkeley)

Science Courses for Baccalaureate Education Project. (V. L. Parsegian, Rensselaer Polytechnic Inst., Troy, N.Y.)

Medical Sciences

Alpha Epsilon Delta. (M. L. Moore, 7 Brookside Circle, Bronxville, N.Y.)

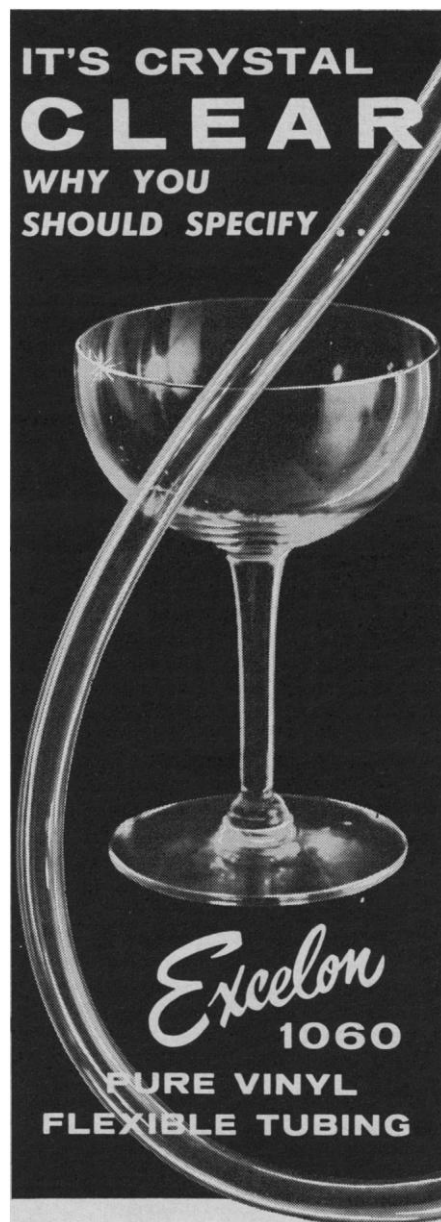
American Assoc. of Bioanalysts, Western Region. (M. Menesini, 1287 Rudgear Rd., Walnut Creek, Calif.)

American Physiological Soc. (R. M. Iverson, Univ. of Miami, Coral Gables, Fla.)

American Soc. for Microbiology, Northern California-Hawaiian Branch. (K. J. Taylor, Cutter Laboratories, Berkeley, Calif.)

California Veterinary Medical Assoc. (A. G. Edward, Univ. of California, Davis)

Society for Experimental Biology and Medicine, Pacific Coast Section. (E. L. Dobson, Donner Laboratories, Univ. of California, Berkeley)



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Education

Commission on Science Education. (J. R. Mayor, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005)

American Nature Study Soc. (H. E. Weaver, Univ. of Illinois, Urbana)

National Assoc. for Research in Science Teaching. (F. B. Dutton, Michigan State Univ., East Lansing)

National Assoc. of Biology Teachers. (H. K. Wong, Menlo-Atherton High School, Atherton, Calif.)

National Science Teachers Assoc. (A. F. Eiss, 1201 16 St., NW, Washington, D.C. 20005)

Information and Communication

National Assoc. of Science Writers. (L. S. Zahn, Hill and Knowlton Inc., 150 E. 42 St., New York, N.Y.)

Society of Technical Writers and Publishers. (G. Marx, Illinois Inst. of Technology, Chicago)

Statistics

BIO: Biomedical Information-Processing Organization. (M. Woodbury, New York Univ. Medical Center, New York, N.Y.)

Biometric Soc., ENAR. (D. S. Robson, Cornell Univ., Ithaca, N.Y.)

Biometric Soc., WNAR. (S. W. Nash, Univ. of British Columbia, Vancouver, Canada)

Mathematical Statistics and Probability, 5th Berkeley symp. (J. Neyman, Statistical Laboratory, Univ. of California, Berkeley)

Science in General

Academy Conf. (J. T. Self, Univ. of Oklahoma, Norman)

Scientific Research Soc. of America (D. B. Prentice, 51 Prospect St., New Haven, Conn.)

Sigma Delta Epsilon. (Miss A. Hanson, Univ. of Minnesota, Minneapolis)

Society of the Sigma Xi. (T. T. Holme, 51 Prospect St., New Haven, Conn.)

27-29. Academy of Management, New York, N.Y. (P. P. LeBreton, College of Business Administration, Univ. of Washington, Seattle)

27-30. Differential Equations and Dynamical Systems. Univ. of Puerto Rico, Mayaguez. (Center for Dynamical Systems, Brown Univ., Providence, R.I.)

27-30. Phi Delta Kappa, Professional Education Fraternity, Univ. of Oklahoma, Norman. (M. Bemis, Phi Delta Kappa, 8th and Union, Bloomington, Ind. 47402)

28-30. Indian Medical Assoc., 41st conf., Baroda (Gujarat). (Indian Medical Assoc. House, Indraprastha Marg., New Delhi 1)

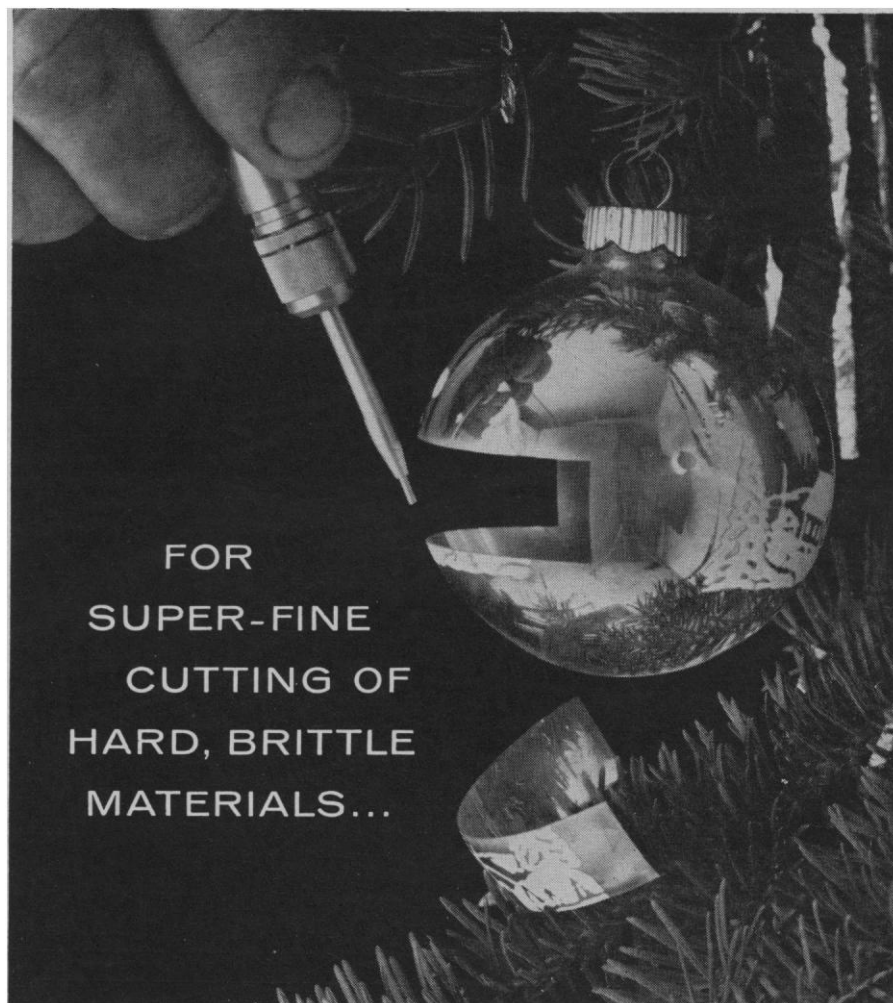
29-4. Pugwash Conf. on Science and World Affairs, Addis Ababa, Ethiopia. (J. Rotblat, Pugwash Continuing Committee, 8 Asmara Rd., London, N.W.2, England)

January

4-7. Solid State Physics, conf., Manchester College of Science and Technology, Manchester, England. (S. F. Edwards, Dept. of Physics, Victoria Univ. of Manchester, Manchester 13)

5-8. National Soc. of Professional Engineers, winter mtg., Bal Harbour, Fla.

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6-7. Society for **General Microbiology**, 45th general mtg., London, England. (P. H. Clarke, Biochemistry Dept., University College, Gower St., London, W.C.1, England)

6-10. International Council of **Scientific Unions**, 11th general assembly, Bombay, India. (Intern. Council of Scientific Unions, Via Sebenico 2, Rome, Italy)

7-8. **Surgical Research** Soc., winter mtg., London, England. (A. P. M. Forrest, Cardiff Royal Infirmary, Newport Rd., Cardiff, Wales)

10-13. **Radioactive Isotopes** in Clinical Medicine and Research, 7th intern. symp., Bad Gastein, Austria. (R. Hofer, Second Medical Univ. Clinic, Garnisongasse 13, Vienna 9)

11-12. Man's Extension into the **Sea**, symp. on SEALAB II, Washington, D.C. (T. Evans, Conference Management Organizer, Colonial Bldg., 105 N. Virginia Ave., Falls Church, Va. 22046)

12-14. **Medicinal and Aromatic Plants in India**, symp., Central Indian Medicinal Plants Organization, Lucknow, India. (S. C. Datta, CIMPO, 4 Sapru Marg, Lucknow)

12-20. International **Fertility** Assoc., Latin American mtg., Acapulco, Mexico. (M. Roland, 109-23 71st St., Forest Hills, N.Y. 11375)

13-14. Institute of **Mathematical Sciences**, 4th Matscience anniversary symp., Madras, India. (C. P. Ramaswami Aiyer, Inst. of Mathematical Sciences, Madras)

13-16. Indian Institute of **Metals**, 19th annual mtg., Hyderabad. (The Institute, 31 Chowringhee Road, Calcutta 16)

16-21. American **Chemical** Soc., winter mtg., Phoenix, Ariz. (ACS, 1155 16th St., NW, Washington, D.C. 20036)

17-19. **Labelled Proteins in Tracer Studies**, conf., Pisa, Italy. (Euratom, Labelled Compounds Div., 51-53, rue Belliard, Brussels, Belgium)

19-21. **Instrumentation** for the Process Industries, Texas A&M symp., College Station. (P. T. Eubank, Dept. of Chemical Engineering, Texas A&M Univ., College Station)

20-21. Anharmonic **Phonon Interactions** in Solids, Princeton Univ., Princeton, N.J. (W. B. Daniels, Dept. of Solid State Sciences, Princeton Univ., N.J.)

20-22. Regulation of **Antibody Response**, intern. symp., Toronto, Ont., Canada. (B. Cinader, Subdivision of Immunochemistry, Univ. of Toronto, Toronto, Ont.)

20-22. **Diabetes** in the Tropics, world Congr., Bombay, India. (Organizing Secretary, Diabetic Assoc. of India, Maneckji Wadia Bldg., Mahatma Gandhi Rd., Bombay 1)

20-22. **Symmetry Principles at High Energy**, conf., Univ. of Miami, Coral Gables, Fla. (D. R. Lehman, Air Force Office of Scientific Research, Tempo D, 4th and Independence Ave., SW, Washington, D.C.)

21-22. Physiology of **Hemostasis and Thrombosis**, 14th annual Wayne State Univ. symp. on blood, Detroit, Mich. (W. H. Seegers, Dept. of Physiology and Pharmacology, Wayne State Univ., Detroit)

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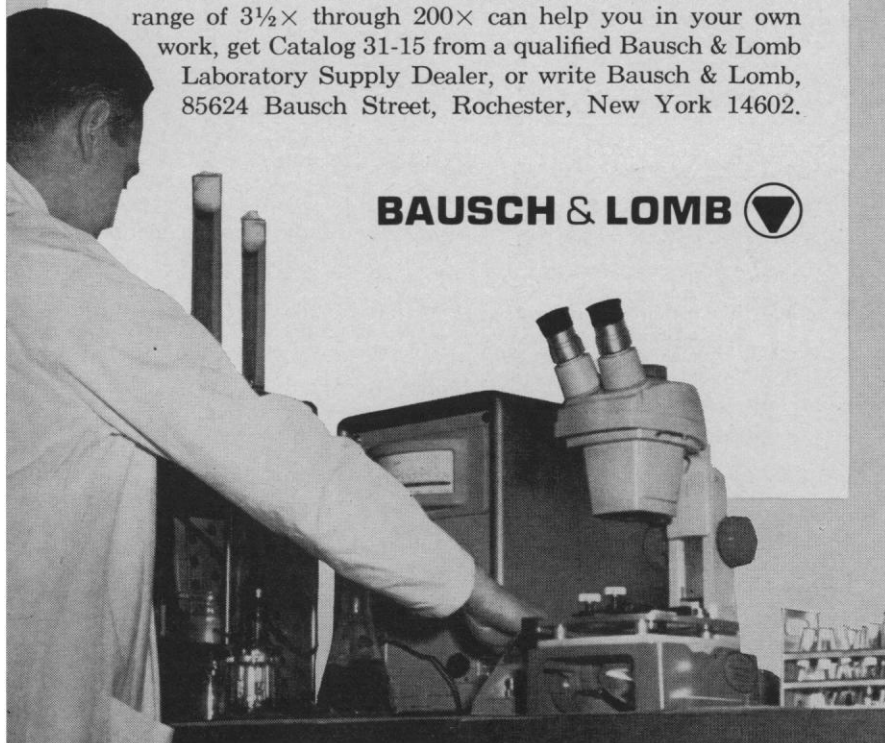
ADDICTION RESEARCH PROGRAM

Robert E. Popham is Associate Research Director of the Alcoholism and Drug Addiction Research Foundation of Ontario. He is studying the chronic effects of certain habit-forming drugs on an unspecialized organism. A paramecium is placed in a 16-18mm dia. slide well and observed. Using StereoZoom, the entire well may be studied at 15 diameters. The wide field of view of StereoZoom eliminates the need for introducing undesirable slide movement or altering light conditions. Uniformly bright, natural, three-dimensional viewing is possible. The zoom magnification feature overcomes the problem of differentiating culture particles from the organism.

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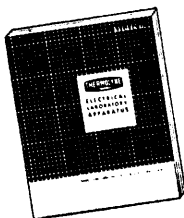
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22-27. American Acad. of **Orthopedic Surgeons**, Chicago, Ill. (J. K. Hart, 29 E. Madison, Chicago 2)

23-28. American **Library Assoc.**, mid-winter mtg., Chicago, Ill. (D. H. Clift, ALA, 50 E. Huron St., Chicago 60611)

24-26. **Aerospace Sciences**, 3rd mtg., American Inst. of Aeronautics and Astronautics, New York, N.Y. (AIAA, 1290 Sixth Ave., New York 10019)

24-27. Modern Methods of **Analytical Chemistry**, 19th annual, Louisiana State Univ. symp., Baton Rouge. (P. W. West, LSU, Baton Rouge)

24-27. American Soc. of **Heating, Refrigerating, and Air-Conditioning Engineers**, semiannual mtg., Houston, Tex. (ASHRAE, 345 E. 47 St., New York 100017)

24-27. American **Meteorological Soc.**, 46th annual mtg., Denver, Colo. (K. C. Spengler, AMS, 45 Beacon St., Boston, Mass.)

24-28. Animal and Clinical **Pharmacologic Techniques in Drug Evaluation**, part 1, mtg., Philadelphia, Pa. (J. H. Nodine, Hahnemann Medical College and Hospital, 230 N. Broad St., Philadelphia 19102)

24-30. **CNS-Drugs**, symp., Regional Research Laboratory, Hyderabad, India. (P. B. Sattur, Regional Research Laboratory, Hyderabad 9)

25. Research and Industrial Applications of the **Mössbauer Effect**, New York, N.Y. (M. Ress, New England Nuclear Corp., 575 Albany St., Boston, Mass.)

25-27. **Reliability**, 12th annual symp., Inst. of Electrical and Electronics Engineers, San Francisco, Calif. (A. R. Park, General Precision Inc., 1378 Encinatas Rd., San Marcos, Calif.)

26. Current and Future Problems in **Chemistry at High Temperatures**, Rice Univ., Houston, Tex. (M. A. Paul, Div. of Chemistry and Chemical Technology, National Acad. of Sciences, Washington, D.C. 20418)

26-27. **Sulfur**, symp., Wilson Dam, Ala. (V. J. Kilmer, Div. of Agricultural Development, Tennessee Valley Authority, Wilson Dam 35661)

26-28. **Light Nuclei**, symp., Lyon, France. (R. Radvanyi, Lab. Joliot-Curie de physique nucléaire, Faculté des Sciences, B.P. 1, Orsay, France)

26-28. **Mathematical Assoc. of America**, 49th annual mtg., Chicago, Ill. (H. M. Gehman, State Univ. of New York, Buffalo 14214)

26-29. American **Physical Soc.**, annual mtg., New York, N.Y. (K. K. Darrow, APS, 335 E. 45 St., New York 10017)

26-29. American Assoc. of **Physics Teachers**, annual mtg., New York, N.Y. (M. Phillips, Ryerson Physical Laboratory, Univ. of Chicago, Chicago, Ill. 60637)

27-29. American **Group Psychotherapy Assoc.**, Philadelphia, Pa. (AGPA, 1790 Broadway, New York 10019)

27-29. International **Medical Assembly** of Southwest Texas, San Antonio. (S. E. Cockrell, Jr., 202 W. French Pl., San Antonio 78212)

31-3. Scientific Aspects of **Pest Control**, symp., Washington, D.C. (Agricultural Board, Natl. Acad. of Sciences, 2101 Constitution Ave., Washington 20418)

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