

Meetings

Electromagnetic Scattering

The Second Interdisciplinary Conference on Electromagnetic Scattering, sponsored by the Air Force Cambridge Research Laboratories, was held at the University of Massachusetts at Amherst on 28–30 June 1965. The speakers and participants, numbering 151, represented several disciplines—astronomy, chemistry, engineering, mathematics, meteorology, and physics.

J. Mayo Greenberg (Rensselaer Polytechnic Institute) reviewed scattering from non-spherical systems. He reported on some recent microwave analog experiments with tilted spheroids which were suspended by very thin nylon threads. The emphasis was on total cross-section or extinction measurements, although the theoretical techniques developed are applicable to angular distributions and to particles having anisotropic refractive indices.

Milton Kerker (Clarkson College of Technology) discussed scattering from spherical particles, including concentric spheres. He reported on a computational study of color effects in scattering. Kerker has continued to show remarkable success in determining particle-size distributions for nonabsorbing spheres in the Mie region, provided that the form of the distribution is assumed or known and that the distribution remains narrow; that is, with standard deviations on the order of 10 percent.

The session on non-particulate scattering was introduced by J. A. Prins (Technical Physics, Delft). He provided the basis for papers to follow on the correlation function approach to the explanation of scattering caused by fluctuations in optical density, anisotropy, and absorption.

Porod (Physikalisches Institute, Graz), in a paper on small-angle x-ray scattering from irregular structures, discussed the influence of dense packing and of interparticle interference. He

considered both the independent-particle, or "gas-type," model of Guinier and the interparticle interference effects stressed by Kratky. His treatment showed that even with gas-type scattering the usual determination of particle size becomes invalid, and that the one parameter characteristic of the true size of colloidal regions is the mean intersect. (An intersect is a chord cut out of a colloidal system by intersecting straight lines passing at random in all directions through the medium.) His treatment distinguished between globular, fibrillar, and lamellar systems which correspond to three different types of scattering curves.

In the multiple-scattering session, Victor Twersky (Sylvania, California) reported on his automated simulation study of the scattering of millimeter waves by dynamic random distributions of large scatterers. The scattering system consists of a transparent box containing a few thousand styrofoam spheres, generally about $4\frac{1}{2}$ centimeters in diameter, which are kept in motion by a blower. The scattered microwaves are detected and the measured phase quadrature components X and Y of the instantaneous field are fed into a computer. Various products $X^n Y^m$ are obtained electronically and time-averaged for moments of $n + m$ up to 4. In general, the fundamental scattering parameters enter differently into the various moments, which facilitates their separation by measurements.

John Howard (Air Force Cambridge Research Laboratory) gave a talk on the life and work of Lord Rayleigh (John William Strutt, 1842–1919), who was a remarkable combination of thoroughly trained theorist and careful and ingenious experimenter. For the most part, Rayleigh worked alone with homemade apparatus, and designed experiments that verified his theoretical predictions. Although he is best known for the theory of Rayleigh scattering,

which explained the blue of the sky, his *Theory of Sound* is still the bible of acoustics; even after his death much of his wave theory was reapplied to quantum and wave mechanics. On display were some of Rayleigh's original papers, notebooks, and notes which appeared remarkably polished in the original draft.

The proceedings of the conference are to be published under the editorship of the conference cochairmen, Richard S. Stein and Robert L. Rowell (University of Massachusetts).

ROBERT L. ROWELL

RICHARD S. STEIN

University of Massachusetts, Amherst

Forthcoming Events

September

22–24. American Soc. of **Photogrammetry**, 30th semiannual conv., Wright-Patterson AFB, Ohio. (A. J. Cannon, Research and Technology Div., Wright-Patterson AFB)

22–28. **Radiology**, 11th intern. congr., Rome, Italy. (Secretariat, Via Reno 21, Rome)

23–25. French **Medical** Congr., Paris, France. (M. Bricaire, 40 rue Scheffer, Paris 16)

23–25. Society of the **Plastics** Industry, New England sect., 21st annual, Groton, Conn. (The Society, 250 Park Ave., New York 10017)

23–28. **Electronics and Vacuum Physics**, 3rd Czechoslovak conf., Prague, Czechoslovakia. (Organizing Committee, Ke Karlovu 5, Dept. of Electronics and Vacuum Physics, Prague 2)

24–25. **Communications**, 13th conf., Cedar Rapids, Iowa. (Inst. of Electrical and Electronics Engineers, Box A, Lenox Hill Station, New York 21)

25–30. International Soc. of **Nephrology**, 3rd intern. congr., Washington, D.C. (Secretariat, 9650 Wisconsin Ave., Washington, D.C. 20014)

26–29. American Inst. of **Chemical Engineers**, 57th natl., Minneapolis, Minn. (AIChE, 345 E. 47 St., New York 10017)

27. Society for **Pediatric Radiology**, Washington, D.C. (J. L. Gwinn, Children's Hospital, 4614 Sunset Blvd., Los Angeles, Calif.)

27–29. Chemistry of the **Solvent Extraction of Metals**, intern. conf., Atomic Energy Research Establishment, Harwell, England. (F. K. Pyne, B. 329, Harwell)

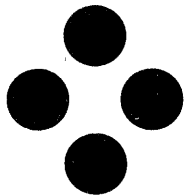
27–1. **Community Oral Health**, hemispheric conf., San Juan, P.R. (N. O. Harris, School of Dentistry, Univ. of Puerto Rico, San Juan 00905)

27–1. **Urology**, French congr., Paris, France. (J. Michon, French Assoc. of Urology, 47, boul. des Invalides, Paris 7)

28. Society of Austrian **Chemists**, general assembly, Graz, Austria. (The Society, Eschenbachgasse 9, Vienna 1)

28–29. **Electric Heating**, 7th biennial

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conf., Cleveland, Ohio. (A. F. Leatherman, Battelle Memorial Inst., 505 King Ave., Columbus, Ohio 43201)

28-30. German Soc. for **Documentation**, 17th annual, Constance, Germany. (The Society, Schubertstr. 1, Frankfurt am Main, Germany)

28-30. Physics and **Nondestructive Testing**, symp., Dayton, Ohio. (D. W. J. McGonnagle, IIT Research Inst., 10 W. 35 St., Chicago, Ill. 60616)

28-30. Industrial and Commercial **Power Systems**, conf., Buffalo, N.Y. (J. A. Hart, Allison Div., General Motors Corp., Box 894, Indianapolis 6, Ind.)

28-1. **Experimental Mechanics**, 2nd intern. congr., Washington, D.C. (J. L. Jones, Soc. for Experimental Stress Analysis, 21 Bridge Sq., Westport, Conn. 06880)

28-1. Society for **Experimental Stress Analysis**, Washington, D.C. (B. E. Rossi, 21 Bridge Sq., Westport, Conn.)

28-1. **Inhaled Particles and Vapors**, Cambridge, England. (J. S. McLintock, Medical Service, Natl. Coal Board, Hobart House, Grosvenor Pl., London S.W.1)

28-1. **Medical Electronics**, European symp., Brighton, England. (J. Pearce, 4 Mill St., London W.1)

28-2. **Hyperpure Materials** in Science and Technology, Inst. for Applied Physics of Hyperpure Materials, Dresden, Germany. (The Institute, Dresden A 20, Winterbergstr. 28, East Germany)

29-1. German Soc. for **Aviation and Space Medicine**, intern. congr., Munich, Germany. (H. von Diringshofen, German Soc. for Aviation and Space Medicine, Silcherstr. 6, Munich 13)

29-1. **Analytical Chemistry**, symp., Graz, Austria. (Prof. Gutmann, Austrian Assoc. for Microchemistry and Analytical Chemistry, Eschenbachgasse 9, Vienna 1)

29-1. European **Atomic Forum**, 2nd congr., Frankfurt am Main, Germany. (European Atomic Energy Forum, 26, rue de Clichy, Paris 9)

29-1. American **Vacuum Soc.**, 12th annual symp., New York, N.Y. (R. L. Jepsen, Varian Associates, 611 Hansen Way, Palo Alto, Calif.)

October

1-3. French-Language Assoc. of **Scientific Psychology**, 10th study sessions, Marseilles, France. (P. Fraisse, The Association, Inst. de Psychologie, 28, rue Serpente, Paris 6°)

1-11. International **Scientific Film Assoc.**, 19th annual congr., Bucharest, Rumania. (ISFA, 38, avenue des Termes, Paris 17°, France)

2. Association of **Clinical Biochemists**, annual, London, England. (D. W. Moss, Postgraduate Medical School, Ducane Rd., London, W.12)

3-5. **Refractory Metals**, 4th symp., French Lick, Ind. (J. Maltz, Materials Research Div., NASA, 600 Independence Ave., SW, Washington, D.C. 20546)

3-7. American **Phytopathological Soc.**, Miami Beach, Fla. (J. R. Shay, Dept. of Botany and Plant Pathology, Purdue Univ., Lafayette, Ind.)

3-8. **Clinical Pathology**, 6th intern. congr., Rome, Italy. (B. L. Della Vida, Via de'Penitenzieri 13, Rome)

3-9. **Water Desalination**, 1st intern.

symp., Washington, D.C. (Atomic Industrial Forum, 850 Third Ave., New York 10022)

4-5. **Enzyme Regulation**, 4th intern. symp., Indiana Univ., Indianapolis. (G. Weber, Indiana Univ. School of Medicine, Indianapolis 46207)

4-5. **Physical Metallurgy of Refractory Metals**, conf., American Inst. of Mining, Metallurgical, and Petroleum Engineers, French Lick, Ind. (AIME, 345 E. 47 St., New York 10017)

4-6. **Electronics**, Canadian conf., Toronto, Ont. (W. M. Lower, 1819 Yonge St., Toronto)

4-6. **Industrial Organic Analysis**, Analytical Chemistry Div., Chemical Inst. of Canada, Sarnia, Ont. (R. M. Small, Research Dept., Polymer Corp, Sarnia)

4-6. International **Scientific Radio Union/Inst. of Electrical and Electronics Engineers**, fall meeting, Dartmouth College, Hanover, N.H. (IEEE, Box A, Lenox Hill Station, New York, N.Y.)

4-7. **Instrument-Automation Conf.**, Los Angeles, Calif. (E. M. Grabbe, Instrument Soc. of America, 530 William Penn Pl., Pittsburgh, Pa. 15219)

4-7. **Otorhinolaryngology**, 62nd French congr., Paris, France. (H. Guillon, 6, avenue Mac-Mahon, Paris 16°)

4-7. **Research Equipment**, exhibit and instrument symp., 15th annual, Bethesda, Md. (J. B. Davis, Natl. Institutes of Health, Bethesda, Md. 20014)

4-7. International Committee for **Social Sciences Documentation**, annual plenary assembly, Budapest, Hungary. (J. Meyriat, 27, rue St. Guillaume, Paris 7)

4-8. **Aeronautic and Space Engineering**, Soc. of Automotive Engineers, Los Angeles, Calif. (C. C. King, SAE Western Branch, 999 North Sepulveda Blvd., El Segundo, Calif. 90245)

4-8. Ciba Foundation **Clinical Research** Guest Conf., London, England. (Ciba, 41 Portland Pl., London W.1)

4-10. **Physicists**, conf., Frankfurt am Main, Germany. (G. Schubert, Inst. für Theoretische Physik, Universität, Mainz, Germany)

4-13. International Council for the **Exploration of the Sea**, 53rd annual meeting, Rome, Italy. (The Council, Charlottenlund Slot, Charlottenlund, Denmark)

4-13. **Commonwealth Medical Conf.**, Edinburgh, Scotland. (Mrs. J. Hotchkiss, Ministry of Overseas Development, Stag Place, London, S.W.1, England)

5-7. Industrial and Commercial **Power Systems**, conf., Buffalo, N.Y. (T. O. Zittel, Bethlehem Steel Co., 3555 Lake Shore Rd., Buffalo 14219)

5-8. International Committee of **Weights and Measures**, session, Sèvres, France. (Intern. Bureau of Weights and Measures, Pavillon de Breteuil, Sèvres, Sein-et-Oise, France)

5-9. **Infectious Pathology**, 4th intern. congr., Freiburg im Breisgau, Germany. (G. Mossner, Hugertstr. 55, Freiburg im Breisgau)

5-9. **Tuberculosis**, 18th intern. conf., Munich, Germany. (Intern. Union Against Tuberculosis, 15, rue Pomereu, Paris 16°, France)

6-8. **Dynamics of Fluids and Plasmas**, symp., Univ. of Maryland, College Park. (S. I. Pai, Inst. for Fluid Dynamics and

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so crucial to democracy?**

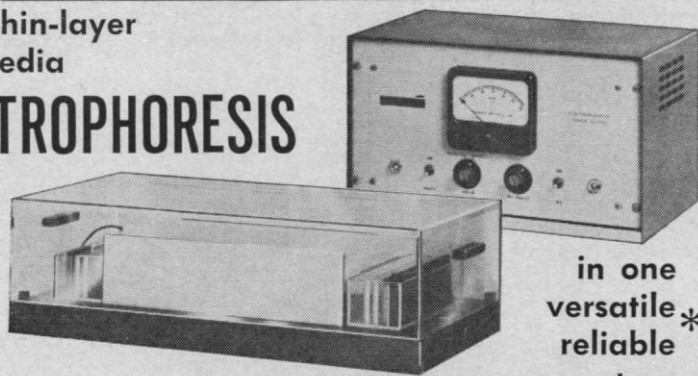
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Applied Mathematics, Univ. of Maryland, College Park 20742)

6-8. **Optical Soc. of America**, annual meeting, Philadelphia, Pa. (M. E. Wurga, OSA, 1155 16th St., NW, Washington, D.C. 20036)

6-8. **Royal Inst. of Public Health and Hygiene**, annual conf., Weymouth, England. (Secretary, RIPHH, 28 Portland Place, London, W.1, England)

6-10. **Wood and Organisms**, intern. symp., Berlin, Germany. (German Soc. for Wood Research, Danneckerstr. 37, Stuttgart S, Germany)

7-9. **Seismological Soc. of America**, eastern sec. 37th annual, Lamont Geological Observatory, Palisades, N.Y. (J. Dorman, Lamont Geological Observatory, Palisades 10964)

8-9. **Atlantic Coastal Plain Geological Assoc.**, field trip, South Carolina. (D. J. Colquhoun, Dept. of Geology, Univ. of South Carolina, Columbia)

8-9. **Association of Midwestern College Biology Teachers**, 9th annual conf., Northern Illinois Univ., DeKalb)

8-9. **Indiana Acad. of Science**, fall meeting, Notre Dame. (C. F. Dineen, St. Mary's College, Notre Dame)

9. **Paleontological Research Inst.**, Ithaca, N.Y. (K. V. W. Palmer, Paleontological Research Inst., 109 Dearborn Pl., Ithaca)

9-10. **Gastroenterology**, French conf., Paris, France. (R. Biguie, 79, Boulevard Malesherbes, Paris 8°)

9-13. **American Soc. of Clinical Hypnosis**, Chicago, Ill. (F. D. Nowlin, ASCH, 800 Washington Ave., SE, Minneapolis, Minn. 55414)

9-17. **Electrical, Electronics, and Mechanical Engineering**, first Pan American congr., Mexico, D.F. (Inst. of Electrical and Electronics Engineers, Box A, Lenox Hill Station, New York 10021)

10-14. **Water Pollution Control Fed.**, 38th annual, Atlantic City, N.J. (R. E. Fuhrman, 4435 Wisconsin Ave., NW, Washington, D.C. 20016)

10-15. **International Federation for Documentation**, congr., Washington, D.C. (Secretariat, FID, 9650 Wisconsin Ave., Washington 20014)

10-15. **Electrochemical Soc.**, meeting, Buffalo, N.Y. (Executive Secretary, ES, 30 E. 42 St., New York 10017)

10-15. **Endocrinology**, 6th Pan American conf., Mexico, D.F. (G. Gual, Inst. Nacional de la Nutrición, Dr. Jimenez No. 261, Mexico 7)

10-16. **American Documentation Inst.**, Washington, D.C. (J. E. Bryan, 2000 P St., NW, Washington, D.C. 20036)

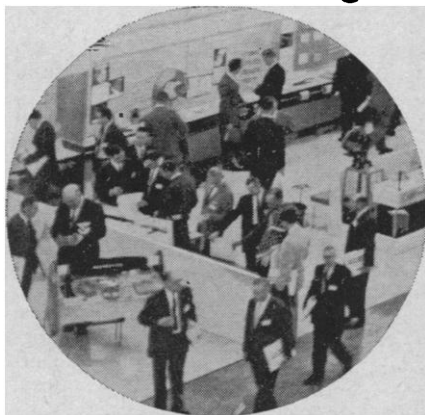
10-17. **Bronchoesophagology**, 1st Latin American congr., Rio de Janeiro, Brazil. (F. Aprigliano, Rua Alcindo Guanabara, 24, Sob-Loja 206, Rio de Janeiro)

10-17. **Otorhinolaryngology**, 14th Brazilian congr., Rio de Janeiro, Brazil. (W. Benevides, Rua Alcindo Guanabara, 24, Sob-Loja 206, Rio de Janeiro)

10-17. **Plastic Surgery**, 10th Latin American congr., Buenos Aires, Argentina. (J. Norberto Spera, Riglos 624, Buenos Aires)

11-13. **Color Centers in Alkali Halides**, symp., Univ. of Illinois, Urbana. (D. W. Compton, Dept. of Physics, Univ. of Illinois, Urbana)

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11-13. Communications, 11th natl. symp., Utica, N.Y. (G. E. Brunette, Communications Div. (EMCT) Rome Air Development Center, Griffiss AFB, New York 13442)

11-13. Metabolic Roles of Lipids, symp., Cincinnati, Ohio. (C. H. Hauber, American Oil Chemists' Soc., 35 East Wacker Dr., Chicago 1, Ill.)

11-13. Manned Spaceflight, 4th meeting, St. Louis, Mo. (J. F. Yardley, McDonnell Aircraft Corp., P.O. Box 516, St. Louis)

11-13. National Acad. of Sciences, fall meeting, Univ. of Washington, Seattle. (H. Neurath, Dept. of Biochemistry, Univ. of Washington, Seattle 98105)

11-13. American Record Management Assoc., 10th annual conf., Minneapolis, Minn. (L. Loveless, Office Services, Honeywell, Inc., 2701 Fourth Ave., S, Minneapolis 55408)

11-14. Association of Official Agricultural Chemists, 79th annual, Washington, D.C. (L. G. Ensminger, AOAC, Box 540, Benjamin Franklin Station, Washington 20044)

11-14. American Oil Chemists' Soc., fall meeting, Cincinnati, Ohio. (AOCS, 35 E. Wacker Dr., Chicago, Ill. 60600)

11-15. Fall Metallurgy Days, Paris, France. (Soc. Française de Metallurgie, 25 rue de Clichy, Paris 9°)

11-16. Stomatology, 19th French Congr., Paris. (R. Cayron, 99, rue de Courcelles, Paris 17°)

11-23. International Organization for Standardization, Milan, Italy. (Soc. of Motion Picture and Television Engineers, 9 E. 41 St., New York 10017)

12-13. Cardio-Renal Consequences of Sustained Hypertension, seminar, Philadelphia, Pa. (Miss S. Rosen, Symposium Office, Hahnemann Medical College and Hospital, 230 N. Broad St., Philadelphia 19102)

12-14. Analytical Chemistry in Nuclear Technology, 9th conf., Gatlinburg, Tenn. (C. D. Susano, Oak Ridge Natl. Laboratory, P.O. Box X, Oak Ridge, Tenn. 37831)

12-16. Communications, 13th intern. Congr., Genoa, Italy. (Inst. for Intern. Communications, Viale Brigate Partigiane, 18, Genoa)

13. Medical Physics, seminar, New York, N.Y. (American Inst. of Physics, 335 E. 45 St., New York 10017)

13. Animal Nutrition Research Council, 26th annual, Washington, D.C. (J. C. Fritz, 12314 Madeley Lane, Bowie, Md. 20715)

13-15. Detonation, 4th symp., White Oak, Silver Spring, Md. (S. J. Jacobs, U.S. Naval Ordnance Laboratory, White Oak, Silver Spring 20910)

13-15. American Assoc. of Petroleum Geologists, mid-continent regional meeting, Tulsa, Okla. (E. W. Ellsworth, AAPG, Box 979, Tulsa 74101)

13-16. Tau Beta Pi Assoc., Inc., Univ. of Maryland, College Park. (R. H. Nagel, 508 Dougherty Engineering Bldg., Univ. of Tennessee, Knoxville)

13-17. Soil Biology, first Latin American colloquium, Bahia Blanca, Argentina. (Organizing Committee, Inst. de Edafologia e Hidrologia, Alem 925, Bahia Blanca, Argentina)



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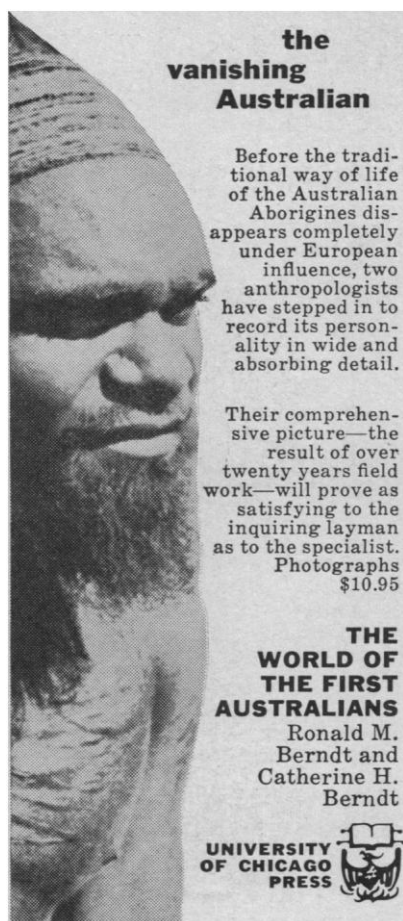
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13-19. **Instrumentation and Automation**, 3rd intern. congr., Düsseldorf, Germany. (Nordwestdeutsche Ausstellungs- und Messe-Gesellschaft, Ehrenhof 4, 4000 Düsseldorf 10)

14. Association of **Vitamin Chemists**, Chicago, Ill. (D. Olson, Dawe's Laboratories, 4800 S. Richmond St., Chicago)

14-15. International Federation of **Surgical Colleges**, 8th annual, Philadelphia, Pa.; 17, Atlantic City, N.J. (K. Cassels, Royal College of Surgeons, Lincoln's Inn Fields, London W.C.2, England)

14-16. **British Orthopaedic Assoc.**, fall meeting, London, England. (Joint Secretariat, 47 Lincoln's Inn Fields, London, W.C.2)

15. **Southern California Acad. of Science**, Los Angeles. (C. Rozaire, Los Angeles County Museum, 900 Exposition Blvd., Los Angeles 90007)

15-16. Contributions of Cytogenetics to the **Determination of Phylogenies**, 12th symp., Missouri Botanical Garden, St. Louis. (H. C. Cutler, Missouri Botanical Garden, St. Louis 63110)

15-16. National Soc. of **Professional Engineers**, 3rd annual conf., Oklahoma City, Okla. (NSPE, 2029 K St., NW, Washington 20006)

15-17. **American Heart Assoc.**, Scientific sessions, Bal Harbour, Fla. (AHA, 44 E. 23 St., New York 10010)

16-17. **Infectious Diseases Soc. of America**, Washington, D.C. (E. H. Kass, IDS, Boston City Hospital, Boston, Mass. 02118)

17-21. **Antimicrobial Agents and Chemotherapy**, 5th interscience conf./4th intern. congr. of chemotherapy, Washington, D.C. (R. W. Sarber, American Soc. for Microbiology, 115 Huron View Blvd., Ann Arbor, Mich.)

17-21. **Metallurgical Soc. of American Inst. of Mining, Metallurgical, and Petroleum Engineers**, Detroit, Mich. (American Inst. of Mechanical Engineers, 345 E. 47 St., New York 10017)

18. **Industrial Pharmacy sect.**, American Pharmaceutical Assoc., 4th annual mid-west regional meeting, Chicago, Ill. (C. Schroeter, Abbott Laboratories, North Chicago, Ill.)

18-19. American Inst. of **Aeronautics and Astronautics/Canadian Aeronautics and Space Inst.**, Toronto, Ont., Canada. (D. L. Raymond, 1290 Sixth Ave., New York 10019)

18-19. **Systems Science**, conf., Case Inst. of Technology, Cleveland, Ohio. (Inst. of Electrical and Electronics Engineers, Box A, Lenox Hill Station, New York 10021)

18-20. **Dynamic Stability of Structures**, intern. conf., Evanston, Ill. (G. Herrmann, Technological Inst., Northwestern Univ., Evanston 60201)

18-20. **Electromagnetic Radiation in Agriculture**, intern. conf., Roanoke, Va. (D. P. Brown, Niagara Mohawk Power Corp., 300 Erie Blvd. W., Syracuse, N.Y. 13202)

18-20. American Soc. of **Lubrication Engineers**, San Francisco, Calif. (D. B. Sanberg, 5 North Wabash Ave., Chicago, Ill.)

18-20. Canadian Inst. of **Mining and Metallurgy**, annual western meeting, Winnipeg, Canada. (CIMM, 906 Drummond

Bldg., 1117 St. Catherine St. W., Montreal 2, P.Q., Canada)

18-20. **Nuclear Science**, 12th symp., San Francisco, Calif. (Inst. of Electrical and Electronics Engineers, Box A, Lenox Hill Station, New York 10021)

18-20. **Applied Spectroscopy**, 12th symp., Ottawa, Ont., Canada. (R. V. Baker, Aluminum Co. of Canada, Arvida, P.Q., Canada)

18-21. **Advances in Gas Chromatography**, 3rd intern. symp., Houston, Tex. (A. Zlatkis, Dept. of Chemistry, Univ. of Houston, Houston)

18-21. **Management Information and Data Transfer Systems**, American Univ., Washington, D.C. (R. I. Cole, Center for Technology and Administration, American Univ., 2000 G St., NW, Washington, D.C.)

18-22. American Soc. of **Civil Engineers**, Kansas City, Mo. (W. H. Wisely, ASCE, 345 E. 47 St., New York 10017)

18-22. Society for **Nondestructive Testing**, 25th natl. conv., Detroit, Mich. (N. H. Cale, Anaconda American Brass Co., Research and Technical Center, P.O. Box 747, Waterbury, Conn.)

18-22. American **Public Health Assoc.**, 93rd annual, Chicago, Ill. (APHA, 1790 Broadway, New York, N.Y.)

18-22. **Radioisotope Instruments in Industry and Geophysics**, Warsaw, Poland. (J. H. Kane, Div. of Special Projects, U.S. Atomic Energy Commission, Washington, D.C.)

18-22. American Soc. for **Metals**, natl. congr., Detroit, Mich. (A. R. Putnam, ASM, Metals Park, Ohio)

18-22. Application of **Radioisotopes in Gastroenterology**, symp., Lausanne, Switzerland. (A. Vannotti, Clinique Médicale Universitaire, Hôpital Cantonal, Lausanne)

18-22. American College of **Surgeons**, annual clinical congr., Atlantic City, N.J. (American College of Surgeons, 55 East Erie St., Chicago, Ill. 60611)

19-20. International **Rhinologic Soc.**, 1st congr., Kyoto, Japan. (H. A. E. van Dishoeck, Academisch Ziekenhuis, Leiden, Netherlands)

19-21. Association of **Analytical Chemists**, 13th conf., Detroit, Mich. (G. Schenk, Dept. of Chemistry, Wayne State Univ., Detroit 48202)

19-21. **Cloud Physics and Severe Storms**, conf., American Meteorological Soc., Reno, Nev. (K. C. Spengler, 45 Beacon St., Boston 8, Mass.)

19-21. Radio Astronomical and Satellite **Studies of the Atmosphere**, 2nd symp., Boston, Mass. (G. A. Cushman, Wentworth Inst., 550 Huntington Ave., Boston)

19-22. Economics of **Automatic Data Processing**, symp., Rome, Italy. (Intern. Computation Center, Viale della Civiltà del Lavoro, 23, P.O.B. 10053, Rome)

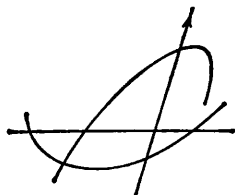
20-21. **Airborne Infection**, 2nd intern. symp., Johns Hopkins School of Medicine, Baltimore, Md. (E. K. Wolfe, Fort Detrick, Frederick, Md. 21701)

20-21. International Soc. of **Audiology**, 2nd congr., Kyoto, Japan. (M. Goto, Dept. of Otolaryngology, Kyoto Univ., Shogoin, Sakyo-ku, Kyoto)

20-22. **Circuit and System Theory**, Alerton Conf., Univ. of Illinois, Monticello. (M. E. Van Valkenburg, Dept. of Electrical Engineering, Univ. of Illinois, Urbana 61803)

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20-22. **Design of Experiments**, 11th conf., Hoboken, N.J. (F. G. Dressel, Army Research Office-Durham, Box CM, Duke Station, Durham, N.C. 27706)

20-22. **Parenteral Drug Assoc.**, annual conv., New York, N.Y. (PDA, Western Saving Fund Bldg., Broad and Chestnut St., Philadelphia, Pa. 19107)

21. **New Mexico Acad. of Science**, Albuquerque. (K. S. Bergstresser, 739 42nd St., Los Alamos, N.M.)

21-22. **Copolymer** conf., Ludwigshafen, Germany. (Deutsche Bunsen-Gesellschaft für Physikalische Chemie, Varrentrappstr. 40-42, 6 Frankfurt am Main, Germany)

21-22. **Electrochemical Current Sources**, symp., Frankfurt am Main, Germany. (Gesellschaft Deutscher Chemiker, Postfach 9075, 6 Frankfurt am Main)

21-23. **Microminiaturization in Automatic Control**, symp., Munich, Germany. (G. Müller, Siemens & Halske AG, Wernerwerk für Messtechnik, Postfach 834, Karlsruhe, Germany)

21-23. **Society of Photographic Scientists and Engineers**, symp., Washington, D.C. (W. S. Dempsey, Houston Fearless Corp., 1413 K St., NW, Washington 20005)

22-23. **Data Processing in Public Libraries**, conf., Drexel Inst. of Technology, Philadelphia, Pa. (M. D. Warrington, Graduate School of Library Science, Drexel Inst. of Technology, Philadelphia 19104)

23-28. **American Acad. of Pediatrics**, annual, Chicago, Ill. (R. G. Frazier, AAP, 1801 Hinman Ave., Evanston, Ill. 60204)

24-27. **Society of American Foresters**, annual, Detroit, Mich. (Society of American Foresters, 1010 16th St., NW, Washington 20036)

24-29. **Stable Isotopes**, 4th symp., Leipzig, East Germany. (Inst. für Stabile Isotope, Deutsche Akademie der Wissenschaften, Permoserstr. 15, 705 Leipzig)

24-30. **American College of Gastroenterology**, Bal Harbour, Fla. (D. Weiss, 33 W. 60 St., New York 10023)

25-27. **Chemical Engineering**, 15th conf., Quebec, Que., Canada. (Chemical Inst. of Canada, 48 Rideau St., Ottawa 2, Ont.)

25-27. **Functional Organization of the Compound Eye**, symp., Karolinska Inst., Stockholm, Sweden. (W. E. Savely, Air Force Office of Scientific Research, Washington, D.C. 20333)

25-27. **Electrical Insulation**, Natl. Acad. of Sciences-Nat. Research Council conf., Buck Hill Falls, Pa. (D. W. Thornhill, NAS, 2101 Constitution Ave., NW, Washington, D.C.)

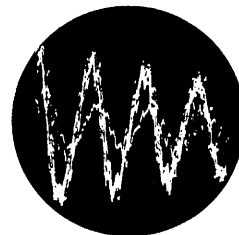
25-27. **Electronics**, natl. conf., Chicago, Ill. (R. G. Brown, Dept. of Electrical Engineering, Iowa State Univ., Ames 50010)

25-27. **Nuclear and Engineering Ceramics**, conf., Harwell, England. (G. H. Stewart, British Ceramic Soc., Shelton House, Shelton, Stoke-on-Trent, England)

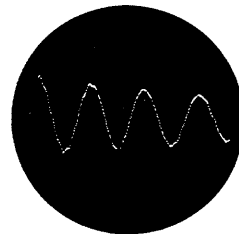
25-27. **Society of Rheology**, Case Inst. of Technology, Cleveland, Ohio. (J. C. Miller, Union Carbide Plastics Co., Bound Brook, N.J.)

25-29. **Hypotensive Polypeptides**, intern. symp., Florence, Italy. (E. G. Erdős, Dept. of Pharmacology, Univ. of Oklahoma Medical Center, Oklahoma City 73104)

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