## Meetings

#### Forthcoming Events

May

5-7. American Soc. of Internal Medicine, Miami Beach, Fla. (G. T. Bates, 350 Post St., San Francisco 8, Calif.)

5-7. Wisconsin Acad. of Sciences, Arts, and Letters, 91st annual, Waukesha. (T. J. McLauglin, Secretary, 2865 N. Prospect Ave., Milwaukee, Wis.) 5-8. American Psychoanalytic Assoc.,

5-8. American Psychoanalytic Assoc., Chicago, Ill. (Mrs. H. Fischer, 1 E. 57 St., New York 22)

6-7. Academy of Psychoanalysis, annual, Chicago, Ill. (J. H. Merin, 49 E. 78 St., New York 21)

6-9. Circuit Theory, 5th midwestern symp., Urbana, Ill. (M. E. Van Valkenburg, Dept. of Electrical Engineering, Univ. of Illinois, Urbana)

7-10. American Inst. of Chemical Engineers, Cleveland, Ohio. (J. F. Van Antwerpen, American Inst. of Chemical Engineers, 25 W. 45 St., New York 36)

7-11. Institute of Food Technologists, New York, N.Y. (C. S. Lawrence, 176 W. Adams St., Chicago 3, Ill.)

7-12. Medical Library Assoc., Inc., Seattle, Wash. (Miss R. J. Mann, Mayo Clinic Library, Rochester, Minn.)

7-12. Society of Motion Picture and Television Engineers, Toronto, Canada. (SMPTE, 55 W. 42 St., New York 36)

8-9. Titrimetric Methods of Analysis, symp., Cornwall, Ontario, Canada. [J. R. McCallum, Courtaulds (Canada) Ltd., Cornwall]

8-10. Aerospace Electronics Conf., 13th annual natl., Dayton, Ohio. (R. G. Stimmel, Institute of Radio Engineers, 1 E. 79 St., New York 21)

8-10. Instrument Soc. of America, Power Instrumentation Symp., 4th natl., Chicago, Ill. (H. A. Van Wassen, Duquesne Light Co., Pittsburgh 19, Pa.)

8-10. Mathematical Theories of Biological Phenomena, symp., New York, N.Y. (N. Rashevsky, Committee on Mathematical Biology, 5741 Drexel Ave., Chicago 37, Ill.)

8-12. American College of Physicians, 42nd annual, Miami Beach, Fla. (American College of Physicians, 4200 Pine St., Philadelphia 4, Pa.)

8-12. American Psychiatric Assoc., 117th annual, Chicago, Ill. (C. H. H. Branch, 156 Westminster Ave., Salt Lake City, Utah)

9-11. Western Joint Computer Conf., Los Angeles, Calif. (W. F. Bauer, 8433 Fallbrook Ave., Canoga Park, Calif.)

10-12. Production Engineering Conf., Toronto, Canada. (R. B. Larson, 5701 Carnegie Ave., Cleveland 3, Ohio)

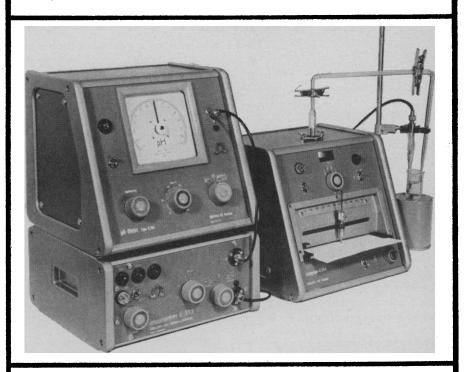
10-13. National Science Fair-International, 12th, Kansas City, Mo. (Science Service, 1719 N Street, NW, Washington 6, D.C.)

6, D.C.) 11-13. Acoustical Soc. of America, Philadelphia, Pa. (W. Waterfall, 335 E. 45 St., New York 17)

11-13. American Inst. of Industrial Engineers, annual, Detroit, Mich. (W. J. Jaffe, Newark College of Engineering, 367 High St., Newark 2, N.J.)

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To operate most efficiently animal colonies must use cages which withstand the rough and tumble of mechanized washing systems and the high temperatures at which these systems and autoclaves operate. Because colonies must be inspected quickly, cages should afford maximum visibility. Until now the cages were either transparent or durable, but none had both characteristics.

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This new material, a linear aromatic polyester of carbonic acid, has a very low absorption level. Odor producing gases are not absorbed, resistance to most acids and basics is very good.

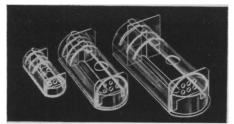
The cage is constructed to NIH Spec. EG-84. For housing mice, the cage is  $11\frac{1}{2}$ " x  $7\frac{1}{2}$ " x 5" deep. The cages nest for easy storage.

This is one of the "20 Series" of Econo-Cages, which includes cages of fibre glass, acrylonitrile-styrene-copolymer, polypropylene and polycarbonate. These are all 111/2" x 71/2" x 5" deep. There are four lid styles which are interchangeable on all "20 Series" cages. Write for complete information on this series.

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All three sizes have an adjustable tailgate which fits into any of three slots to vary cage length, confine the animal, and serve as a cage door. Openings at the top, bottom, and tail provide easy access to any part of the animal (the bottom slot also permits drainage of animal waste). A hopper permanently attached to the front of the unit includes a trough for granular feeds and a water tube inlet.

The small restrainer, Econo-Cage #88, can be varied from 2'' to  $3\frac{1}{2}''$  in length and is 11/4" wide. The medium restrainer, Econo-Cage #90, can be varied from  $4\frac{1}{2}$ " to 6" in length and is  $2\frac{1}{2}$ " wide. The large restrainer, Econo-Cage #91, can be varied from 5" to 7" in length and is 3" wide. All these units can be cleaned chemically or with hot water, they are not autoclavable.



11-13. American Radium Soc., Colorado Springs, Colo. (C. G. Stetson, 350 Engle St., Englewood, N.J.)

13-14. Society for Economic Botany, annual, Cambridge, Mass. (R. E. Schultes, Botanical Museum of Harvard University, Cambridge 38)

15-16. Co-ordination Compounds, symp., Hamilton, Ontario, Canada. (R. J. Gillespie, McMaster Univ., Hamilton) 15-17. Institute of Radio Engineers,

natl. symp., Washington, D.C. (G. Sha-piro, National Bureau of Standards, Wash-

ington 25) 15-17. Radiation Research Soc., annual, Washington, D.C. (E. L. Powers, Div. of Biological and Medical Research, Argonne National Laboratory, Argonne, Ill.)

15-18. Society of Aeronautical Weight Engineers, Akron, Ohio. (D. B. Block, 4004 Oxford Ave., NW, Massillon, Ohio)

15-18. Spectroscopy, 12th annual symp., Chicago, Ill. (W. Ashby, Continental Can Co., Inc., 7622 S. Racine Ave., Chicago 20, Ill.)

15-20. Conference on Nuclear Electronics, Belgrade, Yugoslavia. (J. Burt, International Atomic Energy Agency, Agency, United Nations, New York, N.Y.)

16-18. Western Conf. on Anesthesiology, biennial, Portland, Ore. (J. O. Branford, 2307 NW Overton St., Portland 9, Ore.

17-20. American College of Cardiol-ogy, New York, N.Y. (P. Reichert, 350 Fifth Ave., Empire State Bldg., New York 1)

18-20. Host Tumor Interactions, intern. symp., Detroit, Mich. (M. J. Brennan, Oncology Div., Henry Ford Hospital, Detroit 2)

22-24. American Thoracic Soc., Cin-cinnati, Ohio. (F. W. Webster, 1790 Broadway, New York 19)

22-24. Global Communications, 5th natl. symp., Chicago, Ill. (R. D. Slayton, 5555 Touhy Ave., Skokie, Ill.)

22-24. Telemetering Conf., natl., Chicago, Ill. (J. Becker, AC Spark Plug Division, General Motors Corp., Milwaukee 1, Wis.)

22–25. American Urological Assoc. Los Angeles, Calif. (W. P. Didusch, 1120 N. Charles St., Baltimore 1, Md.)

22-25. Design Engineering Conf. and Show, Detroit, Mich. (ASME Meetings

Dept., 29 W. 39 St., New York 18) 22–25. National Tuberculosis Assoc., Cincinnati, Ohio. (J. G. Stone, 1790 Broadway, New York 19)

22-26. Engineering Conf. and Exhibit, 29th annual, New York, N.Y. (G. E. Seeley, ASTME Headquarters, 10700 Puritan Ave., Detroit 38, Mich.)

22-26. Society of Photographic Scientists and Engineers, annual, Binghamton, N.Y. (M. G. Anderson, Ansco, Vestal Parkway East, Binghamton, N.Y.) 22-27. International Acad. of Legal

Medicine and of Social Medicine, 5th cong., Vienna, Austria. (M. Helpern, Chief Medical Examiner, City of New York, 55 East End Ave., New York 28)

23-25. Large Capacity Memory Techniques for Computing Systems, symp., Washington, D.C. (Miss J. Leno, Code 430A, Office of Naval Research, Washington 25)

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25. Gastroenterology Research Group, Chicago, Ill. (N. C. Hightower, Scott and White Clinic, Temple, Tex.)

White Clinic, Temple, Tex.) 25-26. Medical Technology, symp., Cleveland, Ohio. (J. W. King, Cleveland Clinic, 2020 E. 93 St., Cleveland 6)

Clinic, 2020 E. 93 St., Cleveland 6) 25-26. Nitro Aliphatic Chemistry, symp., Lafayette, Ind. (Purdue Memorial Union, Purdue Univ., Lafayette) 25-26. Operations Research Soc. of

25-26. Operations Research Soc. of America, 9th annual, Chicago, Ill. (D. Schiller, Gaywood-Schiller Associates, 203 N. Wabash Ave., Chicago 1)

26-27. American Otological Soc., Lake Placid Club, Essex County, N.Y. (J. A. Moore, 525 E. 68 St., New York 21)

26-27. Biology of the Trachoma Agent, symp., New York, N.Y. (F. B. Gordon, Natl. Naval Medical Center, Bethesda 14, Md.)

26-27. Cardiovascular Tissue Culture Conf., Dover, Del. (O. J. Pollak, Dover Medical Research Center, Inc., P.O. Box 228, Dover)

26-3. American Acad. of Dental Medicine, cruise to Bermuda and Nassau. (H. Ward, 15 Bond St., Great Neck, N.Y.)

28-1. Special Libraries Assoc., 52nd annual, San Francisco, Calif. (B. M. Woods,

SLA, 31 E. 10 St., New York 3) 29-31. American Gynecological Soc.,

Colorado Springs, Colo. (A. H. Aldridge, 899 Park Ave., New York 21)

29-31. Cancer Symp., 6th annual, Regina, Saskatchewan, Canada. (A. J. S. Bryant, Allan Blair Memorial Clinic, Regina)

29–31. Chemical Inst. of Canada, 44th annual, Ottawa. (Chemical Inst. of Canada, 48 Rideau St., Ottawa 2)

29-3. Molecular Spectroscopy, 5th European cong., Amsterdam, Netherlands. (D. H. Zijp, Secy., Nieuwe Achtergracht 123, Amsterdam-C.)

30. Nutrition Soc. of Canada, 4th annual, Guelph, Ontario. (E. V. Evans, Dept. of Nutrition, Ontario Agricultural College, Guelph)

31-2. Canadian Federation of Biological Societies, Guelph, Ontario, Canada. (E. H. Bensley, Montreal General Hospital, 1650 Cedar Ave., Montreal 25, P.Q.)

31-2. Radar symp., 7th annual, Ann Arbor, Mich. (Coordinator, 7th Annual Radar Symposium, Institute of Science and Technology, Box 618, Ann Arbor)

#### June

2-3. Canadian Soc. for Clinical Chemistry, annual general meeting, Guelph, Ont. (C. R. Cameron, Ontario Veterinary College, Guelph)

2-5. Latin-American Congress of Physical Medicine, Lisbon, Portugal. (C. Lopez de Victoria, 245 E. 17 St., New York, N.Y.)

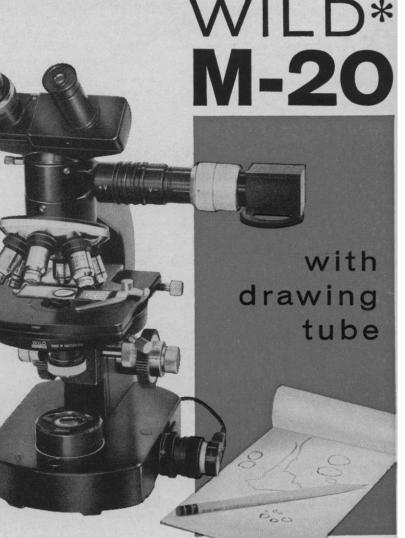
3-11. Medical-Surgical Film Festival, 4th intern., Turin, Italy. (Minerva Medica, Corso Bramante 83-85, Turin)

4-9. Mass Spectrometry, ASTM Committee E-14, Chicago, Ill. (G. Crable, Gulf Research Center, P.O. Box 2038, Pittsburgh 30, Pa.)

4-10. World Congress of Psychiatry, 3rd, Montreal, Canada. (A. Roberts, Allan Memorial Inst., 1025 Pine Ave. West, Montreal 2, P.Q.)

4-12. Cellular Regulatory Mechanisms, 26th Cold Spring Harbor Symp. on Quantitative Biology, Cold Spring Harbor,

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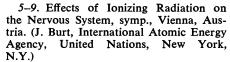
N.Y. (A. Chovnick, Long Island Biological Assoc., Cold Spring Harbor)

5-7. American Soc. for Quality Control, Philadelphia, Pa. (W. P. Youngclaus, Jr., 161 W. Wisconsin Ave., Milwaukee 3, Wis.)

5-7. Fundamental Aspects of Radiosensitivity, symp., Upton, N.Y. (A. H. Sparrow, Brookhaven National Laboratory, Upton, L.I.)

5-8. International Instrument-Automation Conf. and Exhibit, Instrument Soc. of America, Toronto, Canada. (I.S.A., 313 Sixth Ave., Pittsburgh 22, Pa.)

5-9. Animal Reproduction, 4th intern. cong., Amsterdam, Netherlands. (Secretariat, Burgemeester de Monchyplein 14, The Hague, Netherlands)



5-10. International Colloquium on Spectroscopy, 9th, Lyon, France. (Secretariat, Groupement pour l'Avancement des Méthodes Spectrographiques, 1, rué Gaston Boissier, Paris 15)

5-16. Operations Research and Systems Engineering, Baltimore, Md. (Dean, School of Engineering, Johns Hopkins Univ., Baltimore 18)

6-8. Tissue Culture Assoc., 12th annual, Detroit, Mich. (F. E. Payne, Dept. of Epidemiology, Univ. of Michigan, Ann Arbor)



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Branch Salos Offices: Albany 5, N. Y. • Boston 16, Mass, • Elk Grove Village, III. • Philadelphia 43, Pa. • Silver Spring, Md. Branch Warehouse: Elk Grove Village, III. 8-11. American Electroencephalographic Soc., Atlantic City, N.J. (G. A. Ulett, Malcolm Bliss Mental Health Center, 1420 Grattan, St. Louis 4, Mo.)

8-18. International Organization for Standardization, general assembly (members only), Finland. (American Standards Association, 70 East 45 St., New York 17)

9-11. Society of Biological Psychiatry, Atlantic City, N.J. (G. N. Thompson, 2010 Wilshire Blvd., Los Angeles 57, Calif.)

9–17. European Convention of Chemical Engineering, Frankfurt, Germany. (DECHEMA, Postfach No. 7746, Frankfurt/Main 7)

11-15. American Soc. of Mechanical Engineers, summer annual, Los Angeles, Calif. (O. B. Schier II, 29 W. 39 St., New York 18)

12-13. Radio Frequency Interference, 3rd natl. symp., Washington, D.C. (E. F. Mischler, National Engineering Service, Washington, D.C.)

12-14. American Dairy Science Assoc., Madison, Wis. (H. F. Judkins, 32 Ridgeway Circle, White Plains, N.Y.)

12-14. American Neurological Assoc., Atlantic City, N.J. (M. D. Yahr, Neurological Inst., 710 W. 168 St., New York 32)

12-14. Society for the Study of Development and Growth, regeneration symp., Williamstown, Mass. (A. C. Braun, Rockefeller Inst., New York 21)

12-15. Nature of the Real, conf., Milwaukee, Wis. (E. D. Simmons, Dept. of Philosophy, Marquette Univ., Milwaukee 3)

12-15. Physics of Electronic and Atomic Collisions, intern. conf., Boulder, Colo. (B. Bederson, Physics Dept., New York Univ., New York 53)

12-16. Association of Official Seed Analysts, Richmond, Va. (D. D. Forsyth, Agronomy Building, Madison 6, Wis.)

12-16. Molecular Structure and Spectroscopy, symp., Columbus, Ohio. (R. A. Oetjen, Dept. of Physics and Astronomy, Ohio State Univ., Columbus 10)

12-18. European Assoc. for Animal Production, 8th intern. cong., Hamburg, Germany. (European Assoc. for Animal Production, Via Barnaba Oriana 28, Rome, Italy)

12-24. European Inst. of Scientific Studies for the Prevention and Treatment of Alcoholism, Amsterdam, Netherlands. (D. Ehlbeck, Intern. Bureau against Alcoholism, Case Gare 49, Lausanne, Switzerland)

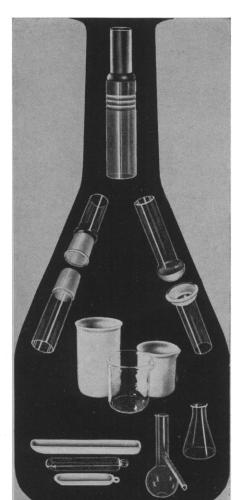
12-29. Statistical Quality Control Intensive Courses for the Chemical and Processing Industries, 18th annual, Rochester, N.Y. (H. M. Kentner, Extended Services Div., Rochester Inst. of Technology, Rochester 8)

13-14. Product Engineering and Production, 5th natl. conf., Philadelphia, Pa. (P. J. Riley, R.C.A., Building 10-6, Camden 2, N.J.) 13-16. Gas Chromatography Symp.,

13-16. Gas Chromatography Symp., 3rd biennial, East Lansing, Mich. (J. E. Callen, Procter and Gamble Co., Miami Valley Laboratories, P.O. Box 175, Cincinnati 39, Ohio)

13-16. Institute of Aerospace Sciences and American Rocket Soc., Los Angeles,

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Calif. (Inst. of Aerospace Sciences, 2 E. 64 St., New York 21)

13-18. Nuclear Congress, 6th, Rome, Italy. (Ufficio Stampa e Relazioni Pubbliche-CNEN, Via Belisario 15, Rome)

14-16. Applied Mechanics Conf., Chicago, Ill. (American Soc. of Mechanical Engineers, Meetings Dept., 29 W. 39 St., New York 18)

14-16. Semiconducting Compounds, conf., Schenectady, N.Y. (W. W. Tyler, General Electric Research Laboratory, Schenectady)

14-16. Theory of Weak and Strong Interactions, conf., La Jolla, Calif. (T. A. Manar, Scripps Institution of Oceanography, La Jolla)

14-17. American Assoc. of Bioanalysts, Dallas, Tex. (L. D. Hertert, 490 Post St., Room 1049, San Francisco 2, Calif.)

16-17. Meteoritical Soc., Nantucket, Mass. (G. L. Rowland, Long Beach City College, Long Beach 8, Calif.)

17-21. American Nuclear Soc., Boston Mass. (O. J. Du Temple, ANS, 86 E. Randolph St., Chicago 1, Ill.)

18-21. American Astronomical Soc., Nantucket, Mass. (J. A. Hynek, Dearborn Observatory, Northwestern Univ., Evanston, Ill.)

18-23. American Meteorological Soc., 193rd natl., and Pacific Div., AAAS, 42nd annual, Davis, Calif. (AMS, 45 Beacon St., Boston 8, Mass.)

18-23. American Soc. of Medical Technologists, Seattle, Wash. (Miss R. Matthaei, Suite 25, Hermann Professional Bldg., Houston 25, Tex.)

19-21. American Soc. of Pharmacognosy, annual summer meeting, Houston, Tex. (R. S. Westby, Eli Lilly and Co., 740 S. Alabama St., Indianapolis 6, Ind.)

19-23. Conference on Carbon, 5th biennial, University Park, Pa. (Fifth Carbon Conf., Pennsylvania State Univ., Conference Center, University Park)

19-24. Feed Microscopy, annual meeting and special short course, Denver, Colo. (C. Jones, Colorado Department of Agriculture, 3130 Zuni St., Denver 11)

19-30. Astrophysics Seminar, Cloudcroft, N.M. (J. R. Foote, P.O. Box 1053, Holloman Air Force Base, N.M.)

21-1. International Plastics Exhibition and Convention, London, England. (British Plastics, Dorset House, Stanford St., London, S.E.1)

22-23. American Rheumatism Assoc., Dallas, Tex. (F. E. Demartini, 622 W. 168 St., New York 32)

22-23. Computers and Data Processing, 8th annual symp., Estes Park, Colo. (W. H. Eichelberger, Denver Research Inst., Univ. of Denver, Denver, Colo.)

22-24. Endocrine Soc., New York, N.Y. (H. H. Turner, 1200 N. Walker, Oklahoma City 3, Okla.)

22–26. American College of Chest Physicians, New York, N.Y. (M. Kornfeld, 112 E. Chestnut St., Chicago 11, Ill.)

23-25. American College of Angiology, 7th annual, New York, N.Y. (A. Halpern, Secretary, 11 Hampton Court, Great Neck, N.Y.)

25-28. American Soc. of Agricultural Engineers, annual, Ames, Iowa. (J. L. Butt, 420 Main St., St. Joseph, Mich.)

25-29. Morphological Precursors of

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25-30. American Medical Assoc., 110th annual, New York, N.Y. (AMA, 535 N. Dearborn St., Chicago 10, Ill.)

25-30. American Soc. for Testing Materials, Atlantic City, N.J. (R. J. Painter, 1916 Race St., Philadelphia, Pa.)

25-30. International Union of Leather Chemists Societies, 8th cong., Washington, D.C. (F. O'Flaherty, Dept. of Leather Research, Univ. of Cincinnati, Cincinnati 21, Ohio)

25-30. National Education Assoc. of the U.S., Atlantic City, N.J. (W. G. Carr, 1201 16 St., NW, Washington 6)

26-27. Conference on Vacuum Metallurgy, 5th annual conf., New York, N.Y. (R. F. Bunshah, Dept. of Metallurgical Engineering, New York Univ., New York 53)

26-28. American Soc. of Heating, Refrigerating and Air-Conditioning Engi-neers, 68th annual, Denver, Colo. (J. H. Cansdale, ASHRAE, 234 Fifth Ave., New York 1)

26-28. Control of Noise, symp., Ted-dington, England. (Director, National Physical Laboratory, Teddington, Middlesex)

26-28. European Symp. on Space Technology, London, England. (Secretary, British Interplanetary Soc., 12 Bessborough Gardens, London, S.W.1)

26-28. Military Electronics, 5th natl. convention, Washington, D.C. (H. Davis, SAFRD, Pentagon, Washington 25) 26-30. American Soc. for Engineering

Education, annual, Lexington, Ky. (M. Baker, Univ. of Kentucky, Lexington)

26-30. Concepts and Design in Aerospace Electricity, Philadelphia, Pa. (D. H. Scott, General Electric Co., No. 3, Penn Center Plaza, Philadelphia 2)

26-30. Reading Conf., 3rd annual, Syracuse, N.Y. (R. A. Kress, Syracuse Univ., Syracuse 10)

26-9. Large Dams, 7th intern. cong., Rome, Italy. (U.S. Committee on Large Dams, c/o Engineering Joint Council, 29 W. 39 St., New York 18)

27-29. Analytical Astrodynamics, intern. symp., Santa Barbara, Calif. (Capt. J. L. Gilbert, Air Force Office of Scientific Re-

search, Washington 25) 27–29. Society for Investigative Der-matology, Inc., New York, N.Y. (H. Beerman, 255 S. 17 St., Philadelphia 3, Pa.)

27-30, American Home Economics Assoc., Cleveland, Ohio. (Miss M. Warren, School of Home Economics, Univ. of Oklahoma, Norman)

28-30. International Gas Conf., 8th Stockholm, Sweden. (R. H. Touwaide, Union Internationale de l'Industrie du Gaz, 4, avenue Palmerston, Brussels 4, Belgium)

28-30. Joint Automatic Control Conf., Boulder, Colo. (R. Kramer, Massachusetts Inst. of Technology, Cambridge 39)

28-1. Institute of Navigation, annual, Williamsburg, Va. (C. T. French, General Precision, Inc., 777 14 St., NW, Suite 611, Washington, D.C.)

29-1. American Assoc. of Physics Teachers, Stanford, Calif. (R. P. Winch, Williams College, Williamstown, Mass.)

21 APRIL 1961

### ENCYCLOPAEDIC DICTIONARY **OF PHYSICS** Volume 1

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