

Association Affairs

Preview of Programs at AAAS Chicago Meeting

Some of the programs to be presented at the 1959 AAAS meeting in Chicago are given here. Others will be announced in subsequent issues. Further information can be found by referring to the following articles which have appeared in previous issues of *Science*: "Preliminary announcement of the Chicago meeting" [129, 1431 (22 May 1959)]; "Additional program notes, hotel headquarters, and housing for the Chicago meeting" [130, 226 (24 July 1959)]; "AAAS Chicago meetings, 1868-1959" [130, 923 (9 Oct. 1959)].

Mathematics

Section A. Vice-presidential address: "Topology of Euclidean Three-space," by R. H. Bing, University of Wisconsin. Symposium: "The New Look in Mathematical Education"; 27 Dec.; R. H. Bing, presiding. Papers will be presented on the work of the Committee on the Undergraduate Program (G. Baley Price, University of Kansas and California Institute of Technology); the ninth-grade course of the School Mathematics Study Group (Henry Swain, Winnetka, Ill.); new curriculum or new pedagogy (Morris Kline, New York University); early calculus in the United States (William L. Duren, Jr., University of Virginia).

Invited papers, cosponsored by the Society for Industrial and Applied Mathematics: "Trends in the Applications of Mathematics," arranged by Brockway McMillan, Bell Telephone Laboratories, with Mina Rees, Hunter College, presiding; 28 Dec. Introductory remarks (Mina Rees); random processes in control and communication (R. F. Drenick, Bell Telephone Laboratories); mathematical programming and the allocation of resources (Philip Wolfe, RAND Corporation); computers, computation and computer languages (Frank Wagner, North American Aviation, Inc.).

Association for Computing Machin-

ery. Invited papers: "Today and Tomorrow in the World of Computers"; arranged by a committee, J. H. Wegstein, National Bureau of Standards, chairman; 29 Dec.; William F. Cahill, National Aeronautics and Space Administration, presiding. Papers: conversation with a machine (L. S. Green, KCS Limited, Toronto, and E. C. Berkeley, Berkeley Enterprises, Inc.); selective dissemination of new scientific information (H. P. Luhn, International Business Machines); stock brokerage accounting on a digital computer (Robert Joslyn, C-E-I-R, Inc.); an evaluation of Soviet computer efforts (John W. Carr, III, University of North Carolina).

Physics

Section B. Four-session symposium, cosponsored by Sigma Pi Sigma: "Recent Advances in Physics," arranged by J. Howard McMillen, National Science Foundation; 26, 28, and 29 Dec. Part I. Paper on high energy particles in the cosmic radiation (Marcel Schein, University of Chicago). Part II. Paper on the major unsolved problems of theoretical physics (Harold W. Lewis, University of Wisconsin). Part III. Papers on the progress and puzzles in nuclear structure (David R. Inglis, Argonne National Laboratory) and new ideas for accelerating multibillion-volt particles (Keith R. Symon, University of Wisconsin). Part IV. Papers on collisions between oriented atoms, photons, and thermal electrons (Richard H. Sands, University of Michigan) and filament optics (Walter L. Hyde, American Optical Company).

Physicists' luncheon and vice-presidential address of Section B (joint session with Sigma Pi Sigma and the Physics Club of Chicago): "Ethics and Thermodynamics," by Robert B. Lindsay, Brown University; 29 Dec.; Joseph C. Boyce, Illinois Institute of Technology, presiding.

Three symposia sponsored by Section L—History and Philosophy of Science which may be of interest to physi-

cians: "Elements in Physical Theory," "The Logic of Variables and Constants," "Philosophical Issues of the Quantum Theory." Further details will be announced in a subsequent issue of *Science*.

Chemistry

Section C. Biochemistry Symposium: "Structure and Metabolism of Collagen"; 28 Dec.; arranged by Jerome Gross, Massachusetts General Hospital, who will preside. Papers will be presented on the structure of collagen (Alexander Rich, Massachusetts Institute of Technology); collagen-gelatin transition (Peter H. Von Hippel, Dartmouth College); unusual linkages in collagen (Paul M. Gallop, Albert Einstein College of Medicine); biosynthesis of collagen (David S. Jackson, University of Oregon Medical School); the collagen defect in vitamin C deficiency (William B. Van Robertson, University of Vermont); the collagen defect in lathyrism (Jerome Gross); immune reactions of collagen (Sidney Rothbard, Cornell University Medical College).

Organic Chemistry Symposium: "Some Recent Developments in Organic Chemistry"; 28 Dec.; S. Archer, Sterling-Winthrop Research Institute, presiding. Papers will be presented on organic chemical models of enzymatic hydrolysis (Myron L. Bender, Illinois Institute of Technology); practical procedures for the sodium-ammonia-alcohol reduction of aromatic compounds (Hugh L. Dryden, Jr., Gayle M. Webber, Robert R. Burtner, John A. Cella, of G. D. Searle and Company); mechanisms of proton transfer processes (Howard E. Zimmerman, Northwestern University); specific solvent effects in the alkylation of enolate anions (Harold E. Zaugg, Abbott Laboratories).

Inorganic and Nuclear Chemistry Symposium: "Some Recent Advances in Inorganic and Nuclear Chemistry"; 29 Dec.; J. J. Katz, Argonne National Laboratory, presiding. Papers will be presented on recent experimental studies of nuclear fission (John R. Hui-zenga, Argonne National Laboratory); current problems in mechanisms of complex reactions (Henry Taube, University of Chicago); rates and mechanisms by magnetic resonance (S. I. Weissman, Washington University).

Radiation Chemistry Symposium: "High-Energy Radiation Chemistry of Proteins and Amino Acids"; 29 Dec.; W. D. Bellamy, General Electric Research Laboratory, presiding. Introductory remarks (W. D. Bellamy); papers on physicochemical changes in irradiated proteins (Virgil L. Koenig, Northwestern University); chemical changes in irradiated proteins (D. M. Doty, University of Chicago); analytical

methods used in the study of irradiated proteins (C. Merritt, Jr., Quartermaster Research and Engineering Command, U.S. Army); irradiated amino acids (Charles Maxwell, National Institutes of Health).

On 30 Dec. there will be two sessions of submitted papers cosponsored by the Chicago Section, American Chemical Society. Edmund Field, Standard Oil Company of Indiana, will preside.

Section C will hold a reception for the speakers and a dinner for symposia chairmen and guests on 29 Dec.

American Association of Clinical Chemists. Symposium: "Diet, Serum Lipids, Lipid Metabolism, and Atherosclerosis"; arranged by Alvin Dubin, Cook County Hospital, Chicago, with Jeremiah Stamler, Heart Disease Control Program and Northwestern University School of Medicine, moderating: 27 Dec. Introductory remarks (Jeremiah Stamler); papers on the role of diet (J. T. Miller, Abbott Laboratories); influence of meal frequency and meal size (Clarence Cohn, Michael Reese Medical Center); role of immunological mechanism and lipoprotein lipase (Saul T. Baker, Chicago Medical School and Cook County Graduate School of Medicine); intermediary metabolism of cholesterol (Ivan D. Frantz, Jr., University of Minnesota Medical School).

Contributed papers will be presented 26 Dec., Chiadao Chen, Northwestern University Medical School, moderating, and 27 Dec., Martin E. Hanke, University of Chicago Medical School, moderating.

Astronomy

Section D. Symposium on the Solar System cosponsored by the American Astronomical Society: 26 Dec.; arranged by Gerard P. Kuiper, Yerkes Observatory, who will preside. Papers will be presented on meteorites and asteroids (Edward Anders, Enrico Fermi Institute); heat maps of the moon (William H. Sinton, Lowell Observatory); lunar cartography (D. W. G. Arthur, Yerkes Observatory); development of the lunar surface (Gerard P. Kuiper); thermal and non-thermal emission of planets (Frank D. Drake, National Radio Astronomy Observatory).

Symposium cosponsored by the Astronomical League: "Astronomical Photoelectric Photometry"; 26 Dec.; arranged by Arthur Code, Washburn Observatory, University of Wisconsin, who will preside. Papers will be presented on history and development of photoelectric technique; studies of variable stars and galactic structure by photoelectric methods; photoelectric photometry and amateur astronomy; future advances in photoelectric technique.

Astronomical League. Symposium: "Photoelectric Photometry"; arranged by Edward A. Halbach, Milwaukee Astronomical Society Observatory; papers will be presented on designing a good photoelectric photometer to meet the amateur's budget (Walter L. Moore, University of Louisville); flare of AD Leonis observed by photoelectric photometer (Donald Engelkemeir, Hinsdale, Ill.); photoelectric program of the AAVSO (John J. Ruiz, Dannemora, N.Y.).

Geology and Geography

Section E. Three-session symposium cosponsored by the Geological Society of America: "Quantitative Terrain Studies." Part I; arranged by Arthur N. Strahler, Columbia University, Jack R. Van Lopik, Warren E. Grabau, and Charles R. Kolb, U.S. Army Engineers Waterways Experiment Station, with Charles R. Kolb presiding. Papers will be presented on prediction in terrain analysis (Walter F. Wood, U.S. Army Quartermaster Research and Engineering Command); determination of the spatial relationships of locally dominant topographic features (Will F. Thompson, U.S. Army Quartermaster Research and Engineering Command); area sampling for terrain analysis (Louis Peltier, Midwest Research Institute, Kansas City); the technique of morphological mapping (R. A. G. Savigear, University of Sheffield, United Kingdom); possible gaussian components of zig-zag curves (W. F. Tanner, Florida State University); influence of scale in geomorphic map analysis (Donald R. Coates, Harpur College); characteristic and limiting slope angles (Anthony Young, Zomba, Nyasaland).

Part II; arranged by Howard A. Meyerhoff, Scientific Manpower Commission, and Charles R. Kolb, Warren E. Grabau, and Jack R. Van Lopik, U.S. Army Engineer Waterways Experiment Station, with Jack R. Van Lopik presiding. Papers will be presented on preliminary investigations of a method to predict line-of-sight capabilities (Joan B. Snell, U.S. Army Quartermaster Research and Engineering Command); terrain mask angles (A. Stein, Cornell Aeronautical Laboratory); classification and quantitative description of large geographic areas to define army transport system requirements (Seymour J. Deitchman, Cornell Aeronautical Laboratory); spectral reflectance data and its applicability to terrain studies by aerial photography (S. E. Swornik, C. N. Johnson, U.S. Army Engineer Research and Development Laboratories, J. C. Little and J. E. Walker, Broadview Research Corporation); radar as a terrain analyzing device (Allen M. Feder, Cornell Aero-

nautical Laboratory); objective field sampling of terrain properties (Arthur N. Strahler, Columbia University, and Donaldson Koons, Colby College); an instrumentation system for the measurement of stress-strain relationships of soil (I. J. Sattinger, University of Michigan).

Part III; arranged by Charles R. Kolb, Jack R. Van Lopik, and Warren E. Grabau, U.S. Army Engineer Waterways Experiment Station. Warren E. Grabau and Louis C. Peltier, Midwest Research Institute, Kansas City, presiding. Papers will be presented on weathering and geomorphic development (B. N. Rolfe, Sinclair Research Laboratories, Inc.); chemical degradation on opposite flanks of the Wind River Range, Wyoming (Charles H. Hembree and Frank H. Rainwater, U.S. Geological Survey); the value of landform analysis in studies of semiarid erosion (Stanley A. Schumm and R. F. Hadley, U.S. Geological Survey); use of recharge characteristics for quantitative analysis in geomorphology (Ward S. Motts, Roswell, N.M.); micro-relief-physiography-land use relationships (Stephen E. Dwornik, Philip K. Webb and Jack R. MacCormac, U.S. Army Engineer Research and Development Laboratories); average slope and agricultural productivity in Ohio (Woodford M. Garrigus, East Carolina College).

Three-session symposium, cosponsored by Section M-Engineering, the Geological Society of America, The American Geophysical Union, and The Association of American Geographers: "Great Lakes Basin"; arranged by George B. Maxey, Illinois State Geological Survey, and Jack L. Hough, University of Illinois; 29 and 30 Dec. Part I, George B. Maxey and Jack L. Hough, presiding. Introduction (George B. Maxey); Papers on geologic framework of the Great Lakes Basin (Jack L. Hough); physiography, topography, and watershed characteristics of the Great Lakes Basin (William Powers, Northwestern University); the water balance of the Great Lakes system (G. K. Rodgers, Ontario Department of Lands and Forests, and J. P. Bruce, Canada Department of Transport); lake waters—circulation and physical and chemical characteristics (John C. Ayers, Great Lakes Research Institute, University of Michigan); regimen of the Great Lakes and fluctuations of lake level (William T. Laidly, U.S. Lake Survey, Corps of Engineers); recession of Great Lakes shorelines (Howard J. Pincus, Ohio State University). Open discussion by members of the panel.

Part II, Albert G. Ballert, Great Lakes Commission, and John C. Ayers, University of Michigan, presiding. Pa-

pers will be presented on economic geography: mineral, agricultural, and industrial resources development (Albert G. Ballert); the land use pattern (Andrew H. Clark, University of Wisconsin); development of the transportation network (Carl W. Muhlenbruch and Robert C. Stuart, Educational and Technical Consultants, Inc.); navigation on the Great Lakes (Edwin W. Nelson, U.S. Corps of Engineers); hydroelectric power in the Great Lakes-St. Lawrence Basin (Kenneth G. Tower, Federal Power Commission); utilization of water in the Great Lakes Basin: recreation (Stanley A. Cain, University of Michigan); the nature of use and consumption of Great Lakes water for domestic and industrial purposes (Merril B. Gamet, Northwestern Technological Institute).

Part III, Howard J. Pincus, Ohio State University, and M. B. Gamet, Northwestern Technological Institute, presiding. Papers will be presented on ground-water supplies in Wisconsin and Illinois adjacent to Lake Michigan (Robert E. Bergstrom, Illinois State Geological Survey, and George F. Hanson, Wisconsin Geological and Natural History Survey); surface and ground-water supplies in Ontario (A.K. Watt, Ontario Water Resources Commission); surface and ground-water supplies in Lake Michigan Drainage Basin in Indiana (Claude Roberts, U.S. Geological Survey); water pollution in the Great Lakes (Arve Dahl, U.S. Public Health Service); beach engineering and harbor protection (R. O. Eaton, Beach Erosion Board); more fruitful use of Great Lakes water through legislation, investigation, and cooperation (H. W. Poston, U.S. Public Health Service). Open discussion by members of the panel. Summary (George B. Maxey).

Section E smoker and vice presidential address, cosponsored by the Geological Society of America and the Association of American Geographers: "Role of Subsidence in the Origin and Evolution of the Appalachian Mountains," by Byron N. Cooper, Virginia Polytechnic Institute; 29 Dec.; Howard A. Meyerhoff, presiding.

Association of American Geographers. Symposium: "The Geographer's Role in Transportation Studies"; 29 Dec.; arranged by Alden Cutshall, University of Illinois; Edward Taaffe, Northwestern University, presiding. Papers will be presented on the history, purpose, and scope of a transportation study (E. Wilson Campbell, Chicago Area Transportation Study); land use and floor inventory (Robert Sharkey, Chicago Area Transportation Study); land use and travel forecast (John R. Hamburg, Chicago Area Transporta-

tion Study); maps and graphics as a mode of analysis for planning (Garred Jones, Chicago Area Transportation Study); summary comments (Edward Taaffe).

Symposium: "Southwest Asia and North Africa"; 29 Dec.; Alden Cutshall, chairman. Papers will be presented on animal life and continuity of environment in the late Quaternary in northern Iraq (Charles Reed, University of Illinois); late Pleistocene glaciation in Southwest Asia (Herbert E. Wright, Jr., University of Minnesota); man-made environmental changes in the historical period of North Africa (Marvin Mikesell, University of Chicago); chronology and implications of fossil soils in the terraces of the Nile Valley (Karl W. Butzer, University of Wisconsin).

Illinois Geographical Society. Symposium, cosponsored by the Association of American Geographers: "Economic Changes in Underdeveloped Areas"; arranged by Mary Grant, Morton Junior College; 28 Dec.; Dalias Price, Eastern Illinois University, presiding. Papers will be presented on some recent changes in the economy of Egypt, United Arab Republic (Floyd F. Cunningham, Southern Illinois University); post-war economic changes in Nigeria (Robert O. Johnsrud, Northwestern University); some new developments in Thailand's economy (Helen L. Smith, Wheaton College); patterns and progress in the Philippines (Alden D. Cutshall); economic changes in the region of Brazil's new capital (Robert L. Carmin, University of Illinois).

National Geographic Society. Lecture and color film, "Dzibilchaltun: Lost City of the Maya," by E. Wyllys Andrews, leader of the National Geographic Society-Tulane University Expedition; 30 Dec.

National Speleological Society. Two-session symposium cosponsored by the Society of Systematic Zoology: "Speciation and Racialization in Cavernicoles"; Thomas C. Barr, Jr., Tennessee Polytechnic Institute, chairman; 28 Dec. Part I. Papers on speciation in North American cave planarians (Libbie H. Hyman, American Museum of Natural History); the origins and affinities of the cave crayfishes of North America (Horton H. Hobbs, Jr., University of Virginia); speciation in cave opiliones (Clarence J. Goodnight, Purdue University); sequential development of cave adaptation in the Amblyopsidae (Thomas L. Poulson, University of Michigan).

Part II. Papers on evolution in cave entomobryinae (Kenneth Christiansen, Grinnell College); the manner and time of dispersal of cavernicolous beetles (Carl H. Krekeler, Valparaiso University); Texas cave beetles of the genus

Rhadine (Thomas C. Barr, Jr., Tennessee Polytechnic Institute); speciation in American cavernicolous pselaphid beetles (Orlando Park, Northwestern University).

Symposium, cosponsored by the Geological Society of America: "Origin and Development of Limestone Caverns"; 28 Dec.; George W. Moore, U.S. Geological Survey, presiding. Papers will be presented on origin of caves in folded limestone (William E. Davies, U.S. Geological Survey); origin of Bermuda caves (J Harlen Bretz, University of Chicago); changing concepts of speleogenesis (William R. Halliday, Western Speleological Survey); origin and geologic relations of Breathing Cave, Virginia (George H. Deike, III, University of Missouri); terminations of passages in Appalachian caves as evidence for a shallow-phreatic origin (William B. White, Pennsylvania State University); stochastic models of cavern development (Rane L. Curl, Shell Development Company); geometric basis for cave interpretation (Arthur L. Lange, Cave Research Associates).

Those in the physical sciences will be particularly interested in the AAAS General Symposium. One of the speakers on the evening of 26 Dec. will be William H. Pickering, Director, Jet Propulsion Laboratory, California Institute of Technology, who will speak on "How artificial satellites can help scientific research." Another speaker will be Robert E. Marshak, chairman of the Department of Physics and Astronomy, University of Rochester, who will speak on "Elementary particles of modern physics."

Forthcoming Events

November

27-17. Bahamas Medical Conf. Nassau. (B. L. Frank, Box 4037, Fort Lauderdale, Fla.)

29-30. American College of Chest Physicians, Dallas, Tex. (M. Kornfield, 112 E. Chestnut St., Chicago 11, Ill.)

29-4. American Soc. of Mechanical Engineers, annual, Atlantic City, N.J. (ASME, 29 W. 39 St., New York 18.)

30-2. American Acad. for Cerebral Palsy, 13th annual, Los Angeles, Calif. (G. L. Brooks, AACCP, Brown Univ., Providence 12, R.I.)

30-2. French-Speaking Neurosurgeons Society, annual, Paris, France. (M. David, 4, rue Galliera, Paris.)

30-3. Eastern Joint Computer Conf., Boston, Mass. (Miss M. Fox, EJCC, Box 4999, Washington 8.)

30-3. Entomological Soc. of America (joint with the societies of Canada and Ontario), annual, Detroit, Mich. (L. L. Reed, Entomological Soc. of Canada, Science Service Building, Ottawa, Canada.)

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30-16. Tropical Meteorology, symp., Nairobi, Kenya, East Africa. (Secretariat, World Meteorological Organization, Campagne Rigot, Avenue de la Paix, Geneva, Switzerland.)

30-17. Problems of Tropical Meteorology in Africa and the Neighboring Islands, symp., Nairobi, Kenya, Africa. (World Meteorological Organization, Campagne Rigot, 1, Avenue de la Paix, Geneva, Switzerland.)

December

1-3. Eastern Joint Computer Conf., Boston, Mass. (D. T. Ross, Dept. of Electrical Engineering, Massachusetts Inst. of Technology, Cambridge.)

1-4. American Medical Assoc. (clinical), Dallas, Tex. (R. M. McKeown, 510 Hall Bldg, Coos Bay, Oreg.)

2-4. Electrical Furnace Conf., Cleveland, Ohio. (E. O. Kirkendall, AIME, 29 W. 39 St., New York 18.)

3-4. Semiconductor Surfaces, 2nd conf., Silver Spring, Md. (R. F. Greene, U.S. Naval Ordnance Lab., White Oak, Silver Spring, Md.)

3-4. Vehicular Communications, St. Petersburg, Fla. (L. G. Cumming, IRE, 1 E. 79 St., New York 21.)

3-5. Corrosion, symp., Dresden, Germany. (Chemische Gesellschaft in der Deutschen Demokratischen Republik, Unter den Linden 68/70, Berlin W.8, Germany.)

3-5. Visual Communications, 3rd annual intern. conf., New York, N.Y. (E. Kaestner, Soc. of Reproductive Engineers, Bell Telephone Labs., New York, N.Y.)

3-11. Training and Education in Nutrition, European symp., Frankfurt am Main, Germany. (Food and Agricultural Organization of the United Nations, Viale delle Terme di Caracalla, Rome, Italy.)

3-12. International Confederation of Free Trade Unions, 7th world cong., Brussels, Belgium. (ICFTU, 24, rue du Lombard, Brussels.)

4-6. American Psychoanalytic Assoc., New York, N.Y. (D. Beres, 151 Central Park West, New York 23.)

5-10. American Acad. of Dermatology and Syphilology, Chicago, Ill. (R. R. Kierland, First National Bank Bldg., Rochester, Minn.)

6. American Acad. of Dental Medicine, mid-annual, New York, N.Y. (A. J. Canistraci, 2152 Muliner Ave., New York 62.)

6-10. American Inst. of Chemical Engineers, annual, San Francisco, Calif. (F. J. Van Antwerpen, AICE, 25 W. 45 St., New York 36.)

7-12. Algology, UNESCO symp., New Delhi, India. (J. P. Correa, South Asia Cooperation Office, 21, Curzon Rd., New Delhi, India.)

8-10. Application of Electrical Insulation, 2nd natl. conf., Washington, D.C. (N. S. Hibshman, AIEE, 33 W. 39 St., New York 18.)

9-15. American Acad. of Optometry, Chicago, Ill. (C. C. Koch, 1506-1508 Foshay Tower, Minneapolis 2, Minn.)

11-12. American Rheumatism Assoc., Detroit, Mich. (F. E. Demartini, Presbyterian Hospital, 622 W. 168 St., New York 32.)

11-12. Association for Research in

Nervous and Mental Disease, annual, New York, N.Y. (R. J. Masselink, 700 W. 168 St., New York 32.)

25-27. Indian Mathematical Soc., 25th conf., Allahabad, India. (B. N. Prasad, Allahabad Univ., Lakshmi Niwas, George Town, Allahabad 2.)

26-30. American Assoc. for the Advancement of Science, annual, Chicago, Ill. (R. L. Taylor, AAAS, 1515 Massachusetts Ave., N.W., Washington 5.)

The following 46 meetings are being held in conjunction with the AAAS annual meeting.

AAAS Committee on Science and the Promotion of Human Welfare (B. Commoner, School of Botany, Washington Univ., St. Louis 5, Mo.). 27 Dec.

AAAS Cooperative Committee on the Teaching of Science and Mathematics (Brother G. Nicholas, Dept. of Biology, Univ. of Notre Dame, Notre Dame, Ind.). 27 Dec.

Academy Conference (A. M. Winchester, Stetson Univ., De Land, Fla.). 27-28 Dec.

Alpha Epsilon Delta (M. L. Moore, 7 Brookside Circle, Bronxville, N.Y.). 29 Dec.

American Assoc. of Clinical Chemists (A. Dubin, Director of Biochemistry, Cook County Hospital, Chicago 12, Ill.). 26-27 Dec.

American Geophysical Union (W. C. Krumbein, Dept. of Geology, Northwestern Univ., Evanston, Ill.). 28 Dec.

American Meteorological Soc. (K. Spengler, 3 Joy St., Boston, Mass.).

American Nature Study Soc. (E. L. Will, State Univ. Teachers College, Oneonta, N.Y.). 26-30 Dec.

American Physiological Assoc. (F. A. Hitchcock, Ohio State Univ., Columbus). 28 Dec.

American Political Science Assoc. (J. Robinson, Dept. of Political Science, Northwestern Univ., Evanston, Ill.). 28 Dec.

American Psychiatric Assoc. (E. L. Bliss, General Hospital, Salt Lake City, Utah). 28-29 Dec.

American Soc. of Criminology (D. E. J. MacNamara, New York Inst. of Criminology, Inc., New York 36). 28-29 Dec.

American Soc. of Naturalists (A. D. Hasler, Dept. of Zoology, Univ. of Wisconsin, Madison). 27-28 Dec.

American Soc. of Plant Taxonomists (L. R. Heckard, Dept. of Botany, Univ. of Illinois, Urbana). 28-30 Dec.

American Sociological Soc. (J. S. Coleman, Dept. of Sociology, Univ. of Chicago, Chicago 37, Ill.). 28-29 Dec.

American Statistical Assoc. (R. F. Winch, Dept. of Sociology, Northwestern Univ., Evanston, Ill.). 29-30 Dec.

Association of American Geographers (A. Cutshall, Univ. of Illinois, Navy Pier, Chicago 11). 29 Dec.

Association for Computing Machinery (W. F. Cahill, Goddard Space Flight Center, Silver Spring, Md.). 29 Dec.

Astronomical League (E. Halbach, 2971 S. 52 St., Milwaukee 19, Wisc.). 26 Dec.

Beta Beta Beta (Mrs. F. G. Brooks, P.O. Box 515, Ansonia Station, New York 23). 27-28 Dec.

Chicago Acad. of Sciences (R. A. Edgren, Chicago Acad. of Sciences, 2001 N. Clark St., Chicago 14, Ill.). 29-30 Dec.

Conference on Scientific Communications (G. L. Seielstad, Applied Physics Lab., Johns Hopkins Univ., Silver Spring, Md.). 28-29 Dec.

Conference on Scientific Manpower (T. J. Mills, National Science Foundation, Washington 25). 28 Dec.

Ecological Soc. of America (W. C. Ashby, Dept. of Botany, Univ. of Chicago, Chicago 37, Ill.). 28-30 Dec.

Honor Soc. of Phi Kappa Phi (L. R. Guild, 634 S. Western Ave., Los Angeles 5, Calif.). 30-31 Dec.

Illinois Geographical Soc. (Miss M. Grant, Morton Junior College, Cicero, Ill.). 28 Dec.

Institute of Management Sciences (M. M. Flood, College of Engineering, Univ. of Michigan, Ann Arbor). 29 Dec.

Metric Assoc. (J. T. Johnson, Ravenswood YMCA, 1725 Wilson Ave., Chicago 40, Ill.).

Mycological Soc. of America (D. P. Rogers, Dept. of Botany, Univ. of Illinois, Urbana).

National Assoc. of Biology Teachers (H. E. Weaver, 202 Men's Old Gym, Univ. of Illinois, Urbana). 26-30 Dec.

National Acad. of Economics and Political Science (J. Rothrock, Pan American Union, Washington 6). 29 Dec.

National Assoc. for Research in Science Teaching (J. C. Mayfield, Univ. of Chicago, Chicago 37, Ill.). 26-30 Dec.

National Assoc. of Science Writers (P. Fraley, Evening Bulletin, Philadelphia, Pa.). 27 Dec.

National Geographic Soc. (W. R. Gray, NGS, 16 and M Sts., NW, Washington 6). 30 Dec.

National Science Teachers Assoc. (R. H. Carleton, NSTA, 1201 16 St., NW, Washington, D.C.). 26-30 Dec.

National Soc. for Medical Research (R. A. Rohweder, NSMR, 920 S. Michigan Blvd., Chicago 5, Ill.). 29 Dec.

National Speleological Soc. (T. C. Barr, Jr., Tennessee Polytechnic Inst., Cookeville, Tenn.). 28 Dec.

Philosophy of Science Assoc. (W. A. R. Ley, Roosevelt College, Chicago, Ill.). 28 Dec.

Scientific Research Soc. of America (D. B. Prentice, 56 Hillhouse Ave., New Haven 11, Conn.). 29 Dec.

Sigma Delta Epsilon (Miss E. S. Anderson, Stratford Hotel, 25 E St., NW, Washington, D.C.). 26-30 Dec.

Society for General Systems Research (R. L. Meier, Mental Health Research Institute, Univ. of Michigan, Ann Arbor).

Society for the History of Technology (M. Kronzberg, Dept. of History, Case Inst. of Technology, Cleveland, Ohio).

Society of the Sigma Xi (T. T. Holme, 56 Hillhouse Ave., New Haven 11, Conn.). 29 Dec.

Society of Systematic Zoology (R. E. Blackwelder, Southern Illinois Univ., Carbondale). 26-30 Dec.

Tau Beta Pi Assoc. (R. H. Nagel, Univ. of Tennessee, Knoxville). 27 Dec.

United Chapters of Phi Beta Kappa (C. Billman, 1811 Q St., NW, Washington, D.C.). 29 Dec.

(See issue of 16 October for comprehensive list)

GRASSLANDS

Editor: Howard B. Sprague 1959

6" x 9", 424 pp., 37 illus., index, cloth. Price \$9.00, AAAS members' cash orders \$8.00. AAAS Symposium Volume No. 53.

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