Association Affairs

Programs Planned for the AAAS Washington, D.C., Meeting

Section and society programs in geology and geography, the biological sciences, anthropology, and psychology, to be presented at the Washington meeting, are given here. Programs in mathematics, physics, chemistry, and astronomy have been previously announced.

Geology and Geography

Section E. Contributed papers, joint session with the Association of American Geographers (Middle Atlantic Division) and the Geological Society of America: "Geology and Geography"; 26 Dec.; Jackson E. Guernsey, Washington, D.C., presiding.

Three-session symposium, cosponsored by Section L and the Geological Society of America: "History of American Geology"; arranged by Edgar W. Owen, University of Texas; 27 and 28 Dec.

Part I, Edgar W. Owen, presiding. Papers on science in America before 1830 (Dirk J. Struik, Massachusetts Institute of Technology); the earliest geologic maps of the United States (John W. Wells, Cornell University); emergence of geology as a public function (William Back, U.S. Geological Survey); the role of the Smithsonian Institution in early American geology (Paul H. Oehser, Smithsonian Institution); the U.S. Geological Survey and the advancement of geology in the public service (Thomas B. Nolan, U.S. Geological Survey); geology, geologists, and the AAAS (Kirtley F. Mather, Harvard University); geology plus adventure, the story of the Hayden survey (J. V. Howell, Tulsa, Oklahoma).

Part II, Edgar W. Owen, presiding. Papers on the history of the popularization of geology in America (a bibliographical survey) (Mark W. Pangborn, Jr., U.S. Geological Survey) and on a university course in the history of geology for seniors and graduates (F. C. MacKnight, University of Pittsburgh). An informal discussion of the major factors and influences in the development of American geology (by all symposium participants).

Part III, William W. Rubey, U.S. Geological Survey, presiding. Papers on Asa Gray and American geology (A. 14 NOVEMBER 1958 Hunter Dupree, University of California); Darwinian natural selection and vertebrate paleontology (John A. Wilson, University of Texas); Dr. John Evans, U.S. geologist to the Oregon and Washington territories (Erwin F. Lange, Portland State College); highlights in the history of the development and use of topographic maps as a base for delineating geological information by agencies of the Federal Government, 1800-1879 (Herman R. Friis, National Archives); the impact of the development of photogrammetry on geology (David Landen, U.S. Geological Survey); development of geological thought concerning Ulster County, New York (Jules D. Friedman, U.S. Geological Survey); David Dale Owen, some aspects of his personal and professional life (Kenneth Dale Owen, Houston, Texas); the history of American petroleum geology (Edgar W. Owen, University of Texas).

Vice-presidential address, "Primary Structures in Sedimentary Deposits," by Robert R. Shrock, Massachusetts Institute of Technology; 27 Dec.; Byron N. Cooper, Virginia Polytechnic Institute, presiding.

Symposium, jointly with the Geological Society of America: "Experimental Geology"; arranged by David B. Stewart, U.S. Geological Survey; 29 Dec.; Edwin Roedder, U.S. Geological Survey, presiding.: Papers will be read on phase relations in the system silver-tellurium (Frank C. Kracek, U.S. Geological Survey, and Charles J. Ksanda, Los Gatos, California); preliminary report on the system $Ag_3SbS_3-Ag_3AsS_3$ (Priestley Toulmin, III, U.S. Geological Survey); solubility of silver sulfide in sodium polysulfide solutions (Paul L. Cloke, Harvard University); preliminary experiments on the distribution of selenium between coexisting sulfides (Philip M. Bethke, Paul B. Barton, Jr., and Norman J. Page, U.S. Geological Survey); recent work on sphalerite-its bearing on the sphalerite geothermometer (Brian J. Skinner and Paul B. Barton, Jr., U.S. Geological Survey); formation of pseudo-meanders in laboratory channels (M. G. Wolman and L. M. Brush, Jr., U.S. Geological Survey); the plane of albite composition to 1000°C and 26,000 bars (Francis Birch and Paul LeComte, Harvard University); preliminary studies of the formation of uranite under simulated Colorado Plateau conditions (A. M. Pommer, I. A. Breger, H. F. Philips, and J. C. Chandler, U.S. Geological Survey).

Symposium jointly with the Association of American Geographers (Middle Atlantic Division): "Geographic Research—Broadening Horizons"; arranged by Jackson E. Guernsey and G. Etzel Pearcy, U.S. Department of State; 29 Dec.; Burton Adkinson, National Science Foundation, presiding. Speakers will be Louis O. Quam, Office of Naval Research, and Norton S. Ginsburg, University of Chicago.

Symposium, jointly with the Association of American Geographers (Middle Atlantic Division): "The Saint Lawrence Seaway"; arranged by J. Warren Nystrom, U.S. Chamber of Commerce; 29 Dec.; George J. Haering, St. Lawrence Seaway Development Corporation, presiding. Speakers will be George J. Haering; Richard S. Thoman, Northwestern University; and N. R. Danielian, Great Lakes–St. Lawrence Association.

National Geographic Society. Lecture and color film, "Winter at the South Pole," by Paul A. Siple, Office of the Chief of Staff, U.S. Army; 30 Dec.

National Speleological Society. Contributed papers on a prospectus of the cave fauna of the Appalachians (Thomas C. Barr, Jr., Tennessee Polytechnic Institute) and on recent paleontological discoveries in caves in the eastern United States (G. Nicholas, La Salle College). An informal round table on sulfate mineralization in cavern fills, led by William E. Davies, U.S. Geological Survey.

Section E tours. The following tours of government laboratories have been arranged.

Monday, 29 Dec. (i) Afternoon. U.S. Geological Survey, Geophysics Branch, Acorn Bldg., Silver Spring, Md. Demonstration of equipment for measuring physical properties of rocks (magnetic properties, deformation of rocks, and thermodynamic properties) and of an airborne magnetometer. Bus leaves from Sheraton-Park Hotel. (ii) Afternoon. U.S. Geological Survey, Geochemistry and Petrology Branch, Naval Gun Factory. This branch makes chemical, spectrographic, mineralogical, crystallographic, and phase equilibrium studies. Bus leaves from Sheraton-Park Hotel.

Tuesday, 30 Dec. (i) Morning and afternoon. U.S. Geological Survey, Map Reproduction Plant. The Branch of Technical Illustrations converts authors' report illustrations and geologic maps into final form suitable for publication. The Branch of Map Reproduction assists in copy preparation and prints report illustrations and geologic and topographic maps. Tours start at Room 1224, General Services Administration Bldg.,

F St. between 18th and 19th Sts., N.W.; tour lasts 11/2 hours. (ii) Morning and afternoon. U.S. Geological Survey, Computation Branch. Demonstration of the use of the Datatron 205 electronic computer as applied to the fields of crystallography, geophysics, and water resources data reduction, and explanation of the Datatron computer system. Tours start at Room 1449, Interior Department Building, C St. between 18th and 19th Sts., N.W.; tour lasts 11/2 hours. (iii) Afternoon. U.S. Geological Survey, Topographic Division, Atlantic Area Headquarters, 1109 North Highland St., Arlington, Va. This division is a topographic mapping facility and research laboratory. There will be demonstrations of the operation of photogrammetric instruments and of cartographic and mapfinishing operations. Bus leaves from Sheraton-Park Hotel. (iv) Afternoon. U.S. Geological Survey, nuclear geology installation (located at the U.S. Bureau of Standards, Bldg. 14, 50 yards west of Connecticut Ave. on the first driveway north of Van Ness St.). This installation makes studies in nuclear geology and geochronology for which mass spectrometric, coding, and other physical measurements are employed.

In addition, visitors are welcome at



the laboratories of the Paleontology and Stratigraphy Branch, U.S. Geological Survey, located in the U.S. National Museum, Constitution Ave. at 10th St. N.W.

Zoological Sciences

Section F. Zoologists' dinner and vicepresidential address of Section F: "Biology and Politics: Some Thoughts After Visits to Universities in the U.S.S.R.," by Harold H. Plough, Amherst College; 29 Dec.; Karl M. Wilbur, Duke University, presiding.

American Society of Zoologists. Foursession symposium: "Vertebrate Zoology"; arranged by Alfred S. Romer, Harvard University; 27 and 28 Dec.

Part I, Alfred S. Romer, presiding. Papers by Robert H. Denison, Chicago Natural History Museum; Horace E. Wood, II, Newark College of Arts and Sciences; Harvey I. Fisher, Southern Illinois University; Perry W. Gilbert, Cornell University; Donald Baird, Princeton University; Tilly Edinger, Harvard University; Howard E. Evans, Cornell University; Richard J. Baldauf, Agricultural and Mechanical College of Texas; Everett C. Olson, University of Chicago; and Walter Auffenberg, University of Florida.

Part II, Bobb Schaeffer, American Museum of Natural History, presiding. Papers by George C. Christensen, Purdue University; H. Clark Dalton, New York University; Hans Elias, Chicago Medical School; David H. Dunkle, U.S. National Museum; Theodore H. Eaton, Jr., Kansas University; Malcolm Jollie, University of Pittsburgh; Edward M. Nelson, Loyola University, Chicago; A. Gordon Edmund, Royal Ontario Museum; and Karl F. Koopman, Academy of Natural Sciences of Philadelphia.

Part III, Perry W. Gilbert, Cornell University, presiding. Papers by Uno Holmgren, Harvard University; Nicholas Hotton, III, University of Kansas; F. Gaynor Evans, Wayne State University; Donn Eric Rosen, New York Zoological Society; Carl Gans, University of Buffalo; Stuart O. Landry, University of Buffalo; Stuart O. Landry, University of Missouri; Bobb Schaeffer; Alfred S. Romer; E. Lloyd DuBrul, University of Illinois; and D. Dwight Davis, Chicago Natural History Museum.

Part IV, Alfred S. Romer, presiding. Papers by Thomas S. Parsons, Harvard University; Charles A. Reed, University of Illinois; Richard Ritland, College of Medical Evangelists; William L. Straus, Jr., Johns Hopkins University; Samuel Booker McDowell, Jr., Newark College of Arts and Sciences; Ernest E. Williams, Harvard University; Albert E. Wood, Amherst College; and Rainer Zongerl, Chicago Natural History Museum.

Five-session symposium: "Arthropod Physiology"; arranged by John B. Buck, National Institutes of Health; 27–29 Dec. Part I, V. G. Dethier, University of Pennsylvania, presiding. Papers by Jack Colvard Jones, University of Maryland; Timothy H. Goldsmith, Harvard University; Daniel S. Grosch, North Carolina State College; Calvin A. Lang, Johns Hopkins University; Donald M. Maynard, University of Michigan; James M. Moulton, Bowdoin College; Michael Menaker, Princeton University; Shepherd K. deF. Roberts, Princeton University; and J. W. Green, M. Harsch, and L. Barr, of Rutgers University, with C. L. Prosser, University of Illinois.

Part II, C. A. G. Wiersma, California Institute of Technology, presiding. Papers by Edward R. Baylor, Woods Hole Oceanographic Institution, and Donald Kennedy, Syracuse University; Frederick E. Smith, University of Michigan; Talbot H. Waterman, Yale University; Saul B. Barber, Lehigh University; Melvin J. Cohen, University of Oregon; David R. Evans, Johns Hopkins University; Miriam Salpeter and Charles Walcott, Cornell University; W. G. Van der Kloot, New York University; and C. A. G. Wiersma.

Part III, K. D. Roeder, Tufts University, presiding. Papers by R. L. Beard, Connecticut Agricultural Experiment Station; Edward G. Boettiger, University of Connecticut; James Case, University of Iowa; John B. Buck, National Institutes of Health; Ernst Florey, University of Washington; Donald Kennedy; James B. Preston, Syracuse University; Jay Robbins, Columbia University; Philip Ruck, Tufts University; and Myron L. Wolbarsht, Naval Medical Research Institute.

Part IV, Alexander Wolsky, Fordham University, presiding. Papers by Arnold M. Clark, University of Delaware; John D. Costlow, Jr., Duke University; David Hanlon, University of New Hampshire; Robert I. Levy and Howard A. Schneiderman, Cornell University; Helen Park and John Buck, National Institutes of Health; David Shappirio, University of Michigan; A. N. Siakatos, Cornell University; William H. Telfer and William E. Koch, University of Pennsylvania; Alexander Wolsky; and Henrietta G. Kalicki, Manhattanville College.

Part V, Howard A. Schneiderman. Cornell University, presiding. Papers by Dorothy M. Skinner, Harvard University; Dorothy E. Bliss, American Museum of Natural History; Patricia Cannon Sprague, Albert Einstein College of Medicine; James B. Durand, Rutgers University; F. Engelmann, Albert Einstein College of Medicine; Judith Haskell and Richard C. Sanborn, Purdue University; E. S. Hodgson, Columbia University; S. Ozbas, University of Ankara; Kenneth D. Roeder, Tufts University; and Donald H. Bucklin, Betty F. Berrend, Betty J. Montag, and Nancy A. Schneider, University of Wisconsin.

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Eight sessions of contributed papers: "Physiology," "Protozoology and Cytology," "Cellular Biochemistry," "Histology," "Endocrinology," "Developmental Biology," "Developmental Biology (Chemical)," and "General Zoology and Evolution"; 27–29 Dec.; 78 papers to be read, 55 additional papers to be read by title only.

Society of Systematic Zoology.

Session for contributed papers; 28 Dec.; ten papers to be read.

Linnaean Bicentennial Celebration, five sessions, cosponsored by AAAS Section G (Botanical Sciences, American Microscopical Society, American Society of Plant Taxonomists, Association of Southeastern Biologists, Section A of the Entomological Society of America, and the Society for the Study of Evolution.

Symposium: "Linnaeus and Nomenclatorial Codes"; 28 Dec.; Reed. C. Rollins, Harvard University, presiding. Papers by W. T. Stearn, British Museum of Natural History; H. W. Rickett, New York Botanical Garden; R. E. Buchanan, Iowa State College; and E. G. Linsley and R. L. Usinger, University of California, Berkeley.

Symposium, cosponsored in addition by the American Society of Zoologists and AAAS Section F (Zoological Sciences): "Basic Concepts of Systematic Order"; 29 Dec.; Alfred E. Emerson, University of Chicago, presiding. Papers by M. R. Irwin, University of Wisconsin; H. H. Ross, Illinois Natural History Survey; and C. H. Seevers, Roosevelt University.

Symposium, cosponsored in addition by the American Society of Zoologists and AAAS Section F (Zoological Sciences): "Systematics, Present and Future"; 29 Dec.; A. Remington Kellogg, Smithsonian Institution, presiding. Papers by F. A. Stafleu, International Association for Plant Taxonomy; R. E. Blackwelder, Southern Illinois University; David D. Keck, New York Botanical Garden; and G. W. Wharton, University of Maryland.

Panel discussion: "London Meeting on Nomenclature"; 30 Dec.; Curtis W. Sabrosky, U.S. National Museum, presiding. Panel members include Philip Hershkovitz, Chicago Natural History Museum; Ernst Mayr, Museum of Comparative Zoology; G. Winston Sinclair, Geological Survey of Canada; and R. L. Usinger.

Panel discussion: "Problems in Systematics"; 30 Dec.; panel is composed of members of previous symposia.

Biological Sciences

Symposium, joint program of Sections F (Zoological Sciences) and G (Botanical Sciences), cosponsored by the American Society of Zoologists, Botanical Society of America, Society of Systematic Zoology, American Society of Naturalists, and Society of General Physiologists: "Some Unsolved Problems in Biology, 1958"; 30 Dec.

Part I: "Problems in Plant and Animal Behavior"; arranged by Karl M. Wilbur, Duke University; Harold H. Plough, Amherst College, presiding. Papers by Marion W. Parker, Agricultural Research Service, U.S. Department of Agriculture; V. G. Dethier, University of Pennsylvania; and Donald R. Griffin, Harvard University.

Part II: "Problems in Differentiation"; arranged by Barry Commoner, Washington University; Kenneth V. Thimann, Harvard University, presiding. Papers by Frederick C. Steward, Cornell University; John T. Bonner, Princeton University; and James D. Ebert, Johns Hopkins University.

American Society of Naturalists. Symposium: "Integrative Mechanisms in Biology"; 28 Dec.; arranged by Jack Schultz (Institute for Cancer Research, Philadelphia), who will preside. Papers by M. G. F. Fuortes, Institute of Neurological Diseases and Blindness, Bethesda, Md.; Ralph O. Erickson, University of Pennsylvania; Efraim Racker, Public Health Research Institute, New York; and Henry Quastler, Brookhaven National Laboratory.

Special closed-circuit color television program, part II, jointly sponsored by Sections F (Zoological Sciences) and G (Botanical Sciences); arranged by a subcommittee of the American Institute of Biological Sciences Committee on Education and Professional Recruitment, H. Burr Roney, University of Houston, chairman; 28 Dec.

Presidential address, "Homage to Santa Rosalia, or Why There Are so Many Different Kinds of Animals," by G. Evelyn Hutchinson, Yale University; 30 Dec.; Bruce Wallace, Cornell University, presiding.

Biometric Society, Eastern North American Region. Invited papers, jointly with the American Statistical Association: "Mathematical Models in Biology"; 31 Dec.; arranged by Jerome Cornfield, Johns Hopkins University, who will preside.

Ecological Society of America. Contributed papers: "Plant and General Ecology"; 28 Dec.; Herbert C. Hanson, Catholic University of America, presiding.

Contributed papers, jointly with the American Society of Zoologists: "Animal Ecology"; 28 Dec.; David E. Davis, Johns Hopkins University, presiding.

Contributed papers, jointly with the American Society of Zoologists and the Section on Animal Behavior and Sociobiology of both societies: "Animal Behavior and Sociobiology"; 29 Dec.; John T. Emlen, University of Wisconsin, presiding.

Symposium, jointly with Section I

(Psychology), cosponsored by the American Society of Zoologists: "Early Expeperience and Imprinting"; arranged by A. M. Guhl, Kansas State College, and Eckhard H. Hess, University of Chicago; 29 Dec.; A. M. Guhl, presiding. Papers by William S. Verplanck, Hunter College; Eckhard H. Hess; N. E. Collias, University of California; and Paul J. Scott, Roscoe B. Jackson Memorial Laboratory, Bar Harbor.

Botanical Sciences

Section G. Contributed papers; 28 Dec.; Oswald Tippo, Yale University, presiding.

Symposium, cosponsored by the American Society of Plant Physiologists: "The Physiology of Algae"; 29 Dec.; arranged by Robert W. Krauss, University of Maryland, who will preside. Papers by John H. Ryther, Woods Hole Oceanographic Institution; Osmund Holm-Hansen, University of Wisconsin; Theodore R. Rice, Fish and Wildlife Service, Radiobiological Laboratory; and Constantine Sorokin, University of Maryland.

Botanists' dinner and vice-presidential address of Section G, jointly with the botanical societies: "Botany and the Ed-ucational Ferment," by Oswald Tippo; 29 Dec.; Barry Commoner, Washington University, presiding.

Anthropology

Section H. Vice-presidential address by Leslie A. White, University of Michigan; 27 Dec.; A. Irving Hallowell, University of Pennsylvania, presiding.

Symposium: "Anthropological Research in Government"; arranged by John M. Corbett, National Park Service; 27 Dec.; Ronald F. Lee, National Park Service, presiding. Papers by Howard Cline, Library of Congress; Frank H. H. Roberts, Jr., Smithsonian Institution; and John M. Corbett.

Psychology

Symposium: "Psychopharmacology: Behavior Profiles and Drug Action"; 28 Dec.; arranged by Joseph V. Brady, Walter Reed Army Medical Center, who will preside. Papers by John J. Boren, Merck Institute of Therapeutic Research, West Point, Pa.; William Morse, Harvard University; and Donald Bullock, Institute of the Pennsylvania Hospital, Wyncote. Discussants: B. F. Skinner, Har-University; Murray Sidman, vard Walter Reed Army Medical Center; and Louis Lasanga, Johns Hopkins School of Medicine.

Invited paper on the identification, development, and utilization of human talents (John T. Dailey, American Institute of Research, Washington, D.C.); 28 Dec.

Symposium: "The Human as a Meas-

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uring Instrument"; 28 Dec.; arranged by Frank A. Geldard, University of Virginia, who will preside. Papers by Clarence H. Graham, Columbia University; Wendell R. Garner, Johns Hopkins University; and S. Smith Stevens, Harvard University.

Vice-presidential address: "The Effects of Drugs on Behavior," by B. F. Skinner. Harvard University; 28 Dec.; Clifford T. Morgan, Johns Hopkins University, presiding.

Symposium: "How Phylogenetically Older Parts of the Brain Relate to Behavior"; 29 Dec.; arranged by Robert B. Livingston, National Institutes of Health, who will preside. Papers by H. W. Magoun, University of California School of Medicine; Paul D. MacLean, National Institute of Mental Health; W. J. H. Nauta, Walter Reed Army Medical Center; Robert Galambos, Walter Reed Army Medical Center; and David Shakow, National Institute of Mental Health.

Symposium: "The Future of Contemporary Learning Theories"; 29 Dec.; arranged by H. H. Kendler, New York University, who will preside. Papers by Abram Amsel, Tulane University; R. J. Herrnstein, Walter Reed Army Medical Center; Frank Restle, Michigan State University; and Donald A. Riley, University of California.

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