

Association Affairs

Symposia at the Philadelphia Meeting

AMONG the sessions which will cross interdisciplinary boundaries, and which are likely to be of especial interest to many who plan to attend the AAAS Meeting at Philadelphia Dec. 26-31, the following merit listing at this early date, as the entire program acquires form and substance:

GENERAL SYMPOSIA

1. **Soviet Science.** Arranged by Conway Zirkle, University of Pennsylvania, and Howard A. Meyerhoff, Administrative Secretary, AAAS.

Session 1. Thursday morning, Dec. 27, Conway Zirkle presiding.

1. Russian Genetics. Th. Dobzhansky, Columbia University.

2. Russian Physiology and Pathology. W. Horsley Gantt, The Johns Hopkins University.

3. Russian Psychology and Psychiatry. Ivan D. London, Russian Research Center, Harvard University.

4. Scientific Methods, East and West. Russ Ackoff, Case Institute of Technology.

Session 2. Thursday afternoon, Dec. 27, Clyde Kluckhohn, Russian Research Center, Harvard University, presiding.

1. Russian Contributions to Soil Science. Jacob S. Joffe, New Jersey Agricultural Experiment Station.

2. Russian Physics and Chemistry. John Turkevich, Princeton University.

3. Russian Mathematics. John R. Kline, University of Pennsylvania.

4. Scientific Inquiry and Intellectual Freedom in Russia (1850-1950). Lazar Volin, Office of Foreign Agricultural Relations, Department of Agriculture.

5. An Appraisal of Science in the USSR. Conway Zirkle.

2. **Operation Knowledge.** Arranged by William F. Hewitt, Jr., Howard University School of Medicine, Washington, D. C.; cosponsored by AAAS Sections A, C, D, F, I, N, and Q and by the American Library Association, the Chemical Literature Division of the American Chemical Society, and the Special Libraries Association.

Session 1. Sunday morning, Dec. 30, Samuel R. Powers, Teachers College, Columbia University, presiding.

1. Problems of Primary Publication. Milton O. Lee, Federation of American Societies for Experimental Biology.

2. Some Science Literature Problems and Parameters. Harold Oatfield, Chas. Pfizer & Co., Inc., Brooklyn, N. Y.

3. Communications Problems Especially Affecting Academic Scientists. William F. Hewitt, Jr.

4. Difficulties Experienced by Scientists in Obtaining Passports and Visas from the U. S. Department of State. William H. Pearlman, Jefferson Medical College, Philadelphia.

5. A Proposed Organization of Communications Scientists. Samuel A. Miles, Hagstrom Company, Inc., New York.

Session 2. Sunday afternoon, Dec. 30, Detlev W. Bronk presiding.

6. The Interpretation of Science through Press,

Schools, and Radio. Watson Davis, Science Service, Washington, D. C.

7. Public Relations with Science. Ivor Griffith, Philadelphia College of Pharmacy and Science.

8. The Function of the Press in the Scientific Education of Adult Readers. Waldemar Kaempffert, the *New York Times*.

9. The Documentation of Technical Literature. Julian F. Smith, Office of Naval Research, Washington, D. C.

10. Unified Symbolism for World Understanding in Science. Oliver L. Reiser, University of Pittsburgh.

Session 3. Sunday evening, Dec. 30, Kirtley F. Mather presiding.

11. The International Physics Abstracting Service. Elmer Hutchisson, Case Institute of Technology, Cleveland.

12. The Story of the Division of Chemical Literature of the American Chemical Society. James W. Perry, Bjorksten Research Laboratory, Madison, Wis.

13. The Library of Congress and International Scientific Communications. Luther H. Evans, Library of Congress.

14. Libraries—Communications Centers or Stockpiles? M. J. Voigt, Carnegie Institute of Technology, Pittsburgh.

Special attention is called to the three sessions of the **Conference on Scientific Manpower** on the mornings of Friday, Saturday, and Sunday, Dec. 28, 29, 30. The conference, cosponsored by the AAAS Cooperative Committee on the Teaching of Science and Mathematics, AAAS Sections I, K, and M, the Engineers' Club of Philadelphia, and the Engineers' Council for Professional Development, was arranged by a committee of which Ralph M. Hogan, Human Resources Division, Office of Naval Research, is chairman. Presiding officers are M. H. Trytten, Office of Scientific Personnel, National Research Council; George B. Thom, Newark College of Engineering; and Dael Wolfe, Commission on Human Resources and Advanced Training, National Research Council. Speakers include Ralph M. Hogan; David Rodnick, Economic Cooperation Administration; Harry C. Kelly, National Science Foundation; John F. Hiliard, Defense Manpower Administration, Department of Labor; Elbridge Sibley, Social Science Research Council; Guy Kleis, Westinghouse Electric Corporation; William G. Torpey, Naval Research Laboratory; Herbert E. Longenecker, University of Pittsburgh; Henry Chauncey, Educational Testing Service; Claude J. Lapp, Office of Scientific Personnel, National Research Council; John C. Flanagan, American Institute for Research, University of Pittsburgh.

SECTIONAL SYMPOSIA

SECTION B. 1. Semiconductors. Arranged by P. H. Miller, Jr., University of Pennsylvania.

Part I. Friday morning, Dec. 28. Frederick Seitz, University of Illinois, presiding. Speakers: Malcolm Hebb, General Electric Research Laboratory; Albert Rose, RCA

Research Laboratory; Karl Lark-Horovitz, Purdue University.

Part II. Friday afternoon, Dec. 28. Robert Mauer, University of Illinois, presiding. Speakers: William Shockley, Bell Telephone Laboratories; John Morton, Bell Telephone Laboratories; Humboldt Leverenz, RCA Research Laboratory.

Attention also is called to a **Conference on Applied Physics**, Thursday afternoon, Dec. 27, Lyman J. Briggs, emeritus director, National Bureau of Standards, presiding. Speakers: Hugh L. Dryden, National Advisory Committee for Aeronautics; Philip M. Morse, Massachusetts Institute of Technology; Thomas H. Johnson, U. S. Atomic Energy Commission.

SECTION C. 2. Monomolecular Layers. Arranged by Harry H. Sobotka, Mount Sinai Hospital, New York.

Wednesday afternoon, Dec. 26, Harry H. Sobotka presiding. Speakers: Harry H. Sobotka; H. J. Trurnit, Army Chemical Center; F. R. Eirich, Polytechnic Institute of Brooklyn; W. A. Zisman and E. G. Shafrin, Naval Research Laboratory, Washington, D. C.; Harry H. Sobotka and Solomon Rosenberg, Mount Sinai Hospital; D. E. Beischer, Naval School of Aviation Medicine, Pensacola.

3. Stream Pollution and Industrial Wastes. Arranged by George D. Beal, Mellon Institute of Industrial Research.

Part I. Thursday morning, Dec. 27, George D. Beal presiding. Speakers: George D. Beal; W. B. Hart, Atlantic Refining Company; J. B. Graham, U. S. Geological Survey; R. E. Teague, Sanitary Water Board, Commonwealth of Pennsylvania; Ruth Patriek, Academy of Natural Sciences of Philadelphia.

Part II. Thursday afternoon, Dec. 27, George D. Beal presiding. Speakers: R. F. Weston, Atlantic Refining Company; S. A. Braley, Mellon Institute of Industrial Research; S. R. Hoover, Northeast Regional Laboratory, Philadelphia; C. E. Renn, The Johns Hopkins University; L. D. Betz, consulting chemist, Philadelphia; George D. Beal.

4. Recent Advances in Catalysis. Arranged by E. H. Riddle, Rohm & Haas Company, Philadelphia.

Friday morning, Dec. 28, E. H. Riddle presiding. Speakers: E. H. Riddle; M. T. O'Shaughnessy, Polytechnic Institute of Brooklyn; L. P. Hammett, Columbia University; Heinz Heinemann, G. A. Mills, and A. G. Oblad, Houdry Process Corporation.

5. The Chemistry of Colchicine and Related 7-membered Carbocyclic Compounds. Arranged by Glenn E. Ulliot, Smith, Kline & French Laboratories.

Friday afternoon, Dec. 28, Glenn E. Ulliot presiding. Speakers: Glenn E. Ulliot; Henry Rapoport, University of California, Berkeley; Evan Horning, National Heart Institute; William E. Doering, Columbia University.

6. Scientific Evidence Pertaining to the Time of Death. Joint program of AAAS Section C and the American Academy of Forensic Sciences. Arranged by Ralph F. Turner, Michigan State College.

Part I. Saturday morning, Dec. 29, Samuel A. Levinson, University of Illinois College of Medicine, presiding. Speakers: S. A. Levinson; Samuel Gerber, Coroner, Cuyahoga County, Ohio; S. H. Durlacher, Medical Ex-

aminer's Office, Baltimore; W. W. Jetter, Boston University School of Medicine; Milton Helpert, Office of the Chief Medical Examiner, New York.

Part II. Saturday afternoon, Dec. 29, Samuel A. Levinson presiding.

7. Recent Advances in Petroleum and Petroleum Technology. Arranged by A. G. Oblad and Heinz Heinemann, Houdry Process Corporation.

Part I. Sunday morning, Dec. 30, A. G. Oblad presiding. Speakers: A. G. Oblad; Thomas S. Oakwood, Pennsylvania State College; L. P. Whorton and Lyeurgus Laskaris, The Atlantic Refining Company; T. A. Burtis, J. C. Dart, and J. W. Schall, Houdry Process Corporation; M. A. Elliott, Bureau of Mines, Pittsburgh.

Part II. Sunday afternoon, Dec. 30, Heinz Heinemann presiding. Speakers: Eugene Ayres, Gulf Oil Corporation; Max Neuhaus and N. B. Sommer, Jefferson Chemical Company; J. B. Hill, Sun Oil Company.

SECTION D. 8. Astronomical Photoelectric Photometry: Recent Developments in Techniques and Instrumentation. Joint program of AAAS Section D, the Amateur Astronomers of the Franklin Institute, and the Rittenhouse Astronomical Society. Arranged by Frank K. Edmondson, Indiana University.

Monday morning, Dec. 31, Harold L. Alden, University of Virginia, and Frank Bradshaw Wood, University of Pennsylvania, presiding. Speakers: Albert P. Linnell, Amherst College Observatory; John S. Hall, U. S. Naval Observatory; William Blitzstein, Flower Observatory, University of Pennsylvania, and Cook Observatory, Franklin Institute; Bengt Strömberg, Yerkes Observatory, University of Chicago; Albert E. Whitford, Washburn Observatory, University of Wisconsin.

SECTION E. 9. The Nation's Water: Want, Waste, and Why? Program of AAAS Section E, cosponsored by the Geological Society of America. Arranged by Jack B. Graham, U. S. Geological Survey.

Thursday afternoon, Dec. 27, A. N. Sayre, U. S. Geological Survey, presiding. Speakers: J. R. Mahoney, Library of Congress; Harry E. Jordan, American Water Works Association; Gilbert F. White, Haverford College; Morris L. Cooke, consulting engineer in management, Philadelphia; Frances A. Pitkin, Pennsylvania State Planning Board and Interstate Commission on the Delaware River Basin; Harold E. Thomas, U. S. Geological Survey, Salt Lake City; Abel Wolman, The Johns Hopkins University; Milo F. Draemel, Department of Forests and Waters, Commonwealth of Pennsylvania; C. V. Youngquist, Ohio State Department of Natural Resources.

10. Crystalline Rocks of the Appalachians. Program of AAAS Section E, cosponsored by the Geological Society of America. Arranged by Leland Horberg, University of Chicago.

Part I. Friday morning, Dec. 28, Kenneth K. Landes, University of Michigan, presiding. Speakers: A. S. Fureon, State of Georgia Department of Mines; William R. Brown, University of Kentucky; Philip B. King, U. S. Geological Survey, Gatlinburg, Tenn.; Judith W. Frondell, Belmont, Mass.; Ernst Cloos, The Johns Hopkins University; Edward H. Watson, Bryn Mawr College.

Part II. Friday afternoon, Dec. 28, Ernst Cloos presiding. Speakers: Walter H. Bucher, Columbia University; Jarvis B. Hadley, U. S. Geological Survey, Gatlinburg, Tenn.;

Janet M. Aitken, University of Connecticut; Marshall Kay, Columbia University; John Rogers, Yale University.

11. Foreign Petroleum Geology and Carbon 14. Program of AAAS Section E, cosponsored by the Geological Society of America. Arranged by Leland Horberg, University of Chicago.

Friday morning, Dec. 28, Hollis Hedberg, Gulf Oil Corporation, and A. W. Weeks, Sun Oil Company, presiding. Speakers: George Gyre and Thomas G. Payne, U. S. Geological Survey; C. M. Pollock, Surbiton, Surrey, Eng.; Frank Reeves, U. S. Department of the Interior; C. W. Flagler, Gulf Oil Corporation; Vittorio Fois, Azienda Generale, Milan, Italy; J. Dupouy-Camet, Compagnie Française des Pétroles, Paris; J. Lawrence Kulp, Lamont Geological Observatory, Palisades, N. Y.

12. Foreign Petroleum Geology and Petroleum Economics. Program of AAAS Section E, cosponsored by the Geological Society of America. Arranged by Leland Horberg, University of Chicago.

Friday afternoon, Dec. 28, G. Moses Knebel, Standard Oil Company, and John F. Mason, Atlantic Refining Company, presiding. Speakers: Sherman Abrahamson, Bureau of Mines; N. E. Baker and F. R. S. Henson, Iraq Petroleum Co., Ltd., New York and London; Earle F. Taylor, DeGolyer & MacNaughton, Dallas; Cecil Hagen, Gulf Building, Houston; Manuel Alvarez, Jr., Petróleos Mexicanos, Mexico, D. F.

SECTION F. 13. Hormones in Invertebrate Animals. Joint program of AAAS Section F and the American Society of Zoologists. Arranged by Douglas M. Whitaker, Stanford University.

Thursday afternoon, Dec. 27, Douglas M. Whitaker presiding. Speakers: Dietrich Bodenstein, Army Chemical Center; Carroll M. Williams, Harvard University; F. A. Brown, Northwestern University; J. H. Welsh, Harvard University.

14. Sex in Microorganisms. Joint program of AAAS Sections F and G, cosponsored by the American Society of Protozoologists, the American Society of Zoologists, the Botanical Society of America, and the Genetics Society of America. Arranged by David H. Wenrich, University of Pennsylvania.

Part I. Sunday morning, Dec. 30, Ivey F. Lewis, University of Virginia, presiding. Speakers: N. Visconti, Carnegie Institution of Washington, Cold Spring Harbor; W. G. Hutchinson and H. Stempfen, University of Pennsylvania; John R. Raper, University of Chicago; Ralph A. Lewin, Yale University.

Part II. Sunday afternoon, Dec. 30, D. H. Wenrich, University of Pennsylvania, presiding. Speakers: L. R. Cleveland, Harvard University; David L. Nanney, University of Michigan; D. H. Wenrich.

15. Estuarine Ecology. Program of AAAS Section F, cosponsored by the American Society of Limnology and Oceanography, the American Society of Zoologists, and the Ecological Society of America. Arranged by R. V. Truitt, Department of Research and Education, Solomons, Md.

Part I. Sunday morning, Dec. 30, George L. Clarke, Harvard University, presiding. Speakers: Alfred C. Redfield, Woods Hole Oceanographic Institution; Donald W. Pritchard, Chesapeake Bay Institute; Henry M. Stommel, Woods Hole Oceanographic Institution; Dayton E. Car-

ritt, Chesapeake Bay Institute; Bostwick H. Ketchum, Woods Hole Oceanographic Institution.

Part II. Sunday afternoon, Dec. 30, Thurlow C. Nelson, Rutgers University, presiding. Speakers: James B. Lackey, The Blakiston Company; Charles E. Renn, The Johns Hopkins University; A. W. H. Needler, Atlantic Biological Station, Canada; A. G. Huntsman, Fisheries Research Board of Canada.

SECTION G. 16. The Use of Isotopes in Botany. Program of AAAS Section G, cosponsored by the Botanical Society of America. Arranged by Alexander Hollaender, Oak Ridge National Laboratory.

Saturday morning, Dec. 29, Ivey F. Lewis, University of Virginia, presiding. Speakers: Alexander Hollaender; Sterling B. Hendricks, U. S. Department of Agriculture; G. R. Noggle, Oak Ridge National Laboratory; C. L. Comar, University of Tennessee; Philip H. Abelson, Carnegie Institution of Washington.

17. The New Jersey Pine Barrens. Joint program of AAAS Section G and the Ecological Society of America. Arranged by John A. Small, Rutgers University.

Saturday afternoon, Dec. 29, John A. Small presiding. Speakers: J. C. F. Tedrow, New Jersey Agricultural Experiment Station; J. E. Potzger, Butler University; John M. Fogg, Jr., University of Pennsylvania; Silas Little, Northeastern Forest Experiment Station, New Lisbon, N. J.; H. H. Chapman, Yale University; J. E. Cantlon, George Washington University and Murray F. Buell, Rutgers University; H. C. Barksdale, U. S. Geological Survey, Trenton; C. B. Cranmer, Department of Conservation and Economic Development, New Jersey State.

18. Foods and People. Panel discussions arranged by Gove Hambidge, Food and Agriculture Organization of the United Nations.

Sunday, Dec. 30, Gove Hambidge presiding. Panel members: H. G. Bennett, U. S. Department of State and Oklahoma A & M College; John D. Black, Harvard University; Charles E. Kellogg, U. S. Soil Survey; L. A. Maynard, Food and Nutrition Board, National Research Council, and Cornell University; Conrad Taeuber, Bureau of the Census; and others.

SECTION H. 19. Sex Education and its Relation to the Sexual Behavior of Children and Young Adults. Joint program of AAAS Section H and the Society for Research in Child Development. Arranged by Charlotte del Solar, Child Study Center, Yale University.

Thursday afternoon, Dec. 27, Thomas W. Richards, Northwestern University, presiding. Speakers: Edith Jacobson, New York; Glenn V. Ramsey, Madison, N. J.; John Whiting, Harvard University.

20. Use of Statistical Models to Interpret Data on Human Population Genetics. Joint program of AAAS Section H and the Biometric Society, Eastern North American Region. Arranged by J. N. Spuhler, U. S. Navy and University of Michigan.

Thursday afternoon, Dec. 27, Marian W. Smith, U. S. Department of State, presiding. Speakers: C. C. Li, University of Pittsburgh; J. V. Neel, University of Michigan; Bentley Glass, The Johns Hopkins University; J. N. Spuhler; D. J. Hager, Princeton University; Howard Levene, Columbia University; Clyde Kluckhohn, Harvard University.

21. Prehistoric and Historic Asia: Transpacific Con-

tacts with the New World. Program of AAAS Section H, cosponsored by the Society for American Archaeology and the University Museum of the University of Pennsylvania. Arranged by Marian W. Smith, Foreign Service Institute, U. S. Department of State.

Part I. Culture History of the Arctic and the Northern Pacific. Friday morning, Dec. 28, James Louis Giddings, University Museum, University of Pennsylvania, presiding. Speakers: H. B. Collins, Smithsonian Institution; F. G. Rainey, University Museum, University of Pennsylvania; A. C. Spaulding, University of Michigan; C. McClellan, Forest Springs, Pennsylvania; Frederica de Laguna, Bryn Mawr College; D. Jenness, National Museum, Ottawa, Canada; J. B. Griffin, University of Michigan.

Part II. Prehistory and History of Asia and the Near East, I. Friday afternoon, Dec. 28, Lauriston Ward, Harvard University, presiding. Speakers: J. L. Angel, Jefferson Medical College, Philadelphia; R. M. Adams, Oriental Institute, Chicago; H. L. Movius, Jr., Harvard University; B. S. Kraus, University of Arizona.

Part III. Prehistory and History of Asia and the Near East, II. Saturday morning, Dec. 29, Lauriston Ward presiding. Speakers: Robert Dyson, Jr., Harvard University; Louis Du Pree, Harvard University; Elizabeth E. Bacon, Washington University; R. K. Beardsley, University of Michigan.

Part IV. Modern Developments in the Culture History of Asia. Saturday afternoon, Dec. 29, Schuyler V. R. Cammann, University Museum, University of Pennsylvania, presiding. Speakers: T. K. Noss, Adelphi College; Simon Mareson, Populations Division, United Nations; W. N. Brown, University of Pennsylvania; Holden Furber, University of Pennsylvania; Gardner Murphy, College of the City of New York, and Pars Ram, East Punjab University, Delhi.

Part V. Culture History and the Question of Transpacific Contacts between Asia and the New World. Sunday morning, Dec. 30, F. G. Rainey, University Museum, presiding. Speakers: G. F. Carter, The Johns Hopkins University; Gordon F. Ekholm, American Museum of Natural History; Ralph Linton, Yale University.

22. Social Structure. Joint program of AAAS Section H and the American Sociological Society. Arranged by Marian W. Smith.

Friday afternoon, Dec. 28, Talcott Parsons, Harvard University, presiding. Speakers: G. C. Homans, Harvard University; G. P. Murdock, Yale University; E. Shils, University of Chicago; Marian W. Smith.

23. Cultural Relativism. Joint program of AAAS Section H and the Eastern Division of the American Philosophical Association. Arranged by Richard B. Brandt, Swarthmore College.

Saturday afternoon, Dec. 29, A. E. Murphy, Cornell University, presiding. Speakers: Clyde Kluckhohn, Harvard University; Ralph Linton, Yale University; Philip Blair Rice, Kenyon College.

SECTION L. 24. Rewards of Research. Arranged by Raymond J. Seeger, Naval Ordnance Laboratory.

Friday afternoon, Dec. 28, Conway Zirkle, University of Pennsylvania, presiding. Speakers: Alan T. Waterman, National Science Foundation; R. Bruce Lindsay, Brown University; Raymond J. Seeger.

25. Philosophical Postulates of Physics. Joint pro-

gram of AAAS Section L and the Eastern Division of the American Philosophical Association. Arranged by Richard B. Brandt, Swarthmore College.

Saturday afternoon, Dec. 29, Raymond J. Seeger presiding. Speakers: A. W. Burks, University of Michigan; Henry Margenau, Yale University; Herbert Feigl, University of Minnesota.

26. History of Science. Arranged by I. Bernard Cohen, Harvard University.

Sunday afternoon, Dec. 30, Conway Zirkle presiding. Speakers: Thomas S. Kuhn, Harvard University; Brooke Hindle, New York University; Wyndham D. Miles, Pennsylvania State College.

SECTION M. 27. Prosthetic and Sensory Aids—Engineering, Design, and Uses. Joint Program of AAAS Section M and the American Society of Mechanical Engineers. Arranged by E. F. Murphy, Prosthetic and Sensory Aids Service, Veterans Administration, New York.

Part I. Thursday morning, Dec. 27, Paul E. Klopsteg, Northwestern Technological Institute, presiding. Speakers: R. Tweedale, Vickers, Inc., Detroit; S. Fishman, New York University; A. Nathan, New York University, and B. Walder, Veterans Administration; C. C. Haddan, American Board for Certification of the Prosthetic and Orthopedic Appliance Industry, Inc.; W. Tosberg, Veterans Administration.

Part II. Thursday afternoon, Dec. 27, Philip D. Wilson, Hospital for Special Surgery, New York, presiding. Speakers: M. Fletcher, U. S. Army, Forest Glen, Md.; F. Leonard, Army Prosthetics Research Laboratory, Forest Glen, Md.; A. W. Spittler, Walter Reed Hospital; E. F. Murphy, Veterans Administration.

28. Nuclear Engineering. Arranged by Irving P. Orens, Newark College of Engineering.

Part I. Friday morning, Dec. 28, Irving P. Orens, presiding. Speakers: Conrad P. Straub and Donald Pesock, U. S. Public Health Service; R. H. Simons, Knolls Atomic Power Laboratory, Schenectady.

Part II. Friday afternoon, Dec. 28, Irving P. Orens, presiding. Speakers: J. C. Suddath, Oak Ridge National Laboratory; Robert H. Wilson, University of Rochester; Paul C. Aebersold, Isotopes Division, U. S. Atomic Energy Commission; David Gurinsky, Brookhaven National Laboratory.

29. The Joint Participation of Engineers and Medical Scientists in the Activities of the Navy Aeronautical Medical Equipment Laboratory. Joint program of AAAS Section M and the schools or departments of engineering of the University of Pennsylvania, Drexel Institute of Technology, Swarthmore College, and Villanova College. Arranged by L. G. Gulick, Towne Scientific School, University of Pennsylvania; R. C. Disque, Drexel Institute of Technology; J. Stanley Morehouse, Villanova College; and W. E. Reaser, Swarthmore College.

Saturday morning, Dec. 29, E. M. Wurzel, Naval Aeronautical Medical Laboratory, Philadelphia, presiding. Speakers: C. T. Koochembere, E. Hendler, E. L. Hays, F. R. Brown and E. M. Wurzel, Naval Aeronautical Medical Laboratory.

30. The Engineer and Scientific Research. Program of AAAS Section M and the schools or departments of engineering of the Philadelphia region (as above).

Part I. Saturday afternoon, Dec. 29, R. C. Disque presiding. Speakers: Charles P. Bailey, Hahemann Medical College and Hospital, Philadelphia; C. E. Fink, Drexel Institute of Technology.

Part II. Saturday evening, Dec. 29, J. Stanley Morehouse presiding. Speakers: Albert J. Williams, Jr., Leeds & Northrup Company; John Grist Brainerd, University of Pennsylvania; John A. Goff, University of Pennsylvania.

SUBSECTION NM. 31. Experimental and Clinical Aspects of Lipid Metabolism, Arteriosclerosis, and the Aging Process. Program of AAAS Subsection Nm, cosponsored by the American Geriatrics Society, the Society for the Study of Arteriosclerosis, and the Gerontological Society, Inc. Arranged by Gordon K. Moe, New York State University Medical Center, Syracuse.

Part I. Saturday morning, Dec. 29, Irvine H. Page, The Cleveland Clinic, presiding. Speakers: David P. Barr, Cornell University Medical College; Eli Moschowitz, Mount Sinai Hospital, New York; L. L. Waters, Yale University School of Medicine; Russell L. Holman, Louisiana State University School of Medicine.

Part II. Saturday afternoon, Dec. 29, Charles F. Wilkinson, Jr., New York University Postgraduate School, presiding. Speakers: Nathan W. Shock, National Institutes of Health and Baltimore City Hospitals; Lena Lewis, Arda H. Green, and Irvine H. Page, The Cleveland Clinic; M. M. Gertler, Francis Delafield Hospital, New York; John W. Gofman *et al.*, Donner Laboratory, University of California, Berkeley; Jeremiah Stamler, Michael Reese Hospital, Chicago.

Part III. Sunday morning, Dec. 30, Harry E. Ungerleider, The Equitable Life Assurance Society, New York, presiding. Speakers: Alfred Steiner, New York; Ancel Keys, University of Minnesota; Campbell Moses, Jr., University of Pittsburgh; J. C. Paterson, University of Western Ontario, London; Benjamin M. Baker, William Scarborough, Martin Singewald, and Robert E. Mason, Baltimore.

Part IV. Sunday afternoon, Dec. 30, Nathan W. Shock presiding. Speakers: Edwin O. Wheeler, Massachusetts General Hospital, and Howard B. Sprague, Brookline, Mass.; Charles F. Wilkinson, Jr.; J. Murray Steele, Goldwater Memorial Hospital, Welfare Island, New York; Henry L. Taylor, University of Minnesota; Paul Starr, University of Southern California.

SUBSECTION ND. 32. Fluoridation as a Public Health Measure. Arranged by James H. Shaw, Harvard School of Dental Medicine, and Harold C. Hodge, University of Rochester School of Medicine and Dentistry.

Friday afternoon, Dec. 28, James H. Shaw presiding. Speakers: Zachary M. Stadt, Health Department, Charlotte, N. C.; Edward J. Largent, College of Medicine, University of Cincinnati; Gerald J. Cox, School of Dentistry, University of Pittsburgh; Harold C. Hodge and F. A. Smith, University of Rochester School of Medicine and Dentistry; R. S. Harris, Massachusetts Institute of Technology.

SUBSECTION NP. 33. A Panel Discussion of the Newer Toxicants of Medical, Economic, and Pharmaceutical Interest. Program of AAAS Subsection Np, cosponsored by the American Pharmaceutical Association, Scientific Section, and the American Society of Hospital Pharmacists. Arranged by George F. Archambault, Pharmacy Branch, U. S. Public Health Service.

Saturday afternoon, Dec. 29, Bernard E. Conley, American Medical Association, moderator. Speakers: Arnold J. Lehman, Pharmacology Division, U. S. Food and Drug Administration; E. E. Fleck, Bureau of Entomology and Plant Quarantine, Beltsville, Md.; Francis F. Heyroth, Kettering Institute for Applied Physiology, Cincinnati; R. Blackwell Smith, Pharmacy School, Medical College of Virginia; Kenneth P. DuBois, Toxicity Laboratory, University of Chicago.

SECTION O. 34. Mineral Nutrition of Plants, Animals, and Man. Arranged by C. E. Millar, Michigan State College.

Part I. Thursday morning, Dec. 27, Victor A. Tiedjens, Virginia Truck Experiment Station, presiding. Speakers: Victor A. Tiedjens; George D. Scarseth, Indiana Agricultural Experiment Station; Jacob S. Joffe, New Jersey Agricultural Experiment Station; Kenneth C. Beeson, U. S. Plant Soil and Nutrition Laboratory, Ithaca, N. Y.; L. L. Danielson, Virginia Truck Experiment Station.

Part II. Thursday afternoon, Dec. 27, Victor A. Tiedjens, presiding. Speakers: Malcolm Hedley McVickar, National Fertilizer Association, Washington, D. C.; Elvin C. Stakman, University of Minnesota; Leonard Haseman and Philip Carton Stone, University of Missouri; James Edward McMurtrey, Jr., U. S. Plant Industry Station, Beltsville, Md.

Part III. Friday morning, Dec. 28, Victor A. Tiedjens, presiding. Speakers: W. B. Mack, Pennsylvania State College; J. R. Taylor, American Plant Food Council, Inc., Washington, D. C.; J. D. Romaine, American Potash Institute, Inc., Washington, D. C.; Russell Coleman, National Fertilizer Association, Washington, D. C.

Part IV. Friday afternoon, Dec. 28, Victor A. Tiedjens, presiding. Speakers: Pauline Mack, Pennsylvania State College; W. D. McElroy, The Johns Hopkins University; Wilma Brewer, Michigan State College; A. L. Moxon, Ohio Agricultural Experiment Station; Folke Skoog, University of Wisconsin.

35. Improvement of Soil Structure. Program of AAAS Section O, cosponsored by AAAS Section C and G. Arranged by N. N. T. Samaras, Central Research Department, Monsanto Chemical Company, Dayton, Ohio.

Part I. Saturday morning, Dec. 29, Firman E. Bear, Rutgers University, presiding. Speakers: G. W. Volk, Ohio Agricultural Experiment Station; J. H. Quastel, McGill University; R. M. Hedrick and D. T. Mowry, Monsanto Chemical Company; R. A. Ruehrwein and D. W. Ward, Monsanto Chemical Company; L. E. Allison, U. S. Salinity Laboratory, Riverside, Calif.

Part II. Saturday afternoon, Dec. 29, C. E. Millar, Michigan State College, presiding. Speakers: W. P. Martin, G. S. Taylor, and G. W. Volk, Ohio Agricultural Experiment Station; L. E. Weeks and W. G. Colter, Monsanto Chemical Company; L. S. Goodman, Ohio State University; L. V. Sherwood, Monsanto Chemical Company.

SECTION Q. 36. The Work of the Science Teacher. Arranged by S. R. Powers, Teachers College, Columbia University.

Part I. Saturday morning, Dec. 29, S. R. Powers, presiding. Speakers: Fletcher Watson, Harvard University; J. S. Richardson, Ohio State University; V. Crowell, State Teachers College, Trenton, N. J.; Ralph W. Lefler, Purdue University; R. W. Burnett, University of Illinois;

V. C. Lingren, University of Pittsburgh; H. E. Wise, University of Nebraska; William C. Forbes, State Teachers College, Troy, Ala.; M. Oakes, Queens College, Flushing, N. Y.; J. G. Manzer, State Teachers College, Trenton, N. J.; Ellis Haworth, Wilson Teachers College, Washington, D. C.

Part II. Saturday afternoon, Dec. 29, S. R. Powers presiding. Speakers: W. Jacobson, Teachers College, Columbia University; J. D. Barnard, New York University; R. H. Lampkin, State Teachers College, Buffalo, N. Y.; R. E. McKay, Bowling Green State University, Ohio; G. Mallinson, Western Michigan College of Education; G. M. Dunning, U. S. Atomic Energy Commission; J. Zipper, Gannon College; T. J. Blisard, Newark College of Engineering; N. E. Bingham, University of Florida; D. G. Decker, Colorado State College of Education; P. Warren, Madison College.

OTHER SYMPOSIA

Among the sessions arranged by the 71 participating societies and other organizations, symposia considered to be of particular interest are listed here.

1. **Cancer Therapy with Radioisotopes.** Joint program of the Oak Ridge Institute of Nuclear Studies and the Isotopes Division of the U. S. Atomic Energy Commission. Arranged by Marshall Bruce, Medical Division, Oak Ridge Institute of Nuclear Studies.

Part I. Internally Administered Radiation. Friday morning, Dec. 28, Marshall Bruce presiding. Speakers: Lowell Erf, Medical College Hospital, Philadelphia; William Beierwaltes, University of Michigan; Gould A. Andrews, Medical Division, Oak Ridge Institute of Nuclear Studies; H. D. Bruner, Medical Division, Oak Ridge Institute of Nuclear Studies; J. A. Cox, Reactor Department, Oak Ridge National Laboratory; S. Allan Lough, Isotopes Division, U. S. Atomic Energy Commission; Richard H. Chamberlain, University of Pennsylvania.

Part II. New Developments in Teletherapy. Friday afternoon, Dec. 28, Marshall Bruce presiding. Speakers: Robert Robbins, Temple University Hospital; C. B. Braestrup, City Department of Hospitals, New York; J. R. Mason, Radioisotopes Branch, U. S. Atomic Energy Commission; A. F. Rupp, Radioisotopes Development Department, Oak Ridge National Laboratory; Marshall Bruce; Max Cutler, Chicago Tumor Institute.

Part III. The Impact of Radioisotopes in Cancer Research. Friday evening, Dec. 28, Marshall Bruce presiding. Speakers: Paul Aebersold, Isotopes Division, U. S. Atomic Energy Commission; Albert H. Holland, Jr., Armour Laboratories; Shields Warren, Division of Biology and Medicine, U. S. Atomic Energy Commission.

2. **Classification of Animals.** Program of the Society of

Systematic Zoology. Arranged by G. W. Wharton, Duke University.

Thursday evening, Dec. 27, G. W. Wharton presiding. Speakers: A. S. Romer, Harvard University; Alan Boyden, Rutgers University; Carl L. Hubbs, Scripps Institution of Oceanography; Th. Dobzhansky, Columbia University.

3. **Modern Methods for Microscopy, II.** Program of American Microscopical Society. Arranged by Oscar W. Richards, American Optical Company, Stamford, Conn.

Friday afternoon, Dec. 28, Oscar W. Richards presiding. Speakers: Oscar W. Richards; A. K. Parpart, Princeton University; S. Inoue, University of Washington; A. J. Kavanagh, Research Laboratory, American Optical Company; R. C. Mellors, Sloan-Kettering Institute for Cancer Research.

4. **Premedical Education and Social Health.** Program of Alpha Epsilon Delta, cosponsored by AAAS Sections K and Nm, the American Society of Zoologists, and Beta Beta Beta Honorary Biological Fraternity. Arranged by Maurice L. Moore, Vick Chemical Company.

Friday afternoon, Dec. 28, Eric H. Faigle, Syracuse University, presiding. Speakers: Hugh E. Setterfield, School of Medicine, Ohio State University; J. McK. Mitchell, University of Pennsylvania; Maurice H. Greenhill, Duke University; L. E. Woodward, New York Department of Mental Hygiene.

5. **The Role of Industrial Hygiene in Industrial Science.** Program of the American Industrial Hygiene Association, cosponsored by AAAS Section P. Arranged by Anna M. Baetjer, The Johns Hopkins School of Hygiene and Public Health.

Friday afternoon, Dec. 28, Anna M. Baetjer and Frank A. Patty, General Motors Research Laboratory, presiding. Speakers: Theodore F. Hatch, Graduate School of Public Health, University of Pittsburgh; Henry F. Smyth, Jr., Mellon Institute; James H. Sterner, Medical Department, Eastman Kodak Company; Allen D. Brandt, Medical Division, Bethlehem Steel Company.

6. **Microbiologic Assay: Microorganisms in Research and Test Procedures.** Program of Society for Industrial Microbiology. Arranged by Walter N. Ezekiel, Bureau of Ordnance, U. S. Department of the Navy.

Thursday, Dec. 27, Benjamin M. Duggar, Lederle Laboratories Division, American Cyanamid Company, presiding. Speakers: B. M. Duggar; Robert A. Steinberg, U. S. Department of Agriculture, Beltsville, Md.; Lemuel D. Wright, Sharpe & Dohme, Inc., West Point, Pa.; Max S. Dunn, University of California, Los Angeles; H. B. Woodruff, Merck & Co., Inc., Rahway, N. J.; James G. Horsfall, Connecticut Agricultural Experiment Station, New Haven; S. Rich, Connecticut Agricultural Experiment Station; W. L. White, Farlow Herbarium, Harvard University.

