

## APPENDIX D

### National Science Foundation-Sponsored Scientific Conferences, Symposia, and Advanced Science Seminars Held During Fiscal Year 1964

#### SCIENTIFIC CONFERENCES AND SYMPOSIA IN THE BIOLOGICAL AND MEDICAL SCIENCES

RESEARCH SEMINARS IN MOLECULAR BIOLOGY—University of California; Meetings scheduled as opportunity arises; Melvin Calvin, Department of Chemistry, University of California at Berkeley.

ANIMAL REPRODUCTION SYMPOSIUM—Corvallis, Oreg.; August 3, 1963; H. H. Cole, Professor of Animal Husbandry, University of California at Davis.

THE XVI INTERNATIONAL CONGRESS OF ZOOLOGY—Washington, D.C.; August 20–27, 1963; Frank L. Campbell, Division of Biology and Agriculture, National Academy of Sciences–National Research Council.

SYMPOSIUM ON FERREDOXINS AND OTHER NON-HEME IRON-CONTAINING ENZYMES—University of Hawaii; August 22–23, 1963; Howard F. Mower-Theodore Winnick, Department of Biochemistry, University of Hawaii, Honolulu, Hawaii.

SYMPOSIUM ON DEVELOPMENTS IN CLASSICAL CONDITIONING—University Park, Pa.; August 1963; William F. Prokasy, Department of Psychology, Indiana University, Bloomington, Ind.

ELEVENTH INTERNATIONAL CONGRESS OF GENETICS—Columbia University; September 2–10, 1963; Francis J. Ryan, Department of Zoology, Columbia University, New York, N.Y.

FIRST INTERNATIONAL CONFERENCE IN AGAROLGY—Fort Collins, Colo.; September 3–7, 1963; Tyler A. Woolley, Department of Zoology, Colorado State University, Denver, Colo.

SYMPOSIUM ON BACTERIAL ENDOTOXINS—Rutgers University; September 4–6, 1963; Werner Braun, Department of Bacteriology, Rutgers State University, New Brunswick, N.J.

CONFERENCE OF ELECTRON TRANSPORT—New York, N.Y.; September 12, 1963; Britton Chance, Director, Johnson Foundation, University of Pennsylvania, Philadelphia, Pa.; Julius Schultz, Hahnemann Medical College, Philadelphia, Pa.

**SYMPOSIUM ON PHOTOSYNTHESIS**—Warrenton, Va.; October 14–18, 1963; Frank L. Campbell, Division of Biology and Agriculture, National Academy of Sciences and National Research Council.

**A SYMPOSIUM ON SYSTEMATICS: POLLINATION RELATIONSHIPS AND SYSTEMATICS**—St. Louis, Missouri; October 18–19, 1963; Robert L. Dressler, Missouri Botanical Garden, St. Louis, Mo.

**SYMPOSIUM ON REGULATION OF BIOSYNTHESIS AND TRANSPORT OF MATERIALS ACROSS THE CELL MEMBRANE**—New York, N.Y.; November 6–8, 1963; David M. Prescott, Division of Biology, Oak Ridge National Laboratory, P.O. Box "Y", Oak Ridge, Tenn.

**BIOLOGICAL SCIENCES SYMPOSIUM**—Houston, Tex.; December 1–5, 1963; H. M. Tsuchiya, Department of Chemical Engineering, University of Minnesota, Minneapolis, Minn.

**SUPPORT OF THE SIXTH INTERNATIONAL TRANSPORTATION CONFERENCE**—New York, N.Y.; February 6–8, 1964; John Marquis Converse-Blair Oakley Rogers, New York University Medical Center, New York, N.Y.

**SYMPOSIUM ON GENETICS OF COLONIZING SPECIES OF ANIMALS AND PLANTS**—Asilomar, Calif.; February 12–16, 1964; Frank L. Campbell, Division of Biology and Agriculture, National Academy of Sciences—National Research Council.

**SYMPOSIUM ON PHOTOSYNTHESIS**—Wakulla Springs, Fla.; February 16–21, 1964; Frank L. Campbell, Division of Biology and Agriculture, National Academy of Sciences—National Research Council.

**SEMINAR ON THE CURRENT STATUS OF RESEARCH ON APHIDS**—University of California; March 23–27, 1964; Edward Sanford Sylvester, Department of Entomology and Parasitology, University of California, Berkeley, Calif.

**CONFERENCE ON ESTUARIES**—Jekyll Island, Ga.; April 1–4, 1964; George H. Lauff, Sapelo Island Research Foundation, Sapelo Island, Ga.

**SUPPORT OF REGIONAL CONFERENCES IN DEVELOPMENTAL BIOLOGY IN 1964**—Madison, Wis.; April 3–6, 1964; John G. Torrey, Harvard University, Cambridge, Mass.

**BACTERIAL FINE STRUCTURE AND REPLICATION CURRENT RESEARCH IN MEDICAL MYCOLOGY**—Washington, D.C.; May 7, 1964; Philipp Gerhardt, Department of Microbiology, University of Michigan, Ann Arbor, Mich.

**CONFERENCE ON NEUROSPORA RESEARCH**—Houston, Tex.; March 5–7, 1964; Val W. Woodward, Department of Biology, Rice University, Houston, Tex.

**THE 29TH COLD SPRING HARBOR SYMPOSIUM**—Cold Spring Harbor, N.Y.; June 5–12, 1964; John Cairns, Cold Spring Harbor Laboratory of Quantitative Biology, New York.

**THE GROWTH SYMPOSIA FOR 1964, 1965, AND 1966**—Amherst, Mass.; June 16–17–18, 1964; John G. Torrey, Harvard University, Cambridge, Mass.

**GORDON RESEARCH CONFERENCE ON NUCLEIC ACIDS**—New Hampton, N.H.; June 22–26, 1964; Seymour Benzer, Department of Biological Sciences, Purdue University, Lafayette, Ind.

**GORDON RESEARCH CONFERENCE ON CELL STRUCTURE AND METABOLISM**—Meriden, N.H.; June 29–July 3, 1964; J. Herbert Taylor, Department of Cell Biology, Columbia University, New York, N.Y.—Walther Stoeckenius, Rockefeller Institute, New York, N.Y.

### **SCIENTIFIC CONFERENCES AND SYMPOSIA IN THE MATHEMATICAL, PHYSICAL, AND ENGINEERING SCIENCES**

**INTERNATIONAL SYMPOSIUM ON THE THEORY OF MODELS**—June 25 to July 11, 1963; University of California at Berkeley. Cochairmen: Professor Leon Henkin, President, Association for Symbolic Logic and Professor Alfred Tarski, University of California. Cosponsors: the Association of Symbolic Logic, the International Union of History and Philosophy of Science, the National Academy of Sciences—National Research Council, the National Science Foundation, and the University of California, Berkeley, Calif.

**CONFERENCE ON PHOTONUCLEAR REACTIONS**—August 5–9, 1963; Tilton School, Tilton, N.H. Cochairmen: Dr. D. J. Zaffarano, Iowa State University, and Dr. Evans Hayward, U.S. National Bureau of Standards. Cosponsor: the Gordon Research Conferences. (Director of the Gordon Research Conferences is Dr. W. George Parks, University of Rhode Island, Kingston, R.I.)

**INTERNATIONAL CONFERENCE ON LATTICE DYNAMICS**—August 5–9, 1963; H. C. Ørsted Institute, University of Copenhagen, Copenhagen, Denmark. Chairman of the Planning and Executive Committee, Elias Burstein, University of Pennsylvania. Cosponsors: Danish Academy of Technical Sciences, Danish Physical Society, International Atomic Energy Agency, International Union of Pure and Applied Physics, NORDITA, U.S. National Science Foundation, U.S. Office of Naval Research, and the University of Pennsylvania.

**XIII<sup>TH</sup> GENERAL ASSEMBLY OF THE INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS**—August 19–31, 1963; University of California, Berkeley, Secretary, General Arrangements Committee, Waldo E. Smith, Executive Secretary, American Geophysical Union. Cosponsors: National Science Foundation, National Aeronautics and Space Administration; Department of the Navy, Department of the Air Force, Department of the Army, Atomic Energy Commission, U.S. Weather Bureau, National Bureau of Standards, Department of Health, Education, and Welfare, U.S. Coast and Geodetic Survey.

**INTERNATIONAL CONFERENCE ON THE SCIENCE OF SUPERCONDUCTIVITY**—August 26–29, 1963; Colgate University, Hamilton, N.Y. Conference Secretary: Roland W. Schmitt, General Electric Research Laboratory, Schenectady, N.Y. Cosponsors: the International Union of Pure and Applied Physics, the Advance Research Project Agency, the National Science Foundation, and the General Electric Company.

**FOURTH INTERNATIONAL CONGRESS ON RHEOLOGY**—August 26–30, 1963; Providence, R.I. Chairman, Arrangements Committee: Professor R. S. Rivlin, Brown University. Cosponsors: National Science Foundation, Brown University, the U.S. Society of Rheology.

**BIENNIEL SEMINAR AND CONGRESS**—August 12 to September 4, 1963; University of Saskatchewan, Saskatoon, Canada. Executive Director Leland F. S. Ritcey; cosponsor: Canadian Mathematical Congress.

**SECOND INTERNATIONAL SYMPOSIUM ON TEKTITES**—September 5–7, 1963; Pittsburgh, Pa. Chairman: Alvin J. Cohen, University of Pittsburgh. Cosponsors: National Science Foundation, the Division of Earth Sciences of the National Academy of Sciences-National Research Council, and the University of Pittsburgh.

**INTERNATIONAL SYMPOSIUM ON HIGH TEMPERATURE TECHNOLOGY**—September 8–11, 1963; Asilomar Conference Grounds, Calif. General Chairman: N. K. Hiester. Cosponsors: the High Temperature Commission of the International Union of Pure and Applied Chemistry, the Atomic Energy Commission, the Advanced Projects Research Agency, the Office of Naval Research, the National Science Foundation, the Air Force Systems Command (Wright Field), Stanford Research Institute, and private industrial sources.

**INTERNATIONAL CONFERENCE ON PRODUCTION ENGINEERING RESEARCH**—September 9–12, 1963; Pittsburgh, Pa. Chairman Organizing Committee, Professor M. C. Shaw, Carnegie Institute of Technology. Cosponsors: International Institution for Production Engineering Research (College International Pour L'Etude Scientifique Des Techniques de Production Mecanique (CIRP)), the American Society of Mechanical Engineers, Carnegie Institute of Technology, and the National Science Foundation.

**TWELFTH CLAY MINERALS CONFERENCE**—September 30–October 3, 1963; Atlanta, Ga. Coordinator, Linn Hoover, Executive Secretary, Division of Earth Sciences, National Academy of Sciences and National Research Councils. Cosponsor: National Academy of Sciences-National Research Council.

**SYMPOSIUM ON APPROXIMATIONS**—October 21–26, 1963; Gatlinburg, Tenn. Chairman, Program Committee F. W. J. Olver, National Bureau of Standards; Executive Secretary, Organizing Committee for the Symposium, A. S. Householder, Oak Ridge National Laboratory. Cosponsors: Society for

Industrial and Applied Mathematics, the Atomic Energy Commission, the National Science Foundation.

**SECOND EASTERN THEORETICAL PHYSICS CONFERENCE**—October 25–26, 1963; Chapel Hill, N.C. Chairman, Organizing Committee, Eugen Merzbacher, University of North Carolina.

**SYMPOSIUM ON THE THEORY OF NUMBERS**—November 21–23, 1963; Pasadena, Calif. Chairman: Gordon L. Walker. Cosponsor: American Mathematical Society and National Science Foundation.

**SYMPOSIUM ON THE PRINCIPLE OF UNIFORMITY**—November 19, 1963; New York, N.Y. Chairman: Claude C. Albritton, Jr., Southern Methodist University. Cosponsor: the Geological Society of America.

**INTERNATIONAL CONFERENCE ON PERMAFROST**—November 11–15, 1963; Lafayette, Ind. General Conference Chairman: Professor Kenneth B. Woods, Purdue University. Cosponsors: Purdue University School of Civil Engineering, National Science Foundation, U.S. Army Corps of Engineers, U.S. Navy Bureau of Yards and Docks, U.S. Air Force Cambridge Research Laboratories, Office of Civil Defense, Bureau of Public Roads, Caterpillar Tractor Company, U.S. Army Materiel Command, U.S. Public Health Service, Office of Naval Research, and the Building Research Advisory Board, National Academy of Sciences-National Research Council.

**SYMPOSIUM ON GRAVITATIONAL COLLAPSE**—December 16–18, 1963; Dallas, Tex. Cochairmen: J. R. Oppenheimer, Institute for Advanced Studies; E. L. Schucking, University of Texas; R. Minkowski, University of California, Berkeley; A. E. Schild, University of Texas; P. Morrison, Cornell University; and Y. Ne'eman, Israel Atomic Energy Commission. Cosponsors: the Southwest Center for Advanced Studies; the University of Texas; Yeshiva University; Aeronautical Research Laboratory, Wright-Patterson Air Force Base; Air Force Office of Scientific Research; National Aeronautics and Space Administration; National Science Foundation; and the Office of Naval Research.

**FIFTH SYMPOSIUM ON THERMAL RADIATION OF SOLIDS**—March 4–6, 1964; San Francisco, Calif. Chairman: J. C. Richmond, National Bureau of Standards. Cosponsors: National Aeronautics and Space Administration, National Bureau of Standards, Aeronautical Systems Division, U.S. Air Force, and the University of California.

**CONFERENCE ON IRRIGATION AND DRAINAGE RESEARCH**—March 19–21, 1964; Logan, Utah. Chairman of Program Planning Committee: M. L. Albertson. Cosponsors: American Society of Civil Engineers, Utah State University, U.S. Department of the Interior Bureau of Reclamation, and the National Science Foundation.

**SYMPOSIUM ON MATRIX COMPUTATIONS**—Gatlinburg, Tenn.; April 1964. Chairman of Organizing Committee: A. S. Householder, Oak Ridge Na-

tional Laboratory. Cosponsors: Society for Industrial and Applied Mathematics and the National Science Foundation.

CONFERENCE ON PRECISION ELECTROMAGNETIC MEASUREMENTS—June 23–25, 1964; Boulder, Colo. Chairman: Edward W. Houghton. Cosponsors: National Science Foundation, National Bureau of Standards, Institute of Electrical and Electronics Engineers, and the International Scientific Radio Union.

CONFERENCE ON COAL SCIENCE—June 23–26, 1964; University Park, Pa. Chairman: Peter H. Given, Pennsylvania State University. Cosponsors: the Pennsylvania State University, the Fuel Chemistry Division of the American Chemical Society, the Geochemical Society, the Geological Society of America, and the National Science Foundation.

MIDWEST CONFERENCE ON THEORETICAL PHYSICS—June 5–6, 1964; Ames, Iowa. Chairman: Joseph M. Keller, Iowa State University. Cosponsors: Iowa State University and the National Science Foundation.

### **SCIENTIFIC CONFERENCES AND SYMPOSIA IN THE SOCIAL SCIENCES**

CONFERENCE ON RECOVERY OF PLEISTOCENE FOSSILS—Washington, D.C.; March 5, 1964. Chairman: Frank C. Whitmore, Jr., National Academy of Sciences-National Research Council.

CONFERENCE ON THE THEORY OF COLLECTIVE DECISION PROCESSES—Charlottesville, Va.; October 11–12, 1963. Chairman: J. M. Buchanan, Thomas Jefferson Center for Studies in Political Economy, University of Virginia.

RESEARCH CONFERENCE IN LINGUISTICS AND SOCIAL SCIENCES—Bloomington, Ind.; June 17–August 14, 1964. Chairman: Charles A. Ferguson, Center for Applied Linguistics, Washington, D.C.

### **ADVANCED SCIENCE SEMINARS**

ADVANCED FIELD TRAINING THROUGH RESEARCH PARTICIPATION IN ARCHAEOLOGY—University of Arizona, Tucson, Ariz.; June 12–August 7, 1964. Director: E. Haury.

FIELD TRAINING FOR ANTHROPOLOGISTS IN OAXACA, MEXICO—Stanford University, Stanford, Calif.; June 1–August 7, 1964. Director: A. K. Romney.

SUMMER SEMINAR FOR ADVANCED GRADUATE STUDENTS IN STATISTICS—Colorado State University, Fort Collins, Colo.; June 15–August 7, 1964. Director: F. A. Graybill.

SUMMER INSTITUTE FOR THEORETICAL PHYSICS—University of Colorado, Boulder, Colo.; June 16–August 24, 1964. Director: W. E. Brittin.

SEMINAR IN THEORETICAL METALLURGY—University of Denver, Denver, Colo.; June 15–August 7, 1964. Director: W. M. Mueller.

**INTERNATIONAL FIELD INSTITUTE IN ITALY FOR COLLEGE GEOLOGY TEACHERS**—American Geological Institute, Washington, D.C.; June 16–August 11, 1964. Director: J. Maxwell.

**ADVANCED COURSE IN BIOLOGY: INVERTEBRATE ZOOLOGY**—American Association of Museums, Washington, D.C.; June 29–August 7, 1964. Director: W. Hartman.

**ADVANCED COURSE IN GEOLOGY: PALEONTOLOGY FOR SCIENCE MUSEUM PERSONNEL**—American Association of Museums, Washington, D.C.; June 1–July 10, 1964. Director: J. Howe.

**SEMINAR ON HURRICANES**—Florida State University, Tallahassee, Fla.; July 6–August 14, 1964. Director: N. E. LaSeur.

**CONFERENCE ON ADVANCES IN CARBONATE SEDIMENTATION STUDIES**—University of Miami, Miami, Fla.; August 3–20, 1964. Director: G. Rusnak.

**WINTER INSTITUTES IN QUANTUM CHEMISTRY, SOLID-STATE PHYSICS AND QUANTUM BIOLOGY**—University of Florida, Gainesville, Fla.; December 9–January 18, 1964. Director: P. Lowdin.

**COURSE IN FIELD METHODS FOR SYSTEMATIC VERTEBRATE ZOOLOGISTS AND PALEONTOLOGISTS**—University of Kansas, Lawrence, Kans.; June 8–July 17, 1964. Director: E. R. Hall.

**SUMMER INSTITUTE IN THEORETICAL PHYSICS**—Brandeis University, Waltham, Mass.; June 22–July 31, 1964. Director: K. W. Ford.

**A SUMMER FIELD PROGRAM IN ANTHROPOLOGY IN YUGOSLAVIA**—Brandeis University, Waltham, Mass.; June 15–September 15, 1964. Director: R. A. Manners.

**ADVANCED SCIENCE SEMINAR IN OBSERVATIONAL ASTRONOMY**—Harvard College, Cambridge, Mass.; June 20–September 5, 1964. Director: W. Liller.

**ADVANCED PHYSICAL OCEANOGRAPHY**—Woods Hole Oceanographic Institution, Woods Hole, Mass.; June 15–September 4, 1964. Director: B. H. Ketchum.

**THEORETICAL STUDIES IN GEOPHYSICAL FLUID DYNAMICS**—Woods Hole Oceanographic Institution, Woods Hole, Mass.; June 28–September 4, 1964. Director: W. V. R. Malkus.

**SUMMER INSTITUTE OF GLACIOLOGICAL SCIENCES IN ALASKA**—Michigan State University, East Lansing, Mich.; July 25–September 8, 1964. Director: M. M. Miller.

**FIELD TRAINING FOR ANTHROPOLOGISTS IN U.S. WESTERN GREAT BASIN**—University of Nevada, Reno, Nev.; June 1–August 7, 1964. Director: W. L. d'Azevedo.

**SUMMER INSTITUTE IN PLASMA PHYSICS**—Princeton University, Princeton, N.J.; June 29–August 7, 1964. Director: M. Gottlieb.

**SPECIAL FIELD INSTITUTE IN ETHNOLOGY**—Museum of New Mexico, Santa Fe, New Mex.; June 10–September 10, 1964. Director: B. Colby.

**INTERDISCIPLINARY CONFERENCE ON CELLULAR ULTRASTRUCTURE OF WOODY PLANTS**—State University of New York, College of Forestry at Syracuse University, Syracuse, N.Y.; September 20–26, 1964. Director: W. A. Cote.

**1964 SYMPOSIUM ON MOLECULAR STRUCTURE AND SPECTROSCOPY**—Ohio State University, Columbus, Ohio; June 14–18, 1964. Director: H. H. Nielsen.

**STRUCTURE AND DYNAMICS OF THE LIQUID STATE**—John Carroll University, Cleveland, Ohio; June 1–5, 1964. Director: J. L. Hunter.

**FIELD SCHOOL IN ETHNOLOGY AND LINGUISTICS**—University of Oklahoma, Norman, Okla.; June 1–July 31, 1964. Director: W. E. Bittle.

**SUMMER INSTITUTE FOR ADVANCED GRADUATE STUDENTS IN ANALYSIS**—Lehigh University, Bethlehem, Pa.; June 15–August 7, 1964. Director: E. Pitcher.

**INSTITUTE IN CROSS-CULTURAL RESEARCH**—University of Pittsburgh, Pittsburgh, Pa.; July and August, 1964. Director: G. P. Murdock.

**FIELD TRAINING FOR ANTHROPOLOGISTS IN PUEBLA, MEXICO**—University of Pittsburgh, Pittsburgh, Pa.; June 1–August 7, 1964. Director: D. Landy.

**SEMINAR ON GENETIC IMPROVEMENT FOR DISEASE AND INSECT RESISTANCE OF FOREST TREES**—Pennsylvania State University, University Park, Pa.; August 30–September 11, 1964. Director: R. McDermott.

**ADVANCED SCIENCE SEMINAR IN PALEOBOTANY**—Lock Haven State College, Lock Haven, Pa.; June 15–27, 1964. Director: P. F. Klens.

**SEMINAR ON COMPUTERS IN ENGINEERING AND SCIENCE EDUCATION**—University of Houston, Houston, Tex.; June 8–July 31, 1964. Director: E. I. Organick.

**SPECIAL SUMMER SESSION ON MATHEMATICAL STATISTICS AND STATISTICAL METHODS IN ENGINEERING AND PHYSICAL SCIENCES**—Virginia Polytechnic Institute, Blacksburg, Va.; June 11–July 18, 1964. Director: B. Harshbarger.

**CONFERENCE ON THE ROLE OF SIMULATION IN SPACE TECHNOLOGY**—Virginia Polytechnic Institute, Blacksburg, Va.; August 10–14, 1964. Director: F. J. Maher.

**INSTITUTE FOR THEORETICAL PHYSICS**—University of Wisconsin, Madison, Wis.; June 15–August 15, 1964. Director: R. G. Sachs.

**ORGANISM-SEDIMENT RELATIONS**—Bermuda Biological Station, St. Georges West, Bermuda; August 1–September 26, 1964. Director: K. E. Chave.



**SUMMER SESSIONS IN MATHEMATICS**—Canadian Mathematical Congress, Montreal, Canada; June 22–August 14, 1964. Director: L. F. S. Ritcey.

**ADVANCED SCIENCE SEMINAR IN TROPICAL BIOLOGY OF COSTA RICA FOR COLLEGE AND UNIVERSITY TEACHERS AND SELECTED GRADUATE STUDENTS**—Organization of Tropical Studies, Inc., San Jose, Costa Rica; July 6–August 14, 1964 and July 12–August 20, 1964. Director: J. Savage.