APPENDIX III

CONTRACTS AND GRANTS OTHER THAN RESEARCH AWARDED IN FISCAL YEAR 1955

Conferences in Support of Science

- AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Mass., International Optical Congress; \$10,700.
- AMERICAN ANTHROPOLOGICAL ASSOCIATION, Peabody Museum, Cambridge, Mass.; Fifth International Congress of Anthropology and Ethnology; \$10,000.
- AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D. C.; Gordon Research Conferences; \$10,000.
- AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D. C.; International Arid Lands Symposium and Conference; \$10,000.
- AMERICAN PHILOSOPHICAL SOCIETY, Philadelphia, Pa.; Research in the History, Philosophy and Sociology of Science; \$5,000.
- AMERICAN PSYCHOLOGICAL ASSOCIATION, Washington, D. C.; Conference on Evolution of Behavior; \$8,600.
- University of Arizona, Tucson, Ariz.; World Symposium on Applied Solar Energy; \$6,000.
- DARTMOUTH COLLEGE, Hanover, N. H.; Conference on Tissue Elasticity; \$4,900.
- CALIFORNIA INSTITUTE OF TECHNOLOGY, Pasadena, Calif., Conference on the Theory of Numbers; \$5,000.
- University of California, Berkeley, Calif.; Third Berkeley Symposium on Mathematical Statistics and Probability; \$10,000.
- DePauw University, Greencastle, Ind.; Conference on Nuclear Emulsion Research in Colleges; \$4,700.
- Long Island Biological Association, Cold Spring Harbor, Long Island, N. Y.; Twentieth Cold Spring Harbor Symposium on Quantitative Biology; \$6,500.
- LOUSIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE, Baton Rouge, La.; Conference on Low Temperature Research; \$3,000.
- University of Michigan, Ann Arbor, Mich.; Problems of Nuclear Structure; \$5,000.
- NATIONAL ACADEMY OF Sciences, Washington, D. C.; International Conference of Marine Biological Laboratory Directors; \$4,000.
- New York University, New York, N. Y.; Conference on Mechanics in Engineering Education; \$5,000.
- OHIO STATE UNIVERSITY, Columbus, Ohio; Conference on Spectroscopy; \$6,000.
- University of Oregon, Eugene, Oreg.; Conference on Recent Advances in Invertebrate Physiology; \$10,000.
- ROBERT S. PEABODY FOUNDATION FOR ARCHAEOLOGY, Phillips Academy, Andover, Andover, Mass.; Conference on Radiocarbon Dating; \$5,500.
- PENNSYLVANIA STATE UNIVERSITY, University Park, Pa.; Fourth National Clay Conference; \$3,000.
- University of Pennsylvania, Philadelphia, Pa.; International Congress on Catalysis; \$5,000.
- University of Rochester, Rochester, N. Y.; Fifth Annual Conference on High Energy Nuclear Physics; \$4,500.
- University of Rochester, Rochester, N. Y.; Sixth Annual Conference on High Energy Nuclear Physics; \$10,000.
- SOCIETY FOR THE STUDY OF DEVELOPMENT AND GROWTH, Stanford University, Stanford, Calif.; Fourteenth Growth Symposium; \$4,500.

- University of Tennessee, Knoxville, Tenn.; Conference on Mechanics of Sediment Transport; \$5,800.
- University of Texas, Austin, Tex.; Conference on Molecular Quantum Mechanics; \$5,000.
- TULANE University, New Orleans, La.; Conference on Biophysics; \$6,000.
- University of Virginia, Charlottesville, Va.; Conference on the Cosmic Distance Scale; \$6,000.
- WENNER-GREN FOUNDATION FOR ANTHROPOLOGICAL RESEARCH, INC., New York, N. Y.; Conference on Man's Role in Changing the Face of the Earth; \$12,000.
- University of Wisconsin, Madison, Wis.; Conference on Metabolic Aspects of Transport Across Cell Membranes; \$4,600.
- LEHIGH UNIVERSITY, Bethlehem, Pa.; Conference on Electricity and Magnetism in Engineering Education; 3 days, \$5,000.
- Purdue Research Foundation, Lafayette, Ind; Conference on Thermodynamics in Engineering Education; 3 days; \$7,000.

Education in the Sciences

- AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D. C.; Traveling Science Libraries for Small High Schools; 1 year; \$23,250.
- AMERICAN INSTITUTE OF PHYSICS, New York, N. Y.; Study of Physics in Engineering Education; 1 year; \$13,600.
- AMERICAN PHYSIOLOGICAL SOCIETY, Washington, D. C.; Workshop on the Teaching of Physiology in Undergraduate Colleges; 2 weeks; \$6,400.
- University of Chicago, Chicago, Ill.; Conference on Summer Institutes for Science Teachers; 2 days; \$4,000.
- MATHEMATICAL ASSOCIATION OF AMERICA, University of Buffalo, Buffalo, N. Y.; Visiting Mathematicians; 18 months; \$20,500.
- University of Minnesota, Minneapolis, Minn.; Summer Institute for Chemistry Teachers in the Liberal Arts Colleges; 5 weeks; \$11,850.
- NATIONAL ASSOCIATION OF BIOLOGY TEACHERS, St. Mary's College, Winona, Minn.; Great Lakes Biology Conference; 10 days; \$15,000.
- University of New Mexico, Albuquerque, N. Mex., Summer Institute for Physics Teachers; 4 weeks; \$18,500.
- OAK RIDGE INSTITUTE OF NUCLEAR STUDIES, INC., Oak Ridge, Tenn.; Summer Institute for High School Science Teachers; 4 weeks; \$10,400.
- OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE, Stillwater, Okla.; Summer Institute on Collegiate Mathematics; 6 weeks; \$15,000.
- OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE, Stillwater, Okla.; Summer Institute for High School Teachers of Mathematics; 6 weeks; \$12,500.
- PENNSYLVANIA STATE UNIVERSITY, State College, Pa.; Summer Institute for High School Science Teachers; 6 weeks; \$12,500.
- Science Service, Inc., Washington, D. C.; Science Clubs of America; 1 year; \$10,000.
- STANFORD UNIVERSITY, Stanford, Calif.; Summer Institute for Teachers of Collegiate Mathematics; 8 weeks; \$15,000.
- SYRAGUSE UNIVERSITY, SYRAGUSE 10, N. Y., Summer Institute for High School Teachers of Chemistry; 6 weeks; \$6,600.
- SYRACUSE UNIVERSITY, Syracuse, N. Y.; Summer Institute for Teachers of Collegiate Chemistry; 6 weeks; \$13,500.
- University of Wisconsin, Madison, Wis.; Summer Institute for Mathematics Teachers; 4 weeks; \$16,500.
- University of Wyoming, Laramie, Wyo.; Summer Institute for Biology Teachers in Liberal Arts Colleges; 5 weeks; \$15,000.

Studies in Science

University of Chicago, Chicago, Ill.; Status of Demography as a Science; 18 months; \$32,700.

Scientific Manpower

- AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES, Washington, D. C.; Maintaining Register of Scientific Personnel in Biology; 18 months; \$26,400.
- AMERICAN INSTITUTE OF PHYSICS, New York, N. Y.; Maintaining Register of Scientific Personnel in Physics; 15 months; \$14,500.
- AMERICAN PSYCHOLOGICAL ASSOCIATION, Washington, D. C.; Maintaining the National Register of Scientific and Technical Personnel in Psychology; 1 year; \$7,500.
- AMERICAN MATHEMATICAL SOCIETY, Providence, R. I.; Maintaining a Register of Scientific and Technical Personnel in the Field of the Mathematical Sciences; 2 years; \$19,850.
- AMERICAN METEOROLOGICAL SOCIETY, Boston, Mass.; Maintaining the National Register of Scientific and Technical Personnel in Meteorology; 18 months; \$11,500.
- FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY, Washington, D. C.; Maintaining the National Register of Scientific and Technical Personnel in the Field of Biology; 18 months; \$15,750.
- COLUMBIA UNIVERSITY, New York, N. Y.; Estimating Supply of Professional and Technical Manpower as of 1965; 1 year; \$10,000.
- NATIONAL ACADEMY OF Sciences, Washington, D. C.; Maintaining National Register of Scientific and Technical Personnel in the Earth Sciences; 18 months; \$21,500.
- AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES, Washington, D. C.; Register of Scientific and Technical Personnel in the Field of Biology; \$17,000.
- NATIONAL ACADEMY OF Sciences, Washington, D. C.; Studies on Doctoral Degrees in Science; \$15,000.
- POPULATION ASSOCIATION OF AMERICA, Washington, D. C.; Register of Scientists in the Field of Demography; 1 year; \$1,000.

Attendance at International Meetings

- Conference on Astrometry and British Royal Astronomical Society, Brussels, Belgium and London, England.—D. Brouwer, Yale University Observatory, Yale Station, New Haven. Conn.
- Conference on Selection, Training, and Support of Medical Research Workers, London, England.—E. Allen, National Institutes of Health, Bethesda, Md.; R. K. Cannan, National Research Council, Washington, D. C.; H. B. Steinbach, University of Minnesota, Minneapolis, Minn.
- Conseil de Physique Solvay, Brussels, Belgium.—L. Onsager, Yale University, New Haven, Conn.
- The Faraday Society General Discussion on Microwave and Radio Frequency Spectroscopy, Cambridge, England.—
 - B. P. Dailey, Columbia University, New York, N. Y.
 - W. Gordy, Duke University, Durham, N. C.
 - H. S. Gutowsky, University of Illinois, Urbana, Ill.
 - R. A. Ogg, Jr., Stanford University, Stanford, Calif.
 - G. E. PAKE, Washington University, St. Louis, Mo.
 - J. G. Kirkwood, Yale University, New Haven, Conn.
 - K. J. LAIDLER, Catholic University of America, Washington, D. C.
 - E. L. Smith, University of Utah, Salt Lake City, Utah.

Fifth Congress on Coastal Engineering, Grenoble, France.—T. SAVILLE, New York University, New York, N. Y.

Fourteenth International Union of Pure and Applied Chemistry, Zurich, Switzerland.—

- M. L. Bender, Illinois Institute of Technology, Chicago, Ill.
- W. G. Brown, University of Chicago, Chicago, Ill.
- M. CARMACK, Indiana University, Bloomington, Ind.
- E. J. Corey, University of Illinois, Urbana, Ill.
- W. G. DAUBEN, University of California, Berkeley, Calif.
- C. DJERASSI, Wayne University, Detroit, Mich.
- M. R. EHRENSTEIN, University of Pennsylvania, Philadelphia, Pa.
- E. L. ELIEL, University of Notre Dame, Notre Dame, Ind.
- G. I. FUJIMOTO, University of Utah, Salt Lake City, Utah.
- M. GATES, University of Rochester, Rochester, N. Y.
- S. M. GOODWIN, National Institutes of Health, Bethesda, Md.
- C. D. GUTSCHE, Washington University, St. Louis, Mo.
- I. M. Kolthoff, University of Minnesota, Minneapolis, Minn.
- S. M. KUPCHAN, Harvard University, Cambridge, Mass.
- N. J. LEONARD, University of Illinois, Urbana, Ill.
- J. M. Luck, Stanford University, Stanford, Calif.
- S. P. MASSIE, Fisk University, Nashville, Tenn.
- M. S. NEWMAN, Ohio State University, Columbus, Ohio.
- A. W. Schrecker, National Institutes of Health, Bethesda, Md.
- A. SILVERMAN, University of Pittsburgh, Pittsburgh, Pa.
- C. L. STEVENS, Wayne University, Detroit, Mich.
- G. STORK, Columbia University, New York, N. Y.
- R. B. TURNER, Rice Institute, Houston, Tex.
- E. WICHERS, National Bureau of Standards, Washington, D. C.
- R. H. Wiley, University of Louisville, Louisville, Ky.
- B. WITKOP, National Institutes of Health, Bethesda, Md.

FOURTEENTH JAPANESE MEDICAL CONGRESS, Kyoto, Japan.—O. HAYAISHI, National Institutes of Health, Bethesda, Md.

INTERIM COUNCIL OF THE INTERNATIONAL UNION OF BIOCHEMISTRY, London, England.—

- S. Ochoa, New York University College of Medicine, New York, N. Y.
- E. Stotz, University of Rochester, School of Medicine and Dentistry, Rochester, N. Y.

INTERNATIONAL CONGRESS OF MATHEMATICIANS, Amsterdam, The Netherlands.— K. Kodaira, Princeton University, Princeton, N. J.

International Council of Scientific Unions, Executive Committee Meeting of the Abstracting Board, Zurich, Switzerland.—E. Hutchisson, Case Institute of Technology, Cleveland, Ohio.

International Symposium of the Biometric Society, Campinas, Brazil.—

- C. A. BICKING, Silver Spring, Md.
- C. ITTNER, Bliss, New Haven, Conn.
- W. G. COCHRAN, Johns Hopkins University, Baltimore, Md.
- E. R. Dempster, University of California, Berkeley, Calif.
- P. G. Homeyer, Iowa State College, Ames, Iowa.

International Symposium on Electrical Discharges in Gases, Delft, Netherlands.—L. H. Fisher, College of Engineering, New York University, New York, N. Y.

INTERNATIONAL SYMPOSIUM ON MOLECULAR SPECTROSCOPY, Oxford, England.— R. C. Lord, Massachusetts Institute of Technology, Cambridge, Mass. International Union of Chemistry, Munster, Germany.—H. H. Anderson, Drexel Institute of Technology, Philadelphia, Pa.

LECTURES AND SEMINARS ON PHOTOSYNTHETIC RESEARCH, Tokyo, Japan.—A. H. Brown, University of Minnesota, Minneapolis, Minn.

Ninth General Assembly of the International Astronomical Union, Dublin, Ireland.—

- A. Blaauw, Yerkes Observatory, University of Chicago, Williams Bay, Wis.
- V. M. Blanco, Case Institute of Technology, Warner and Swasey Observatory, East Cleveland, Ohio.
- B. J. Bok, Harvard Observatory, Cambridge, Mass.
- J. W. CHAMBERLAIN, Yerkes Observatory, University of Chicago, Williams Bay, Wis.
- HELEN W. Dodson, McMath-Hulbert Observatory, Lake Angelus, Pontiac, Mich.
- L. Goldberg, The Observatory, University of Michigan, Ann Arbor, Mich.
- G. H. HERBIG, Lick Observatory, University of California, Mt. Hamilton, Calif.
- P. HERGET, Cincinnati Observatory, University of Cincinnati, Cincinnati, Ohio.
- W. A. HILTNER, Yerkes Observatory, University of Chicago, Williams Bay, Wis.
- G. Keller, Perkins Observatory, Ohio State University, Delaware, Ohio.
- D. LAYZER, Harvard College Observatory, Cambridge, Mass.
- E. LILLEY, Naval Research Laboratory, Washington, D. C.
- W. J. LUYTEN, University of Minnesota, Minneapolis, Minn.
- A. B. Meinel, Yerkes Observatory, University of Chicago, Williams Bay, Wis.
- W. W. Morgan, Yerkes Observatory, University of Chicago, Williams Bay, Wis.
- G. Munch, California Institute of Technology, Pasadena, Calif.
- W. O. Roberts, High Altitude Observatory, University of Colorado, Boulder, Colo.
- NANCY G. ROMAN, Yerkes Observatory, University of Chicago, Williams Bay, Wis.
- M. Schwarzschild, Princeton University, Princeton, N. J.
- CHARLOTTE M. SITTERLY, National Bureau of Standards, Washington, D. C.
- K. A. STRAND, Dearborn University, Evanston, Ill.
- F. L. Whipple, Harvard College Observatory, Cambridge, Mass.
- A. E. Whitford, Washburn Observatory, University of Wisconsin, Madison, Wis.
- A. G. Wilson, Lowell Observatory, Flagstaff, Ariz.
- F. B. Wood, University of Pennsylvania, Philadelphia, Pa.
- M. H. WRUBEL, Indiana University, Bloomington, Ind.
- Pisa Conference on Elementary Particles, Pisa Italy.—M. Schein, University of Chicago, Chicago, Ill.
- Second Inter-American Congress of Psychology, University City, Mexico.—American Psychological Association, Washington, D. C.
- Symposium on Radiation Chemistry of Liquids, Paris, France.—J. L. MAGEE, University of Notre Dame, Notre Dame, Ind.
- Tenth General Assembly of the International Union of Geodesy and Geophysics, Rome, Italy.—P. E. Church, University of Washington, Seattle, Wash.
- Third International Congress of Biochemistry, Brussels, Belgium.—
 - R. O. Brady, National Institutes of Health, Bethesda, Md.
 - P. L. DAY, University of Arkansas, Little Rock, Ark.
 - A. L. Dounge, University of Rochester, Rochester, N. Y.
 - H. EDELHOCH, University of Kansas Medical Center, Kansas City, Kans.
 - M. R. EHRENSTEIN, University of Pennsylvania, Philadelphia, Pa.
 - S. W. Fox, Iowa State College, Ames, Iowa.
 - P. HANDLER, Duke University School of Medicine, Durham, N. C.

F. L. Hoch, Harvard Medical School and Peter Bent Brigham Hospital, Boston, Mass.

MARY ELLEN JONES, Harvard Medical School, Massachusetts General Hospital, Boston, Mass.

PATRICIA J. KELLER, University of Washington, Seattle, Wash.

L. M. Kozloff, Chicago, Ill.

H. R. MAHLER, University of Wisconsin, Madison, Wis.

M. F. MALLETTE, Pennsylvania State University, University Park, Pa.

J. L. Oncley, Boston, Mass.

L. J. REED, University of Texas, Austin, Tex.

S. Roberts, University of California, Los Angeles, Calif.

W. C. SCHNEIDER, Department of Health, Education and Welfare, Bethesda, Md.

DeW. Stetten, Jr., National Institutes of Health, Bethesda, Md.

VIRGINIA R. WILLIAMS, Louisiana State University, Baton Rouge, La.

J. L. Wood, University of Tennessee, Memphis, Tenn.

W. A. Wood, University of Illinois, Urbana, Ill.

Third Pan-African Congress on Prehistory, Northern Rhodesia, South Africa.— W. W. Howells, Peabody Museum, Harvard University, Cambridge, Mass.

Twenty-ninth International Statistical Institute, Rio de Janeiro, Brazil.—

C. A. BICKING, Silver Spring, Md.

W. E. DEMING, New York University, New York, N. Y.

W. LEONTIEF, Harvard University, Cambridge, Mass.

W. F. OGBURN, University of Chicago, Chicago, Ill.

Scientific Information Exchange

AMERICAN GEOPHYSICAL UNION, Washington, D. C.; For Partial Support of "Transactions of the American Geophysical Union"; 1 year; \$4,000.

AMERICAN INSTITUTE OF PHYSICS, New York, N. Y.; English Edition of Journal for Experimental and Theoretical Physics (Russian); 1 year; \$40,000.

AMERICAN MATHEMATICAL SOCIETY, Providence, R. I.; Partial Support of the Transactions of the American Mathematical Society; \$3,500.

AMERICAN MATHEMATICAL Society, Providence, R. I.; Preparing and Distributing Selected Translations of Russian Mathematics Articles; 1 year; \$14,490.

THE AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.; The International Journal, Insectes Sociaux; \$920.

AMERICAN PHYSIOLOGICAL SOCIETY, Washington, D. C.; Electrolytes in Biological Systems; 3 years; \$3,500.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS, New York, N. Y.; For Partial Support of the Publication of "Applied Mechanics Reviews"; 1 year \$10,000.

BERNICE P. BISHOP MUSEUM, Honolulu, Hawaii; Partial Support of Secretariat of the Pacific Science Association; \$12,000.

University of California, Berkeley, Calif.; World Bibliography of Fossil Vertebrates; 3 years; \$3,500.

University of Florida, Gainesville, Fla.; Rainforests of Golfo Dulce; 4 years; \$2,500.

FREE University of Brussels, Brussels, Belgium; Publication of Tables of Physico-Chemical Constants of Concentrated Solutions; \$12,000.

INDIANA UNIVERSITY, Bloomington, Ind.; Study on the History of Psychology as a Natural Science; \$2,300.

INSTITUTE FOR ADVANCED STUDY, Princeton, N. J.; Survey of the Mathematical Foundations of Quantum Mechanics; \$3,300.

- INTERNATIONAL COUNCIL OF SCIENTIFIC Unions, National Academy of Sciences, Washington, D. C.; Partial Support of Meeting of the Bureau of the International Council of Scientific Unions; \$3,700.
- Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine; Subject-Strain Bibliography of Mice; 1 year; \$4,500.
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Mass.; V. H. Yngve; Methods of Translating Languages by Machine; \$18,700.
- MISSOURI BOTANICAL GARDEN, St. Louis, Mo.; Flora of Japan; 1 year; \$1,500.
- NATIONAL ACADEMY OF Sciences, Washington, D. C.; Committee on International Scientific Unions, Office of International Relations; \$7,500.
- NATIONAL ACADEMY OF Sciences, Washington, D. C.; Luigi Meschieri's visits to psychological laboratories and research facilities; 1 month; \$575.
- OREGON STATE COLLEGE, Corvallis, Oreg.; Manual of Vascular Plants of the Lower Yangtze Valley, China; 3 years; \$2,550.
- SMITHSONIAN INSTITUTION, Washington, D. C.; Biological Sciences Information Exchange; \$22,000.
- SMITHSONIAN INSTITUTION, Washington, D. C.; Publication of an Annotated Bibliography of Termites; \$3,600.
- SOCIETY OF AMERICAN FORESTERS, Washington, D. C.; Journal of Forest Science; 3 years; \$5,000.
- CALIFORNIA INSTITUTE OF TECHNOLOGY, Pasadena, Calif.; Dr. Roger W. Sperry, Division of Biology, Lectures on Visual Perception; 1 year; \$725.
- U. S. AGRICULTURAL RESEARCH CENTER, Beltsville, Md.; Dr. Satyu Yamaguti, Preparation of Two of Three Volume Publication entitled "Systems Helminthum"; 1 year; \$3,500.
- NATIONAL AGADEMY OF Sciences, National Research Council, Washington, D. C.; Preparation of a Monograph on the Training of Scientists and Engineers in Russia; 1 year; \$4,050.

International Geophysical Year

NATIONAL ACADEMY OF SCIENCES, Washington, D. C.; Support of the U. S. National Committee for the International Geophysical Year 1957-58; \$100,000.