Division of Physical Sciences

<u>1919-1939</u> / <u>1940-1974</u>

This collection contains the records of the activities of the Division of Physical Sciences from its establishment in 1919 through 1974. The collection is divided into two separately indexed date spans of 1919-1939 and 1940-1974 and comprises a total volume of approximately 13 linear feet.

1919-1939

<u>ADMINISTRATION</u>

INSTITUTIONS – ASSOCIATIONS & INDIVIDUALS

- Acoustical Society of America
 - o Constitution Bylaws Members: 1939
- American Astronomical Society
 - o Committee on Meteors: 1920
 - Constitution Bylaws Members: 1938
- American Institute of Physics: 1931-1936
- American Mathematical Society: 1919-1936
- American Standards Association
 - Committee on Electric & Magnetic Magnitudes & Units: 1935
- Corning Glass Works: 1919-1920
- Mathematical Assoc of America: 1920
- Washington Biophysical Institute: 1934-1939
- General: 1923-1937

DIVISIONS OF THE NRC

PHYSICAL SCIENCES

- Activities
 - Historical Summary: 1919-1932
 Historical Survey: Draft: 1934
 Summary of Projects: 1919
- Appointments: Members: 1919-1939
- Board of Directors of Washington Biophysical Institute: 1934-1937
- Committees
 - o Acoustics: 1920-1923
 - Algebraic Numbers: 1920-1923Atomic Structure: 1919-1922
 - Award
 - Optical Society of America Prize for Best Paper on Scientific Instruments: 1923-1926
 - o Bibliography of Mathematical Tables & Aids to Computation
 - Appointments: Members: 1936Beginning of Program: 1934-1935
 - Proposed: 1930-1933

General: 1937-1939

- Biophysics Joint with Division of Medical Sciences
 - Survey of Possible Research Projects: 1919

General: 1920-1921

- Books in Astronomy Physics & Mathematics for Oriental Library: 1938
- o Celestial Mechanics: 1919-1923
- Cooperation in Mathematical Projects: 1919-1920
- o Electrodynamics of Moving Media: 1919-1923
- o Enlargement of Functions of International Bureau of Weights & Measures: 1919-1921
- Hydrodynamics: 1924-1932Line Spectra of the Elements
 - Activities: 1925-1938
 - Beginning of Program: 1925
 - General: 1929-1935
- o Luminescence: 1919-1923
- Mathematical Analysis of Statistics: 1922
- Orbit Theory: 1920-1922Parallaxes: 1919-1922
- o Photo-Electric Effects: 1919-1922
- o Physics Bulletins: 1923
- o Physics of the Earth: 1927-1938
 - Physics of the Earth Series: 1938
- Physiological Optics: 1921-1923
- Proposed Mathematical Dictionary: 1919
- Pyrometry
 - Proposed: 1921
- Quantum Theory
 - Proposed: 1928
- Relation between Physics & Medical Sciences: 1925-1926
- o Relation of Electro-Magnetic Theory to Quantum Hypotheses: 1919-1924
- Relation of Elementary Physics Teaching to Research: 1921
- o Research Methods & Technique: 1920-1923
- Revolving Fund for Publication of Mathematical Books
 - Appointments: 1936General: 1920-1939
- Service Institute for Biophysics: 1933-1934
- Sources of Rock Salt Crystals: 1932
- Spectroscopy
 - Eastern Division: 1919-1922Western Division: 1919-1922
- Standards of Radioactivity
 - Appointments: Members: 1938
 Meetings: Minutes: 1938-1939
 Research Projects: 1938-1939
 - General: 1938-1939
- Theories of Magnetism: 1920-1922
- o Thermo-Magnetic Electric Effects: 1919-1920
- Utilization of Bureau of Standards Facilities: 1921-1922
- Vision & Photobiology: 1922-1924
- X-Ray Spectra: 1919-1921

- X-Rays & Crystal Structure: 1920
- Conference on Precision Measurement of Solar Radiation: 1938-1939
- Directory of Division: 1919-1939
- Executive Committee Meetings: Minutes: 1919-1939
- Meetings
 - o Annual Meetings: 1920-1939
 - o Minutes (Annual Meetings & Executive Committee): 1919-1940
 - o Organizational: 1919
- News Bulletin: 1923-1925
- Nobel Prize for Physics
 - o Recommendations: 1922-1926
- Personnel Listing: 1939
- Physical Review
 - o Financial Report: 1920-1930
- Projects
 - o Airplane Power Plants: 1919
 - Astronomical Periodicals & Books: 1920-1922
 Astronomical Research Surveys: 1926-1930
 - o Aviation Field Lighting: 1919
 - o Camouflage: 1919
 - Centrifugal Gun: 1919
 - o Exchange of Apparatus: 1920
 - Infrared Detection: 1919
 - o Instrument Journal: 1920-1922
 - o Proposed: 1933-1935
 - Shop Work at Carnegie Institute of Technology: 1919
 - Signaling Telescopes: 1919
 - o Submarine Detection: 1919
 - o General: 1919
- Reports to Administrative Committee: 1924-1939
- Research Committees: 1919-1920
- General: 1919-1939

FINANCE & ACCOUNTING

CONTRACTS

• Committee on Physics of the Earth: 1938

REPORTS - 1919-1939

- Annual Report: 1922; 1936
- Committee on Supersound
 - o Quartz Source Projector of Supersound: 1919
- Projects
 - o Centrifugal Gun: 1919

1940-1974

ADMINISTRATION

INSTITUTIONS – ASSOCIATIONS & INDIVIDUALS

- Acoustical Society of America
 - Membership Bylaws History: 1955
- American Assoc for Advancement of Science
 - Annual Meeting: 1947
 - o Cooperative Committee on Teaching of Science & Mathematics: 1949
- American Assoc of Physicists
 - o Request to Affiliate with Division: 1966-1968
- American Assoc of Physics Teachers: 1949-1957
 - History & Activities: 1946-1948
 Oersted Medal: 1946-1948
- American Institute of Physics
 - Executive Committee Meetings: 1948-1956
 Governing Board Meetings: 1948-1955
 Policy Committee Meetings: 1945-1948
 - o General: 1945-1956
- American Standards Assoc: 1949-1957
- Optical Society of America: 1949-1957
- Society of Nuclear Scientists & Engineers
 - o Proposed: 1954
- Washington Biophysical Institute: 1940-1942
- General: 1946-1954

INTERNATIONAL RELATIONS

International Congresses: 1949-1961

PUBLICATIONS

- Glossary of Nuclear Energy Terms
 - o Index: 1949
 - o Sections I-III: 1949
 - o Sections V-VII: 1949
- Glossary of Terms in Nuclear Science & Technology
 - o Editions Approved by ASA: 1957
 - o Interim Edition: 1955
 - Preliminary Edition Sections I-IX: 1950-1953
 - Proposed for Approval by ASA: 1957
- Physics of the Earth Series
 - Copyright Assignments: 1949-1951Republication & Revision: 1948-1949
 - o General: 1947-1951
- General: 1947-1955

DIVISIONS OF THE NRC

PHYSICAL SCIENCES

Activities: Reports: 1967-1973

Advisory Services to NBS (National Bureau of Standards)

Mathematical Tabulation Projects: 1948

• Appointments: Members of Division: 1940-1955

• Chairman: 1960-1965

Committees

Extra-Atmospheric Cosmic Ray Research

Proposed: 1958

NSF Postdoctoral Fellowship Evaluation: 1964-1966 & 1959-1963

Systems Evaluation Group: 1954-1956Applied Mathematics: 1946-1947

Astronomy Advisory to ONR (Office of Naval Research)

Activities Summary: 1951

Appointments: Members: 1952-1971

Beginning of Program: 1947
 Contracts & Proposals: 1964-1970
 Meetings: Minutes: 1948-1969
 Research Projects: 1955-1961

General: 1952-1962, 1967-1969

Automation of Optical Production Equipment: 1957-1959

Basic Research Advisory to AROD (Army Research Office (Durham))

Appointments: Members: 1961

General: 1961

Basic Research Advisory to OOR (Office of Ordnance Research)

Appointments: Members: 1954-1960

Referees: 1957-1959General: 1953-1960

Bibliography of Mathematical Tables & Aids to Computation: 1940

Defense Projects & Personnel: 1940

Fellowships: 1940-1942

Fundamental Physical Constants: Joint with Division of Chemistry & Chemical Technology:
 1947-1950 & 1961-1963

Geophysics

Advisory to President's Materials Policy Commission: 1951

Helium Vapor Pressure Scale of Temperatures

Joint with Division of Chemistry & Chemical Technology: 1955

High-Speed Calculating Machines

Appointments: Members: 1946

General: 1946-1949

Infra-Red Absorption Spectra

Joint with Division of Chemistry & Chemical Technology: 1951-1952

Line Spectra of the Elements

Activities: 1940-1949

Appointments: Members: 1954-1957
 Reconstitution of Committee: 1940
 Reorganization of Committee: 1948-1949

General: 1946-1954

Mathematical Tables & Other Aids to Computation

Book of Tables: 1948-1949

Quarterly Journal: 1942-1950

Revolving Fund for Publication of Mathematical Tables: 1940

General: 1940-1949

Mathematics Advisory to ONR (Office of Naval Research)

Applications for Research: 1950Appointments: Members: 1948-1949

■ Beginning of Program: 1947

General: 1948-1950

- Naval Ships Characteristics & Design Procedures: 1966
- Operations Research

Beginning of Program: 1948-1949Chronology of Activities: 1949-1952

Conference on Operations Research: 1951

■ End of Program: 1955

Meetings: Minutes: 1951-1953

Operations Research Center: 1950-1952

Operations Research with Special Reference to Non-Military Operations: 1951

■ Supporting Data: 1949-1954

Symposium on Operations Research for Guidance of Management: 1951

General: 1950-1954

o Pollution: 1965-1966

Radioactive Substances: 1946

Radioactivity

Beginning of Program: 1946Meetings: Minutes: 1946-1947

Subcommittee on Shipment of Radioactive Substances: 1946-1947

General: 1947

- o Revolving Fund for Publication of Mathematical Books: 1940-1949
- Semiconductor Particle Detectors

■ Meetings: Report: 1966

Solids

Appointments: Members: 1950-1958

Beginning of Program: 1947Conferences: 1950-1960Meetings: Minutes: 1947-1951

Symposia: 1948-1959General: 1948-1961

Solid State Sciences

Advisory Panel: Membership: 1970-1974

Meetings: 1971-1975Membership: 1971-1974

General: 1974Spectral Absorption Data

Joint with Division of Chemistry & Chemical Technology: 1952-1958

Standards of Radioactivity

Activities: 1941-1943

Meetings: Minutes: 1938-1942Research Projects: 1939-1942

General: 1945-1946

- Standards Units & Constants of Radioactivity: Interdivisional: 1947-1956
- Symbols Units & Nomenclature: 1957-1967 & 1954-1957
- Training & Research in Applied Mathematics
 - Applied Mathematics Program: 1941-1942
 - Appointments: Members: 1941Beginning of Program: 1941
 - Program of Policy & Action: 1941-1942
 - General: 1941-1943
- Undersea Warfare
 - Appointments: Members: 1955-195, 1972-1973
 Contract Correspondence & Proposals: 1970-1974
 - End of Program: 1975Future Status: 1964, 1972
 - Meetings
 - 99th: Feb 1972General: 1972
 - 1971
 - 1955-1959
 - Naval & Maritime Affairs Board: Proposed: 1972
 - Panels
 - DD-963 Class Destroyer: 1971-1972
 - Underwater Swimmers: 1955
 - US Torpedo Program: 1963-1964
 - General: 1972
 - Project NOBSKA
 - 1956-1957
 - BBC-TV Queries Regarding: 1975
 - Summer Studies
 - Advanced Sea-Based Deterrence [Project Seabed]: 1964
 - Countermeasures for Fleet Defense: 1972-1974
 - Information Processing & Display: 1971
 - Ocean Surveillance: 1966
 - Workshops: Numerical Hydrodynamics: 1974
 - General: 1953-1959, 1963-1974
- Underwater Telecommunications
 - Coast Guard Briefing: 1968
 - Comments on HR 246 Submersible Vessel Safety Act: 1969
 - Conferences: Present & Future Civil Uses of Underwater Sound: 1968-1969
 - Contract Correspondence & Proposals: 1968-1970
 - Meetings: 1968-1969Membership: 1968-1970
 - Report: Correspondence re: 1969-1970
 - General: 1968-1973
- o To Study Advisability of a Division of Mathematical Sciences: 1949-1950
- Conferences
 - Post-War Physics: 1943-1945Transport Theory: 1962-1963
 - o UHF-TV Project: Jun 1960
- Directory of Division: 1940-1958

Executive Committee

o Appointments: Members: 1940-1954

- o Meetings: Minutes: 1948-1957
- Glossary of Terms in Nuclear Science & Technology
 - o Conference on Glossaries of Terms in Nuclear Science & Technology: 1948-1950
 - Working Committees: 1948
 - o General: 1947-1958
- International Activities
 - Cooperation between US & USSR in Field of High Energy Physics: 1971
 - o Inter-American Program in Biophysics: 1960-1962
 - Joint US-USSR Projects: Suggested: 1972
 - Visiting Scientists: 1956-1963
 - Volcanoes in Mexico (Vacquier): 1960
 - o General: 1959-1962
- Mathematical Problems to be Solved for Use in Theoretical Physics: 1947
- Meetings: Annual: 1940-1957
- Meetings: NASA Inter-University Research Project: Proposed: 1962
- Mine Advisory Committee
 - Appointments: Members: 1955-1975
 - o Funding: 1969-1972
 - o Meetings: Agenda: 1955-1957
 - o Panel on Command & Control: 1971
 - Studies: Pollution of Oceans by Abandoned Explosive Ordnance: Proposed: 1970
 - Summer Studies for Defense Science Board: 1971-1972
 - o General: 1951-1959, 1966-1969
- Name Change Proposed: 1947
- NAS-ARDC Study on Long-Range Scientific & Technical Trends

Committees: Facilities: 1959

- o Participants: 1957-1958
- o General: 1957-1958
- Nuclear Data Project
 - o Activities: 1953-1961
 - Associates in Project: 1955-1962
 - o General: 1953-1962
- Personnel Listings: 1940-1945
- Physical Sciences Research Evaluation Panels
 - o Advisory to AFOSR: Proposed: 1964-1965
- Physics Survey Committee
 - o Membership: 1969-1971
 - Panels: Earth & Planetary Physics

■ Meetings: Minutes: 1969-1970

- Papers: Education: Draft: 1971
- Report: 1972
- Report: General: 1970-1972
- General: 1969-1972
- o General: 1969-1971
- Planning Committee on Production of Physicists
 - Appointments: Members: 1954
 - o Conference on Production of Physicists: 1954-1955

- Improvement of Science Teaching: 1955
- Meetings: Minutes: 1954
- Review of Chamber of Commerce Report on Basic Research: 1961
- Site Evaluation Committee: Advisory to AEC
 - o Activities: Chronology: 1965-1966
 - o AEC Site Visit Program: 1965
 - Contract & Related Correspondence: 1965-1966
 - o Correspondence with AEC: 1965-1966
 - Meetings: 1965-1966Membership: 1965
 - Panels
 - Accelerator Scientists [Climate Panel]: 1965-1966
 - Foundation Requirements: 1965-1966
 - Report: 1966
 - o Press Releases & Coverage: 1965-1966
 - Relationships: Universities Research Association: 1965
 - Reports
 - **1**966
 - Draft: Comments: 1965-1966
 - Site Proposals: 1965-1966
 - o Site Visits: Reports: 1965-1966
 - o General: Mar 1965-May 1966
- Solid State Sciences Panel
 - Ad hoc Committee on Mission Operation & Structure: Report: Oct 1970
 - o Beginning of Program: 1961-1963
 - o Meetings: 1962-1970
 - Membership
 - Rosters: 1962-1970General: 1958-1970
 - o Reorganization: 1970-1971
 - Subcommittee on Federally Supported Basic Research on Materials: 1963-1964
 - o General: 1963-1968
- Studies
 - ARPA Nuclear Technology: Requested: 1968
 - Computer Facilities for Astronomy & Astrophysics: Proposed: 1973-1974
- Sun & Earth Film Series [IQSY Films]
 - o Broadcast Rights: National Educational Television (NET): 1967-1970
 - Distributor: McGraw-Hill: 1968-1971
 - o Producer: Wolff L: 1967-1969
 - o Scripts: 1969
 - o General: 1967-1971
- Symposiums
 - o Immediate & Low-Level Effects of Ionizing Radiation: 1959
 - o Microseisms: 1951-1954
 - Naval Hydrodynamics
 - First: 1956
 - Second: 1958-1959
 - Oceanographic Instrumentation: 1951-1954
 - Plasma Dynamics
 - Advisory Committee: 1957-1958

Participants: 1958

■ Proceedings: 1958-1960

General: 1957-1958

Saline Water Conversion

Abstracts of Papers: 1957

■ Beginning of Program: 1956-1957

Participants: 1957Press Releases: 1957

Report on Symposium: 1957

General: 1956-1958

Uniform Tri-dimensional Color Scales

o Proposed Study: 1946-1947

Very Large Array (VLA) Site Selection Review Panel: Ad hoc: 1972

• General: 1940-1959

FINANCE & ACCOUNTING

CONTRACTS

Committee on Solids: 1948-1959

• General: 1952-1957

FINANCE

• Funds

• General: 1957-1961

GOVERNMENT

AGENCIES & DEPARMENTS

Army

o Research & Development: 1958-1959

• Atomic Energy Commission: 1946-1956

Commerce

NBS Committee on Infra-Red Punch Card System: 1949-1951

National Science Foundation

Support for Astronomy Proposed: 1951

Navy

ONR (Office of Naval Research): 1946-1952

• General: 1947-1957

REPORTS - 1940-1974

Annual Report: 1950-1962

Committees

o Fundamental Physical Constants: 1950

Geophysics

Advisory to President's Materials Policy Commission: 1951

- Sound Control
 - Articulation Testing Methods: 1942
 - Effects of Noise on Psychomotor Efficiency Part I: 1941
 - Materials for Sound in Airplanes: 1941
 - NDCrc-52 Project Progress Reports: 1941
- Sound Control in Vehicles
 - NDCrc-52 Project Progress Reports: 1941
- Training & Research in Applied Mathematics
 - Advance Training in Applied Mathematics: 1941
 - Report to NRC: 1942
- Undersea Warfare
 - History of Self-Contained Diving & Underwater Swimming: 1959
- NAS-Air Research & Development Command Study on Long-Range Scientific & Technical Trends
 - o Committees
 - Facilities Report: 1958
 - General Sciences Report: 1958
 - Working Papers
 - Acceleration & Dynamic Flight Simulation: 1958
 - Administration of Programmatic Research: 1958
 - Biological Effects of Nuclear Weapons: 1958
 - Contributions of Basic Research to Clinical Medicine: 1958
 - Design of Training: 1958
 - Detecting Undercover Agents: 1958
 - Evaluation of Effectiveness of Incendiary Weapon Against Personnel as Illustration of Mathematical Modeling: 1958
 - Improvement of Productivity of Basic Research in Life Sciences: 1958
 - Mechanized Data Processing Developments in Medicine & Life Sciences: 1958
 - Neurophysiology & Behavior: 1958
 - Notes on Conference of Test Pilots: 1958
 - Physiology & Pharmacology of Extra-Atmospheric Flight: 1958
 - Problems of Aging: 1958
 - Psychological Warfare as Weapon System: 1958
 - Role of Hospital in Medical & Biological Research & Training: 1958
 - Selection Research: 1958
 - Task Group & Organizational Effectiveness: 1958
 - Toxicological Research in US Air Force: 1958
 - Training Requirements for Flight Surgeons & Space Biologists: 1958
 - Use of Animals Plants Microorganisms & Tissue Culture in Space Research: 1958
 - Weightlessness: 1958
- Reports to Administrative Committee: 1940-1941