



Smithsonian

National Museum of American History Kenneth E. Behring Center

Oscar W. Richards Collection

NMAH.AC.0343

Miles Lawlor and Robert W. Ageton

2019

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Collection Overview

Repository:	Archives Center, National Museum of American History
Title:	Oscar W. Richards Collection
Date:	1848-1989
Identifier:	NMAH.AC.0343
Creator:	Richards, Oscar W., Dr.
Extent:	6 Cubic feet (18 boxes)
Language:	Collection primarily in English, but also contains materials in German, Russian and French.
Summary:	This collection is made up of materials collected by Dr. Oscar W. Richards on various topics related to microscopes.

Administrative Information

Acquisition Information

Collection donated by Dr. Richard E. Richards, May 25, 1989.

Processing Information

Collection processed by Robert Ageton, 1990. Collection reprocessed by Miles Lawlor; supervised by Alison Oswald, archivist, July 2019.

Preferred Citation

Oscar W. Richards Collection, Archives Center, National Museum of American History.

Restrictions

Collection is open for research.

Conditions Governing Use

Collection items available for reproduction, but the Archives Center makes no guarantees concerning copyright restrictions. Other intellectual property rights may apply. Archives Center cost-recovery and use fees may apply when requesting reproductions.

Accruals

Approximately 1.5 cu. feet of material was added to the collection between 2017-2018. Its immediate source of acquisition is unknown. Materials transferred from Division of Work and Industry.

Biographical / Historical

Oscar W. Richards (1902-1988) was a biologist and researcher on optics and microscopy. Born at Butte, Montana, Richards received his B.A. (1923) and M.A. (1925) from the University of Oregon and a PhD in Zoology from Yale in 1931. Richards worked as a professor and lecturer at various academic institutions, including the University of Oregon (1925-1926), Clark University (1928-1930) and Yale University (1931-1937) and Pacific University after 1967.

Richards also worked with the American Optical Company, where he conducted research on microscopes and related instruments. His research focus shifted over time to encompass optics and human vision, especially as they related to night driving of automobiles. In addition to his teaching and work in optics, Richards was also a long-time consultant at the Medical Museum of the Armed Forces Institute of Pathology, where he advised on the museum's collection of historical microscopes.

Scope and Contents

This collection consists of materials related to Richards' consulting work on the history and development of microscopes. Included are scholarly articles, publications, trade literature, photographs and negatives, photographic slides, correspondence, conference programs, bibliographies, advertising clippings, and a card catalogue. Prior to acquisition, Richards organized his materials into folders by subject. Where possible, folders reflect his organizational methods, but with new folder titles to provide clarity.

Arrangement

This collection is arranged into 6 series.

Series 1: Historical Materials, 1848-1989

Series 2: Bibliographies, 1916-1973

Series 3: Topics in Microscopy, 1887-1988

Series 4: Trade Literature, 1926-1976

Series 5: Slides and Clippings, 1890-1947

Series 6: Card Catalogue, 1923-1988

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Biologists
- Biology
- Microbiologists
- Microbiology
- Microscopes
- Microscopy

Types of Materials:

Articles -- 20th century
Correspondence -- 1930-1950
Photographic prints
Reprints
Sales catalogs -- 1900-1960
Trade catalogs

Names:

American Optical Company
Armed Forces Institute of Pathology
Richards, Oscar W., Dr. (biologist)

Container Listing

Series 1: Historical Materials, 1848-1989

Scope and Contents: This series contains files maintained by Richards for his consulting work on the history of microscopes. These materials appear to have been largely organized by Richards based upon the organization he was consulting for. Series includes correspondence, illustrations of microscopes, conference programs and proceedings, photographs and photographic negatives, patents, trade literature, and scholarly articles.

Box 1, Folder 1-4	Early History of Microscopes, 1920-1978 Language: Contains materials in German and French.
Box 1, Folder 5	Historic Individuals in Microscopy, 1902-1979
Box 1, Folder 6	History of Spencer Microscopes and Surviving Examples, 1979-1981
Box 1, Folder 7-8; Box 2, Folder 1; Map-folder 1	Spencer Microscopes, 1848-1985
Box 2, Folder 2-4	Armed Forces Institute of Pathology, 1949-1977
Box 2, Folder 5	Science Museum of St. Paul, Minnesota, 1966
Box 2, Folder 6-8	History of American Microscopes, 1923 Language: Contains materials in German.
Box 3, Folder 1	History of American Microscopes, 1941-1985 Language: Contains materials in French.
Box 3, Folder 2	History of European Microscopes, 1888-1989 Language: Contains materials in German and French.
Box 3, Folder 3	Correspondence on the History of Microscopes, 1948-1985 Language: Contains materials in German.
Box 3, Folder 4	Correspondence on the History of Microscopes, 1936-1985
Box 3, Folder 5-7	Correspondence on the History of Microscopes, 1939-1985 Language: Contains materials in German.
Box 3, Folder 8	Royal Rife Telescope Correspondence, 1940-1978
Box 3, Folder 9	Oscar Richards Correspondence, 1937-1963

Box 4, Folder 1-2	Correspondence, 1943-1968 Language: Contains materials in German.
Box 4, Folder 3	Correspondence Received, 1943-1986
Box 4, Folder 4	Medical Museum of the Armed Forces Institute of Pathology Correspondence, 1967
Box 4, Folder 5	American Optical Company Correspondence, 1954-1968 Language: Contains materials in German.
Box 4, Folder 6	Consulting Work on Magnesium Fluoride and Interference Microscopes, 1954-1971 Language: Contains materials in German.
Box 4, Folder 7	Armed Forces Institute for Pathology Correspondence on Old Microscopes, 1875-1964
Box 4, Folder 8	Microscope Photographs, 1968, undated
Box 4, Folder 9	Dorland's Illustrated Medical Dictionary Correspondence, 1957-1973
Box 4, Folder 10	Planning and Producing Visual Aids, 1969
Box 4, Folder 11	Microscope Patents, 1950-1965
Box 4, Folder 12	The Bulletin of The American Society of Amateur Microscopists, 1948
Box 5, Folder 1	Conference Programs and Proceedings, 1952-1966
Box 5, Folder 2	Technical Information Bulletin, 1963-1966
Box 5, Folder 3	Seeing the Nation's Capital, undated
Box 5, Folder 4	New York Microscopical Society Yearbooks and Newsletters, 1964-1969
Box 5, Folder 5	New York Microscopical Society Yearbooks and Newsletters, 1977-1987
Box 5, Folder 6	Billings Microscope Collection Speech, undated
Box 5, Folder 7	American Society for Testing Materials Symposium on Interference Microscopy, 1962
Box 5, Folder 8	Camera News, 1966
Map-folder 1	Recommended Phase Objectives for Specific Appliances, 1949

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Series 2: Bibliographies, 1916-1973

Scope and Contents: This series contains bibliographic files and reference materials that Richards maintained on various topics in microscopy.

Box 5, Folder 9	Annotated Bibliographies, 1937-1938
Box 5, Folder 10	Early Microscopy Reference, 1943-1963
Box 5, Folder 11	Index to Microscopy in ASTM Literature, Part 1: 1916-1963, undated
Box 5, Folder 12	LEFAX Reference Files, undated
Box 5, Folder 13	Light Microscopy and Interference Microscopy Bibliographies, 1937-1973
Box 5, Folder 14	Microradiography and Soft Radiography Bibliography, circa 1955
Box 6, Folder 1	Microscopy in ASTM Literature, 1916-1965
Box 6, Folder 2	Traffic Accidents Medical Bibliography, 1955-1964
Box 6, Folder 3	Visual Acuity Bibliography, 1968

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Series 3: Topics in Microscopy, 1887-1988

Scope and Contents: This series contains Richards files relating to topics in microscopy and advancements in the field from its early history through the 1980s. They appear to have been kept by Richards for reference purposes. Most of the files are organized by type of microscope or by research topic. Also included are publications and journal articles, trade literature, correspondence, and advertising clippings. Richard's original file organization was retained, with previously unsorted materials interfiled where appropriate.

Box 6, Folder 4	Articles by Oscar W. Richards, 1959-1964
Box 6, Folder 5	Color Translating Microscope, 1956
Box 6, Folder 6	Compound Optics, 1948 Language: Contains materials in German.
Box 6, Folder 7	Computer Assisted Microscopy, 1966-1977
Box 6, Folder 8	Dark Field Microscopy, 1937-1969 Language: Contains materials in German.
Box 6, Folder 9	Depth-scanning Microscopy, 1954
Box 6, Folder 10	Electron and X-Ray Microscopes, 1938-1973
Box 6, Folder 11	Extreme Close-up Techniques for Kodak Cameras, 1943
Box 6, Folder 12-14	Eye Resolution, 1929-1974 Language: Contains materials in German and French.
Box 6, Folder 15; Box 7, Folder 1-2; Map-folder 1	Fluorescence Microscopy, 1939-1970 Language: Contains materials in German and French.
Box 7, Folder 3-6	Glare, Lighting and Eye Movement, 1948-1977 Language: Contains materials in German and French.
Box 8, Folder 1	Hematology, 1947-1958 Language: Contains materials in German.
Box 8, Folder 2	Histology and Cytology, 1933-1953
Box 8, Folder 3	Holographic Microscopy, 1969
Box 8, Folder 4-8	Image Resolution, 1945-1968 Language: Contains materials in German and French.

Box 9, Folder 1	Increased Image Resolution Techniques, 1959-1987
Box 9, Folder 2	Infrared Microscopes, 1942-1962 Language: Contains materials in French.
Box 9, Folder 3	Infrared Photography, 1952-1968
Box 9, Folder 4	Instruction Manuals, undated
Box 9, Folder 5-7	Interference Microscopy, 1952-1967 Language: Contains materials in German and French.
Box 9, Folder 8	Journal Articles, A-H, 1913-1977
Box 9, Folder 9	Journal Articles, I-P, 1937-1973
Box 10, Folder 1	Journal Articles, Q-U, 1929-1977
Box 10, Folder 2	Journal Articles, V-Z, 1934-1971
Box 10, Folder 3	Journal Articles, German Language, 1936-1965 Language: Contains materials in German.
Box 10, Folder 4	Journal Articles, Russian Language, 1942 Language: Contains materials in Russian.
Box 10, Folder 5	Leeuwenhoek's Microscope, 1976, undated
Box 10, Folder 6	Microprojection Apparatus, 1937-1981
Box 10, Folder 7	Microscope Accessory Correspondence and Trade Literature, 1943-1963
Box 10, Folder 8	Microscope Centrifuge, 1930-1932
Box 10, Folder 9	Microscope Objectives, 1939-1962
Box 10, Folder 10	Microscope Terminology, Conventional and Unconventional, 1977
Box 10, Folder 11	Microscope Test Plates, 1925-1963
Box 10, Folder 12	Microscopic Counting Techniques, 1938-1945
Box 10, Folder 13	Microscopes and Moving Pictures, 1941-1969
Box 10, Folder 14; Box 11, Folder 1-7	Phase Microscopy, 1941-1986

Box 12, Folder 1	Photomicrography, 1920-1937
Box 12, Folder 2	Polarized Microscopes, 1959-1972
Box 12, Folder 3	Polarnet Microscopes, 1947-1973
Box 12, Folder 4	Reflecting Microscopes, 1947-1950
Box 12, Folder 5	Refractometry, 1952-1962
Box 12, Folder 6	Rotary Microtomes, 1942-1943
Box 12, Folder 7	Shinya Inoue Telescope Articles, 1957-1960
Box 12, Folder 8	Stereoscopic Microscopes, 1939-1944
Box 12, Folder 9	Stereomicroscopy, 1957-1988 Language: Contains materials in German.
Box 12, Folder 10	Stereoscopic/3-D Micrography, 1935-1967
Box 12, Folder 11	Surface Illuminators, 1963
Box 12, Folder 12	Tentative Specifications for Stage Micrometers Used in Microscopy, 1948-1967
Box 12, Folder 13	Test Plate Rulings, 1887 Language: Contains materials in French.
Box 12, Folder 14	Theory on Image Formation and Resolution, 1946 Language: Contains materials in German and French.
Box 12, Folder 15; Box 13, Folder 1	Traffic Safety, 1958-1965 Language: Contains materials in German.
Box 13, Folder 2-4	Ultraviolet Microscopy, 1904-1964 Language: Contains materials in German.
Box 13, Folder 5	Vision Testing, 1951-1970
Box 13, Folder 6	Wide Field Specular (Scanning Mirror) Microscopes, 1980-1988

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Series 4: Trade Literature, 1926-1976

Scope and Contents: This series consists of trade literature on microscopes and microscope accessories.

Box 13, Folder 7	Baker Trade Literature, 1958
Box 13, Folder 8	Heating and Cooling Stage Trade Literature, 1957-1965
Box 13, Folder 9-10; Box 14, Folder 1-2; Map-folder 1	Trade Literature, 1926-1976 Language: Contains materials in German.
Box 14, Folder 3; Map-folder 1	Zeiss Trade Literature, 1963-1966 Language: Contains materials in German.
Map-folder 1	The Porter Chemical Company, undated

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Series 5: Slides and Clippings, circa 1890-1947, undated

Scope and Contents: This series contains the clippings, negatives and slides that Richards maintained for reference purposes. The series includes photonegatives, magazine clippings on microscopes, prints and slides. Most of these materials lack sources.

Box 14, Folder 4	Microscope and Publication Prints, undated
Box 14, Folder 5	Photographic Negatives, 1930-1947, undated
Box 14, Folder 6	Negative Microscope Images, circa 1890
Box 14, Folder 7	Microscope Clippings, undated
Box 14, Folder 8	Slides, undated
Box 14, Folder 9	Prints of Magnified Cells, undated

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Series 6: Card Catalogue, 1923-1988

Box 16

Box 17

Box 18

Box 15

Scope and

Contents:

This series consists of a card catalogue maintained by Richards. The handwritten and typed cards document the scholarly publications on types of microscopes, their ongoing evolution and topics in microscopy, and that he possessed. Topics include infrared microscopes, stereoscopy, photomicrography, and polarizing microscopes.

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