

CLARKE ALDEN RODMAN, 1921-- 1997

Register of His Papers, 1946 – 1996

Overview of Collection

Creator: Rodman, Clarke A. 1921 -- 1997

Collection Number: Mss 274

Title: Clarke Rodman Papers, 1946 – 1996

Abstract: Clarke Alden Rodman had a distinguished career as a chemist, engineer and inventor. He worked for the FRAM Corporation beginning in 1946 as researcher on oil filtration. Rodman concentrated upon research related to filter media for filters used in the automobile/truck industry. The papers document research pertaining to the manufacturing of filters and other automotive parts and accessories. It also documents Mr. Rodman's continued interest and involvement in the development and implementation of wastewater treatment technologies and water pollution controlling devices. It includes some correspondence but consists primarily of research reports and related material.

Quantity: 3.4 cubic feet consisting of 86 folders in seven document boxes, one oversize folder and one oversize box with eleven folders with approximately seventy photographs, twenty overhead transparencies, three pieces of felt one model of a filter and one reel of 16 mm motion picture film.

Dates: 1946 – 1996, bulk dates 1960 -- 1989

Scope and Content Note

The papers include correspondence, motion picture film, photographs, reports, and transparencies.

The papers date from 1946 – 1996 with the bulk of the collection dating from 1960 – 1989. There are eleven folders with approximately seventy photographs, twenty overhead transparencies, three pieces of felt and one reel of 16 mm motion picture film.

His widow, Katherine Perry Rodman transferred the papers to Special Collections after Clarke Rodman's death in 1997. Edward Homanoff, a colleague, helped weed out material leaving only items related to Rodman's research and information about filtration. They have been arranged in an alphabetical subject file with items within folders in chronological order.

The papers document research pertaining to the manufacturing of oil filters, air filters, fuel filters, and other automotive parts and accessories as part of his work as an employee of FRAM Corporation. It also documents Mr. Rodman's continued interest and involvement in the development and implementation of wastewater treatment technologies and water pollution controlling devices.

There is a model of an oil or water filter mounted on a wooden base with a wooden cover.

Additional Collection Information

Cite as: [description of item such as "Report by Clarke Rodman on Tung Oil, 1947"], box number, folder number, Mss 274, Clarke Rodman Papers, Special Collections, Clemson University Libraries, Clemson, SC.

Biographical Note

The son of Francis C. and Mary Tucker Rodman, Clarke Alden Rodman was born in Newton, Massachusetts on August 31, 1921. Graduating from Loomis Institute in Connecticut, he began studies in chemistry at Harvard College in 1939. Rodman interrupted his studies from 1941--1943, when he first worked for Ranger Aircraft Engines, Inc., in Farmingdale, NY, and then was drafted into the Navy. After three months, he came down with a kidney ailment and was discharged in 1943 for medical reasons. Returning to Harvard and he obtained his A.B in 1946.

Upon graduation Rodman joined Pirnie & Lee, a China trading company, affiliated with the two southern provinces of China. The business plan was to barter American manufactured goods for natural resources such as tung oil. By the end of 1946, the advances of the Chinese Communists resulted in the liquidation of this enterprise. Rodman returned to New England and began working for the Fram Filtration Corporation located in Providence Rhode Island. He then spent the next four decades working for Fram and retired as a senior research scientist. In the course of his distinguished career, Rodman contributed in many ways to turning Fram into America's number one oil filter brand. The brand quickly developed into a trusted name among automotive maintenance products. During the post World War II period, Fram became a major supplier not only for automobile manufacture, but also for vehicles used by the armed services.

A holder of eight patents on filter media construction and chemistry, Rodman was awarded the Bendix Award for outstanding technical achievement in 1977. He published several technical papers on filtration theory and organic waste treatment. Additionally, Rodman chaired the 1973 and 1981 American Association of Textile Chemists and Colorists' National Textile Environmental Symposia in Washington, D.C. His memberships included the American Chemical Society, the American Filtration and Separations Society, the American Society of Textile Chemists and Colorists, and the Fiber Society. Although he retired in 1988, Rodman continued to be active in professional organizations and served as an associate at the Fram/Allied Filtration Research Laboratory at the University of Rhode Island that he helped to establish. His involvement with Clemson University was vital for the development in the School of Textiles of a joint FRAM/GE project. The research was done on the use of non-woven fabric technology in automated manufacturing systems for automotive chasses and bodies.

Clarke Rodman's interests extended beyond his professional activities and included choral singing in the University Glee Club of Providence and the Central Congregational Church Choir, the theater, sports, traveling, and family. On December 26, 1960 Rodman married Katherine S. Perry, from East Greenwich, Rhode Island. They had two children,

Susannah, born in 1962, and Edward, born in 1964. He died on March 15, 1997 of congestive heart failure.

Subjects:

Automobiles – Motors – Oil Filters
Filters and Filtration
Oil Filters
Rodman, Clarke Alden, 1921 – 1997
Separation (Technology)

Document Types

Articles
Models
Motion Pictures
Photographs
Reports
Transparencies

Administrative Information

Acquired from: Mrs. Katherine Rodman, 97-96.

Processing information

Stanislav Trembach prepared this register in 2003 as part of work in History 893 Archives Practicum with further editorial work done by Michael Kohl and processing help from student assistant Christine Mollineaux in 2004.

SEPARATION LIST

Oversize Folder

2 22 x 33.5 inch drawings of Skid Mounted Waste Water Treating System, 1972.

Oversize Box of Photographs and Film

All photographs and film are black and white unless identified as colored

Folder

- 1 Albany International Research Company Scanning Electron Microscope, 1985, 18 7.5 x 9.5" photographs, 1 4 x 5.5" photograph
- 2 BMJ Project, 1953, 12 8.5 x 11" photographs of lube oil oxidation tests
- 3 Filter Media Analysis, 1938-1939, 8 5 x 7" photographs of microscopic fibers
- 4 Fram URI Equipment Donation, 1970s, 1 8.5 x 11 photograph of oil filter
- 5 Maxwell Bendix Labs Fan Components, 1982 – 1984, 14 x 6" color photograph of fan components
- 6 Metalized Filter Media, no date, 4 8.5 x 11 sheets with attached photographs, 20 10 x 12" overhead transparencies
- 7 Oily Water Separation Through the Use of Coalescence, 1970s, 14 8.5x11 photographs of presentation
- 8 On Guard Oil Filter Demonstration, no date, 16 mm film circa 5minutes
- 9 United States Army Natick Chemical Warfare Fabric, 1982, 3 pieces of felt
- 10 Water/Oil Separation Slide Description and Guide, 4 8.5 x 11 photographs
- 11 Water Separator Cartridge Design, 1958, 4 8.5 x 11 photographs

Artifact

There is a model of an oil or water filter mounted on a wooden base with a wooden cover, 97-96.1

Mss 274 Clarke Rodman Papers

<u>Box</u>	<u>Folder</u>	<u>Title</u>
1		
	1	Acquisition and Evaluation of Multistage Filtration System, 1979
	2	Advanced Pretreatment Process for Wastewater Reuse, 1976
	3	Agricultural Use of Textile Waters (Article), [c.1970s] Air Filter:
	4	Elements: U.S. Patent Specifications, 1975-1980
	5	Precipitator Development, 1980-1982 Air Laid
	6	Filter Media Analyses, 1973, 1978, 1979
	7	Structural Composites, 1985-1986
	8	Albany International Research Co., 1985
	9	Army Helicopter Air Filter Study, 1956 Automotive Air Filters:
	10	Journal Reprints, 1952-1992
	11	Reports and Presentations, no dates
	12	Axial Flow Air Filter, 1984 Bendix:
	13	Air Laid Brake Lining Project, 1980-1982
	14	Diesel Particulate Destructor (Vehicle Test), 1981
	15	Bilge Oil Removal System, 1978
2	1	Biomatrix Technologies: Wastewater Treatment, 1995
	2	Bioregeneration of Activated Carbon, 1973
	3	BMJ Project: Chemical Filtration Improvers, 1953
	4	Bubble Pressure Data Correlation (Technical Report), 1957
	5	Changes in Filter Efficiency Due To Dust Deposition, [c.1980s]
	6	Coalescer Cartridge Development: J.C. McClelland Correspondence, 1965-1967
	7	Colored Organic Wastewater Treatment, 1971
	8	Corporate Technical Quarterly Review, 1976
	9	Development of Advanced Air- Intake Filter, 1982
	10	Development of Engineered Nonwovens (by C. Rodman), [c.1980s]
	11	Development of Partial Flow Pressure Tester (Technical Report), 1961
	12	Electrostatic Filters, 1975
	13	Estimate of Tung Oil (China) by C. Rodman, 1946
	14	E-18 Gas-Aerosol Filter Manufacturing, 1961
	15	Fail-Safe Oily Water Monitor: Final Report, 1973-1974
3	1	Fibrous Filter Media: Research Reports, 1955-1988
	2	Fibrous Media Filtration: Deviation of Proposed Theory (Technical Report), 1958 Filter:
	3	Cartridge Patent, 1962

- 4 Media Analysis - Oil/Fuel Filter Papers (Photographs),
1973
- 5 Filter Paper: Structural Representation, [c.1980s]
- 6 Filtration of Aviation Fuels, 1959-1982
- 7 Filtration Theory Relative to Air Laid Filter Media, 1976
- 8 Foamed Filter Fibers-Allied Automotive Sector Program, 1985
FRAM
- 9 and Facet Akers Plate Separators, 1973 Reports
- 10 Filter Media Appraisal, 1972
- 11 CC-20 Filter Coalescers Test: Engineering Report, 1965
- 12 Oil/Water Separators (Information Booklets), 1971-1982
- 13 Power Filter Task Group, 1983
- 4 1 "Rando-matic" Nonwoven Line, 1973
- 2 URI Equipment Donation, [c.1970s]
- 3 GE Oil/Water Separators (Information Booklets), 1977-1979
- 4 Hydraulic Oil Filtration, 1980
- 5 Lawrence Livemore Lab Enhanced Filtration Program, 1978
- 6 Light- and Heavyweight Nonwoven Fabric Structures, 1983
- 7 Lubricants Used in Filtration Process, [c.1980s]
- 8 Marine Waste Discharges Treatment, 1957-1976
- 9 Math Model for Predicting Performance of Air Filters, 1987
- 10 Maxwell and Bendix Labs, 1982-1984
- 11 Micromembrane Filtration: Papers in Order of Presentation,
[c.1980s]
- 12 Microscopic Technique in Studying Filtration of Wool and Cotton
Fibers, 1950
- 5 1 Miscellaneous: C. Rodman Memoranda and Correspondence,
1978-1982
- 2 Molded Air Filter: Drafts and Memoranda, 1984-1985
- 3 Molded Depth Type Filter (Market Survey), 1968
- 4 NTIS Oil/Water Pollution Program (Phase III), 1974
- 5 Oil Filter Market Growth Strategies, [c.1980s]-1996
Oil/Water Separator:
- 6 Coalescence Transparencies, no dates
- 7 GM Technical Manual, [c.1980s]
- 8 Information Booklets (Misc.), 1976
- 9 Oily Water Separation Through the Use of Coalescence, 1977
- 10 Pleated Air Laid in Place of Existing Molded and Roving
Elements, [c.1980s]
- 6 1 Polypropylene Nonwoven Materials Filtration (Performance
Tests), 1991
- 2 Pore Dimension Distribution in Fibrous Filter Efficiency, 1983
- 3 Pore Size Characterization in Nonwoven Fabrics, [c.1980s]
- 4 Pore Sizes in Filter Media: Review of Size Distribution, [c.1970s]
- 5 Procedure for Selecting Optimum Filters, 1959
- 6 Project BJZ: Development of Sized Glass Beads, 1953

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- 7 Purolator Lab Evaluation of Filter Pore Sizes, 1960
Research on Engine Air Intake:
- 8 (Phase I), 1989
- 9 (Phase II), 1990
- 10 Reverse Osmosis: Water Purification, 1979-1984
- 11 Rolled Batt Cartridge Design (Tests), 1961-1965, 1972
- 12 Separation of Immiscible Liquids (J. Gernhardt's Course), 1983
- 7 1 Shirley Institute: Improvements in Fabric Filtration (Client
Report), 1982
- 2 Studies on Extra Life Batt Media, 1979
- 3 Superfine Thermoplastic Fiber Performance, [c.1980s]
- 4 Textile Systems Used in Gas Filtration, [c.1970s-1980s]
- 5 The 2nd World Filtration Congress Publications, 1979
- 6 U.S. Army Natick Chemical Warfare Fabric Project, 1982
- 7 Waste Treatment/ Oil/Water Separation Systems, no dates
- 8 Water Separator Cartridge Design, (Technical Report), 1958
- 9 Water/Oil Separation: Slides Description and Guide, [c.1970s]