

# Guide to the Raymond M. Fuoss papers

MS 1560



July 2008

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## Table of Contents

Collection Overview .....	3
Requesting Instructions .....	3
Administrative Information .....	3
Immediate Source of Acquisition .....	3
Conditions Governing Access .....	4
Conditions Governing Use .....	4
Preferred Citation .....	4
Biographical / Historical .....	4
Scope and Contents .....	4
Arrangement .....	4
Collection Contents .....	5
Series I: Correspondence, 1944-1984 .....	5
Series II: Subject Files, 1913-1986 .....	7
Series III: Writings, 1934-1985 .....	9
Series IV: Restricted files, 1934-1985 .....	11
Selected Search Terms .....	12

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## Collection Overview

**REPOSITORY:** Manuscripts and Archives  
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**CALL NUMBER:** MS 1560

**CREATOR:** Fuoss, Raymond M. (Raymond Matthew), 1905-1987

**TITLE:** Raymond M. Fuoss papers

**DATES:** 1913-1986

**PHYSICAL DESCRIPTION:** 7.5 linear feet

**LANGUAGE:** English

**SUMMARY:** The papers consist of correspondence, writings, and research files documenting Raymond Fuoss's professional career.

**ONLINE FINDING AID:** To cite or bookmark this finding aid, please use the following link: <https://hdl.handle.net/10079/fa/mssa.ms.1560>

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## Requesting Instructions

To request items from this collection for use in the Manuscripts and Archives reading room, please use the request links in the HTML version of this finding aid, available at <https://hdl.handle.net/10079/fa/mssa.ms.1560>.

To order reproductions from this collection, please go to [http://www.library.yale.edu/mssa/ifr\\_copy\\_order.html](http://www.library.yale.edu/mssa/ifr_copy_order.html). The information you will need to submit an order includes: the collection call number, collection title, series or accession number, box number, and folder number or name.

Key to the container abbreviations used in the PDF finding aid:

b. box  
f. folder

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## Administrative Information

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### Immediate Source of Acquisition

Transferred from the Chemistry Department, 1988.

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## Conditions Governing Access

Recommendations in box 15 are restricted until January 1, 2058 as established by [Yale Corporation regulations](#).

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## Conditions Governing Use

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## Preferred Citation

Raymond M. Fuoss Papers (MS 1560). Manuscripts and Archives, Yale University Library.

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## Biographical / Historical

Raymond Matthew Fuoss was born in Bellwood, Pennsylvania on September 28, 1905. He graduated summa cum laude from Harvard College in 1925 and received his Ph.D. in chemistry from Brown University in 1932, in the course of which he did research in Germany and England. His thesis was on the behavior of electrolytes in non-aqueous solvents. Between 1932 and 1945 he worked for various corporations in the field of science and technology. In 1945 Fuoss joined the faculty of the Yale chemistry department. Shortly thereafter he was named Sterling Professor of Chemistry, which he remained until his retirement in 1974. In the course of his career he wrote many articles on a wide range of subjects in journals of chemistry. His main interests were dielectrics, electrolytes, and polymers, and he was the world's leading authority on electrolyte conductance. He was interested in linguistics and fluent in Italian, Portuguese, Spanish, German, Russian, and French. Fuoss married twice. He had one daughter, Pat, from his first marriage. Fuoss died in 1986.

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## Scope and Contents

The papers consist of correspondence, writings, and research files documenting Raymond Fuoss's professional career.

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## Arrangement

Arranged in three series: I. Correspondence, 1944-1984. II. Subject files, 1913-1986. III. Writings, 1934-1985.

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## Collection Contents

### Series I: Correspondence, 1944-1984

The series is divided into two sections: chronological, and alphabetical by correspondent.

Alphabetical		
b. 1, f. 1	Bien	1949-1956
b. 1, f. 2	Chin, Ying-Chech	1980
b. 1, f. 3	Cussler, E.L. Jr.	1968-1973
b. 1, f. 4-7	D'Aprano, A.	1966-1972, 1978
b. 1, f. 8	Debye	1944-1959
b. 1, f. 9	Eisenberg, H.	1965-1967
b. 1, f. 10	Evans	1968-1977
b. 1, f. 11	Femandez-Prini	1969
b. 1, f. 12	Flory	1952-1961
b. 1, f. 13	Gross, B.	1946
b. 1, f. 14	James, C. J.	1972-1979
b. 1, f. 15	Janz, G.	1975-1976
b. 1, f. 16	Justice, J. C.	1965-1973
b. 2, f. 17	Kay, Robert L.	1959-1970
b. 2, f. 18	Kolthoff, I. M.	1969
b. 2, f. 19	Komiyama, J.	1966-1976
b. 2, f. 20	Lind, J.E.	1966-1972
b. 2, f. 21	Mattina, C. F. Jr.	1966-1974
b. 2, f. 22-25	National Academy of Sciences	1951-1974
b. 2, f. 26	Pearce, P. J.	1968-1974
b. 2, f. 27-28	Pethybridge	1973-1982
b. 2, f. 29	Prager	1975-1977
b. 3, f. 30	Press, Stephen W.	1969-1971
b. 3, f. 31	Quintin, M.	1965-1973
b. 3, f. 32	Reinfelds-Michel, G.	1971-1972
b. 3, f. 33	Sadek	1976

## Alphabetical (continued)

b. 3, f. 34-35	Seefried, Carl G., Jr.	1966-1970
b. 3, f. 36	Sen & Schulenberger Labs	1980
b. 3, f. 37	Stokes, R. H.	1966-1974
b. 3, f. 38-39	Tuan, D	1963-1984
b. 3, f. 40	Venkataraman, R.	1968-1970
b. 3, f. 41	Wang, J. H.	1972-1973
b. 3, f. 42	Weizmann Institute	1965-1982
b. 3, f. 43	Werblan, L.	1981
b. 3, f. 44	Zwolenik, J.	1967-1976
Chronological		
b. 4, f. 45-50	1950-1980 [general]	1950-1980
b. 4, f. 51	1956-1970 [former students and fellows]	1956-1970
b. 15, f. 1-6	Recommendations [See: Restricted, folder 1-6]	

**Series II: Subject Files, 1913-1986**

The series is arranged alphabetically by subject, and contains correspondence and records related to Professor Fuoss' professional interests.

b. 5, f. 1	Acetonitrile puzzle	1957
b. 5, f. 2	Barthel	1983-1984
b. 5, f. 3	Brazil conference	1975
b. 5, f. 4	Carman [publications on conductance]	1976
b. 5, f. 5	Computer program requests	1978
b. 5, f. 6	Conductance Worksheets	1963
b. 5, f. 7	Conductance Theory [reprints]	1975-1980
b. 5, f. 8-9	Electrolytes	1957-1969
b. 5, f. 10	Electrolyte reprints	1926-1927
b. 5, f. 11	Eyring [re: theory of liquids]	1941-1967
b. 5, f. 12	Gordon [re: variations on sub-pc]	1980-1984
b. 5, f. 13	Gordon conference	1980
b. 5, f. 14	Gordon experiment and figures	1983-1986
b. 5, f. 15	Gronwall, Lamer, & Sandved [re: polynoms]	19f8
b. 5, f. 16	Japan	1952-1956, 1966-1971
b. 6, f. 17-18	Laboratory notebooks [two bound books]	1945-1986
b. 6, f. 19	Lambda © review at Cornell, n.d.	
b. 6, f. 20	Languages	undated
b. 6, f. 21	Lecture trips	undated
b. 6, f. 22	MS style notes	1952-1960
b. 6, f. 23	Onsager [Science biography of]	1968
b. 6, f. 24	Personal	1931-1974
b. 6, f. 25	Petrucci comment	1974-1975
b. 6, f. 26	Ph.D. thesis	1932
b. 6, f. 27	Pitts equation [reprints]	1953-1970
b. 7, f. 28	Retirement	1974
b. 7, f. 29	Reviews [of others' articles prior to publication]	1983-1984

b. 7, f. 30	Scheraga [re: potential function]	1982-1983
b. 7, f. 31	Stillinger reprints	1967-1969
	Theses [of Fuoss' graduate students]	
b. 7, f. 32	Correspondence	1968, undated
b. 7, f. 33	Title pages	1948-1953, 1960-1961
b. 7, f. 34-35	Reprints	1947-1974
b. 7, f. 36	Travel diary	1962-1968
b. 7, f. 37-38	Water structure and related materials	1913, 1972-1974, 1977, 1981
b. 7, f. 39	Yale	1956-1974, undated



**Series III: Writings, 1934-1985**

The series is divided into two sections: articles and computer programs. The articles section includes a numbered list of Fuoss' publications in chronological order, correspondence with his publishers regarding certain articles, and reprints, all arranged in chronological order. The computer programs section contains correspondence, personal notes, and other material related to his work with computers.

Articles		
b. 8, f. 1	List [of articles in numbered, chronological order]	1934-1980
Publishers [correspondence with publishers about articles]		
b. 8, f. 2	252 [derivation of the Justice Conductance Equation]	1971-1974
b. 8, f. 3	253 [conductance in isodielectric mixtures II]	1974
b. 8, f. 4	254 [conductance in isodielectric mixtures III]	1974
b. 8, f. 5	255 [parametric analysis of conductance data]	1974
b. 8, f. 6-7	256 [PARACOND computer program]	1974, 1977-1978
b. 8, f. 8	257 [comment on Bjerrum-Justice...]	1969, 1973-1975
b. 9, f. 9-10	258 [conductance-concentration function for model electrolytes]	1972-1977
b. 9, f. 11	259 [conductance of the alkali halides]	1974-1975
b. 9, f. 12	260 [correction of publication 258]	1975
b. 9, f. 13	261 [Sao Carlos paper --Portuguese]	1975-1979
b. 9, f. 14	262 [KI in mixed solvents]	1975-1976
b. 9, f. 15	263 [supplementary comments to previous publication]	1976
b. 9, f. 16	264 [boundary conditions in the theory of the relaxation field]	1976-1977
b. 9, f. 17	265 [boundary conditions for the integration of the equation of continuity]	1975-1977
b. 10, f. 18	266 [paired ions: dipolar pairs as subset of diffusion pairs]	1977-1978
b. 10, f. 19	267 [review of theory of electrolyte conductance]	1977-1978
b. 10, f. 20	268 [comments on discussions of Faraday Society]	1977-1978, undated
b. 10, f. 21-23	269 [conductance-concentration function for paired ion model]	1975-1978, undated
b. 10, f. 24	270 [non-coulomb variation of ion pairing...]	1977-1978, undated
b. 10, f. 25	271 [biography of T. Shedlovsky]	1953, 1975-1980
b. 11, f. 26	272 [ion pairing of quaternary salts in solvent mixtures]	1978-1979

## Articles &gt; Publishers [correspondence with publishers about articles] (continued)

b. 11, f. 27	273 [conductimetric determination of thermodynamic pairing constants for symmetrical electrolytes]	1977-1980, undated
b. 11, f. 28-29	274 [ion pairing in solutions of sodium tetraphenylborate]	1979-1980, undated
b. 11, f. 30	275 [Parametric analysis of conductance data]	1984
Reprints		
b. 11, f. 31-33	Unbound	1953-1978
Bound		
b. 12, f. 34	1925-1943 [bound; 1 volume]	
b. 12, f. 35-36	1925-1945 [bound; 2 volumes]	
b. 13, f. 37	1946-1956 [bound; 1 volume]	
b. 13, f. 38	1957-1964 [bound; 1 volume]	
b. 14, f. 39	1957-1964 [bound; 1 volume]	
b. 14, f. 40	1965-1977 [bound; 1 volume]	
Computer programs		
b. 14, f. 41	Correspondence	1968-1974
b. 14, f. 42	"How to" English	1984-1985
b. 14, f. 43	QDC B84.FOR	1984
b. 14, f. 44	158	1969-1972
b. 14, f. 45-46	Miscellaneous	1969, 1973, 1983-1985

## Series IV: Restricted files, 1934-1985

Recommendations in box 15 are closed until January 1, 2058 as established by [Yale Corporation regulations](#).

Correspondence

b. 15, f. 1-6

Recommendations

1945-1982

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## **Selected Search Terms**

The following terms have been used to index the description of this collection in the Library's online catalog. They are grouped by name of person or organization, by subject or location, and by occupation and listed alphabetically therein.

### **Subjects**

Dielectrics  
Electrolytes -- Conductivity  
Polymers

### **Names**

Fuoss, Raymond M. (Raymond Matthew),  
1905-1987

### **Corporate Bodies**

Yale University. Department of Chemistry  
Yale University -- Faculty