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Guide to the Clyde A. Hutchison, Jr. Papers 1913-2000



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Table of Contents

| | |
|---------------------------------|----|
| Descriptive Summary | 3 |
| Information on Use | 3 |
| Access | 3 |
| Citation | 3 |
| Biographical Note | 3 |
| Scope Note | 4 |
| Related Resources | 5 |
| Subject Headings | 5 |
| INVENTORY | 6 |
| Series I: Teaching | 6 |
| Series II: Research and Writing | 6 |
| Series III: Correspondence | 9 |
| Series IV: Organizations | 10 |
| Series V: Personal | 11 |

Descriptive Summary

Identifier ICU.SPCL.CAHUTCHISON

Title Hutchison, Clyde A., Jr. Papers

Date 1913-2000

Size 8.5 linear feet (14 boxes)

Repository Special Collections Research Center
University of Chicago Library
1100 East 57th Street
Chicago, Illinois 60637 U.S.A.

Abstract Clyde Allen Hutchison, Jr. (1913-2005) was a chemist who pioneered research in magnetic resonance spectroscopy, served on the faculty of the University of Chicago's Department of Chemistry, and participated in the Manhattan Project. This collection documents Hutchison's work in teaching and research, as well as aspects of his career as a lecturer, visiting professor and administrator. Materials in this collection include lecture notes, drafts, notebooks, correspondence, publications and memorabilia.

Information on Use

Access

Open for research. No restrictions

Citation

When quoting material from this collection, the preferred citation is: Hutchison, Clyde A., Jr. Papers, [Box #, Folder #], Special Collections Research Center, University of Chicago Library

Biographical Note

Clyde Allen Hutchison, Jr. (1913-2005) was a chemist who pioneered research in magnetic resonance spectroscopy, served on the faculty of the University of Chicago's Department of Chemistry, and participated in the Manhattan Project.

Hutchison was born May 5, 1913, in Alliance, Ohio. In 1933, Hutchison received a bachelor's degree from Cedarville College and a Ph.D. from Ohio State University in 1937.

Hutchison's early career included work with Harold Urey at Columbia University as a National Research Council Fellow, and a position as an assistant professor of chemistry at University of Buffalo. At Columbia University and the University of Virginia, Hutchison participated in the Manhattan Project.

In 1945, Hutchison joined the faculty of the University of Chicago's Department of Chemistry, where he remained until his retirement in 1983. Hutchison served as chairman of the department from 1959-1963. During his tenure, Hutchison conducted fundamental research in the magnetic properties of atoms and molecules. As a pioneer in this field, Hutchison developed equipment and methods that enabled future research in chemistry, physics and medicine.

Teaching was an important part of Hutchison's career. Favoring seminars and informal presentations over traditional coursework, Hutchison led several series of voluntary lectures that were popular among students and faculty.

In addition to his work at University of Chicago, Hutchison lectured at leading universities worldwide, served as editor of the *Journal of Chemical Physics* from 1953-1959, and worked as consultant to laboratories, including Argonne and Los Alamos. Hutchison was appointed to the second executive committee of the Atomic Scientists of Chicago in 1946, and was involved with the *Bulletin of the Atomic Scientists*. He received Guggenheim Fellowships to University of Oxford in 1955 and 1972, and visited Oxford again in 1981-1982 as George Eastman Professor of the Clarendon Laboratory. Hutchison also received several honorary degrees, and was elected as a member of the American Academy of Arts and Sciences and the National Academy of Sciences.

Music and church were both important parts of Hutchison's life. The son of a Methodist minister, he played organ in his father's congregations, and appeared as a pianist in radio broadcasts. Married in 1937 to Sarah Jane West, Hutchison had two sons and a daughter. He died of prostate cancer in 2005, at age 92.

Scope Note

This collection documents Hutchison's work in teaching and research, as well as aspects of his career as a lecturer, visiting professor and administrator. The Clyde A. Hutchison, Jr. Papers are divided into five series. Some material from his education and family life are also included in this collection.

Series I: Teaching Material, contains lecture notes, syllabi, handouts and examinations from courses Hutchison taught at University of Chicago in the 1940s-1980s, as well as material from voluntary and informal seminars and lectures. This series is arranged chronologically, and the names and numbers of courses and syllabi are given when available. Some material precedes Hutchison's arrival at University of Chicago, and may relate to his teaching at University of Buffalo; some material in the collection may relate to instructors other than Hutchison.

Series II: Research and Writing, contains Hutchison's own drafts, notebooks, research material, and publications. This material spans the years 1931-2000, and includes documents from his education at Ohio State University; research conducted at Columbia University, University of Buffalo, and University of Chicago; and several memorial writings that Hutchison composed late in his career - among these are drafts, correspondence, and research on the lives of Harold C. Urey and other significant colleagues. Writings of several of Hutchison's colleagues are also found in this series.

Series III: Correspondence, spans the 1910s-1990s and is organized chronologically. Professional and personal correspondence with colleagues and administrators is found in this series, as is a small amount of family correspondence. Additional correspondence is found in other series of this collection, filed with other types of documentation.

Series IV: Organizations, spans the years 1938-1998, and documents Hutchison's relationship with academic institutions, professional organizations, journals, honorary societies, and other groups. This series is organized alphabetically by organization name, and includes reports, minutes, correspondence, award certificates, membership information, publications, organizational material for conferences, travel and meetings. This series contains some administrative records of University of Chicago, Atomic Scientists of Chicago and the Bulletin of the Atomic Scientists.

Series V: Personal, contains a variety of biographical material, memorabilia, correspondence, publications, and travel material. Included in this series is a 1996 list of Hutchison's publications, diaries from his trips to Russia and China in the 1980s, photographs, and material related to his family and to his involvement in church and musical activities.

Related Resources

The following related resources are located in the Department of Special Collections:

<http://www.lib.uchicago.edu/e/spcl/select.html>

Atomic Scientists of Chicago. Records

Bulletin of the Atomic Scientists. Records

Urey, Harold. Papers

Subject Headings

- Hutchison, Clyde A., Jr.
- Urey, Harold Clayton
- University of Chicago. Department of Chemistry
- Chemistry

- Chemists

INVENTORY

Series I: Teaching

Box 1

Folder 1

Chemistry 320, 1941

Box 1

Folder 2

Chemistry 261-262, 1948

Box 1

Folder 3

T.J. Neubert, Chemistry 342, Physical Chemistry Laboratory, 1950

Box 1

Folder 4

"Crystallography - Definitions and Facts," 1962

Box 1

Folder 5-6

Chemistry 279, Introduction to Chemical and Physical Applications of Symmetry Reasoning, 1963

Box 1

Folder 7

Tuesday Evening Seminars, 1968

Box 2

Folder 1-2

Lectures on density matrix methods, 1975

Box 2

Folder 3

Physical Chemistry 261, 1979

Box 2

Folder 4

Physical Chemistry Laboratory, 1982

Series II: Research and Writing

Box 2

Folder 5

Chemistry class notebook, 1931

Box 2

Folder 6

"The Electrolytic Separation of the Isotopes of Lithium," dissertation, Ohio State University, 1937

Box 3

Folder 1

Elementary physical chemistry, notebook, 1939

Box 3

Folder 2

Isotopes seminar, notebook, ca. 1940

Box 3**Folder 3**

Carbon-13, drafts and correspondence with Harold Urey, ca. 1940s

Box 3**Folder 4**

"The Atomic Weight of Fluorine Calculated from Density and X-Ray Data" (with Herrick L. Johnston), drafts and order for reprints, ca. 1940s

Box 3**Folder 5**

"Application of the Mass Spectrometer in Physical and Biological Researches," talk given at Sigma Xi meeting, ca. 1940s

Box 3**Folder 6**

Wittenberg College, Department of Education, assignment book, ca. 1940s

Box 3**Folder 7**

"The Analysis of Mixtures of Uranium Oxides," draft, ca. 1940s

Box 3**Folder 8**

Atomic energy, page from draft, ca. 1940s

Box 3**Folder 9-12**

Notes, diagrams, and coursework, ca. 1940s-1960s

Box 3**Folder 13**

"The Magnetic Susceptibility of Neptunium" (with Dieter M. Gruen), draft, 1950

Box 3**Folder 14**

Electron double resonance, notes and drafts, 1962

Box 3**Folder 15**

"Electron Paramagnetic Resonance and Electron Nuclear Double Resonance of Chemically Reacting Triplet State Species in Single Organic Crystals," lecture delivered at the Second International Symposium on Organic Solid-State Chemistry, Weizman Institute of Science, Rehovot, Israel, 1970

Box 3**Folder 16**

Ion pair calculations and eigenfield calculations, notebook, ca. 1977

Box 4**Folder 1**

Eastman Lectures, 1982

Box 4**Folder 2**

Nicotinate crystal structures, notebook, 1982-1984

Box 4

Folder 3

"Monks Climbing Mountain," draft, 1983

Box 4

Folder 4

Robert Gomer, "Remarks at the Unveiling of the James Franck Portrait," draft and photographic reproduction of portrait, 1983

Box 4

Folder 5-6

"Nuclear Effects on Electronic Spin Echoes," drafts and notes, ca. 1986

Box 4

Folder 7

"A Tribute to a Gifted Researcher, Teacher, Scholar and Friend," 70th birthday celebration for Jacob Bigeleisen, drafts, correspondence, notes and photocopies of photographs, 1989

Box 4

Folder 8-9

Printouts of computer data and calculations, ca. 1989

Box 5

Folder 1

Jim Hogan and Karoline Wielgoz, Nathan Sugarman memorial, photocopies of drafts, 1990

Box 5

Folder 2-3

Book chapter drafts, 1991

Box 5

Folder 4-5

"Spin Temperature and Negative Kelvin Temperature," drafts, notes and research material, 1992

Box 5

Folder 6

"In Memory of Gerhard L. Closs," drafts and memorial service program, 1992

Box 5

Folder 7-8

"Harold Clayton Urey, a Biographical Memoir" (with James R. Arnold and Jacob Bigeleisen), drafts and correspondence, 1993

Box 6

Folder 1-7

"Harold Clayton Urey, a Biographical Memoir" (with James R. Arnold and Jacob Bigeleisen), drafts, correspondence, research material and reprints, 1939-1995

Box 6

Folder 8

John Willard Stout memorial, draft, 2000

Box 6

Folder 9

Scientific puzzles, undated

Box 6

Folder 10-12

Drafts, notes, graphs and diagrams, undated

Box 6

Folder 13-14

Reprints, ca. 1940s

Box 7

Folder 1-9

Reprints and photocopies of articles, ca. 1940s-1990s

Box 7

Folder 10-15

Periodicals, reports and reprints, ca. 1930s-1950s

Box 8

Folder 1-15

Periodicals, reports and reprints, ca. 1940s-1990s

Box 9

Folder 1-2

Periodicals, reports and reprints, ca. 1940s-1990s

Series III: Correspondence

Box 9

Folder 3-4

1910s-1940s

Box 9

Folder 5

Mrs. J.S. West, 1940s-1960s

Box 9

Folder 6-7

1950s-1960s

Box 10

Folder 1

Invitations, 1960s

Box 10

Folder 2

1970s

Box 10

Folder 3

Brian R. Judd to Eugene Wong, regarding wager over discovery of Loch Ness Monster, 1982

Box 10

Folder 4

Brebis Bleaney, 1986-1995

Box 10

Folder 5

John A. Weil, 1991-1995

Box 10

Folder 6-7

1990s

Series IV: Organizations

Box 10

Folder 8

American Academy of Arts and Sciences, 1968

Box 10

Folder 9

American Association for the Advancement of Science, 1963

Box 10

Folder 10-11

American Chemical Society, 1958-1996

Box 10

Folder 12

American Physical Society, 1939

Box 10

Folder 13-14

Argonne National Laboratory, 1946

Box 10

Folder 15-16

Atomic Scientists of Chicago, ca. 1940s

Box 10

Folder 17

Balliol Society in North America, 1993

Box 10

Folder 18-19

Bulletin of the Atomic Scientists, 1946-1948

Box 11

Folder 1

European Academy of Arts, Sciences and Humanities, ca. 1980s

Box 11

Folder 2

Guggenheim Foundation, 1956-1974

Box 11

Folder 3

International EPR (ESR) Society, 1995

Box 11

Folder 4

Massachusetts Institute of Technology, 1949

Box 11

Folder 5

Kazan Physical-Technical Institute of the Russian Academy of Sciences, 1994-1995

Box 11

Folder 6-10

National Academy of Sciences, 1963-1998

Box 11

Folder 11-13

Ohio State University, 1938-1988

Box 11

Folder 14

Phi Lambda Upsilon, 1947

Box 11

Folder 15

University of Bristol, 1961

Box 11

Folder 16

University of Buffalo, ca. 1939-1940

Box 11

Folder 17-19

University of Chicago, ca. 1940s-1960s

Box 12

Folder 1-12

University of Chicago, 1959-1989

Box 12

Folder 13-16

University of Oxford, 1972-1995

Box 12

Folder 17

Wolf Foundation, 1996

Box 12

Folder 18-19

Unidentified, probably related to Bulletin of the Atomic Scientists, ca. 1940s

Box 12

Folder 20

Unidentified and unsorted material, ca. 1960s

Series V: Personal

Box 12

Folder 21-23

Childhood artwork, assignments and memorabilia, ca. 1920s

Box 13

Folder 1-5

Church and religious activities, writings and ephemera, ca. 1950s- 1960s

Box 13

Folder 6-12

Travel material, ca. 1960s-1980s

Box 13

Folder 13

Musical activities, programs, financial material and notes, 1946- 1997

Box 13

Folder 14

Correspondence, ca. 1960s-1990s

Box 13

Folder 15

List of publications, 1996

Box 13

Folder 16

Brebis Bleaney, 80th birthday celebration, correspondence, invitation and program, 1995

Box 13

Folder 17

Retirement from faculty, correspondence and memorabilia, 1983

Box 13

Folder 18-19

Photographs, ca. 1970s-1980s

Box 14

Folder 1

High school drafting assignment, ca. 1920s

Box 14

Folder 2

Clippings, publications and ephemera, ca. 1950s-1980s

Box 14

Folder 3

Ohio State University, Ph.D. diploma, 1937

Box 14

Folder 4

Office of Scientific Research and Development, Certificate of Merit, 1945

Box 14

Folder 5

Gordon Research Conferences, certificate in recognition of contributions as Chairman,
Conference on Magnetic Resonance, 1959