15/5/25 Liberal Arts and Sciences Chemistry John C. Bailar Papers, 1852-65, 1900-97

Box 1:

Oral History Tapes, Interview by Wyndham D. Miles, Oct. 9, 1964 Reel 1

> Dr. Bailar was born in Golden, Colorado, May 27, 1904. His father was a member of the chemistry staff of the Colorado School of Nines and they lived across the street from the campus. He went to his father's office frequently, even as a small boy, and began entering school. His father taught analytical, industrial, and general chemistry, a service course for students in mining and metallurgy. Both mother and father were graduates of University of Colorado. Bailar's father was the first graduate of Leadville High School in 1883 - 3 people in the class but his name was the first in the alphabet so he was the first graduate. He worked on the farm and as a stone mason and did various things; was 32 years old when he married Bailar's mother who was 25. She had been to a normal school but neither had been to a college. They were living in Glenwood Springs at the time and his father was still working on the farm. His mother thought if they saved their money for 4 or 5 years they could both go to college, but Bailar's father was not convinced until one day he overheard someone say that the second semester was about to start. So he announced to his wife that they were going to college now; they started in January 1898 and 3 1/2 years later both graduated. Bailar's father taught science in the Cripple Creek High School for 2 years and then went to the School of Mines as Assistant Professor of Chemistry; stayed there until 1918 when he left to become research chemist for the Great Western Sugar company in Denver, but they continued to live in Golden......000-039

> Recollections of "growing-up years" and time spent with his father - who really was Bailar's first teacher - talking about chemistry and chemical formulas. His introduction to the Journal of Chemical Abstracts...039-093

Bailar took chemistry in Golden High School but didn't enjoy his teacher - had biology with him the year before - although the course probably systematized Bailar's thinking about chemistry. He graduated from high school in the spring of 1920 along with his sister who was 2 years older, and they both got scholarships (\$10.00 a quarter) to the University of Colorado at Boulder where they enrolled that fall.......093-145

Bailar's courses in college; majored in chemistry. Professor John B, Eckley (Ph.D. in Holland, Swedish), head of the department, gave the lectures and professor Horace von Valkenburg taught qualitative analysis. Bailar later did his master's thesis with von Valkenburg and they published a paper together. Bailar had very good teachers throughout his college years at the University, where he stayed for another year and took his master's degree (History of Chemistry, 185-88).......145-191

207-227

352-374

- Laboratory and library facilities at the University were quite adequate at that time (changes in chemistry)......227-254
- Bailar's high school days were very productive but he was not happy; he was younger than most of the students, his parents very strict, he studied very hard and didn't have much time to play......254-280

Educational background of some of Dr. Bailar's teachers........331-352

- A year later Dr. Bailar went to Michigan on a fellowship and worked with professor Moses Gomberg. He stayed 3 years and had a teaching fellowship for the other 2 years. Took his doctor's degree in 1928......374-377

Impressions of	Professor M	loses Gom	berg	(Russi	an born), one o	f the worl	ld's	great	chemi	ists
(taught	beginning	organic)	and	from	whom	Bailar	learned	a	great	deal	of
technique			377-455								

- While at Michigan, Dr. Bailar lived at the Alpha Chi Sigma house for the first 2 years and the third year lived with Dick Clarkson. They had a room in a private house but took their meals at the fraternity...535-565

Reel 2

- Dr. Bailar's administrative duties at Illinois: a separate building was constructed for elementary and sophomore chemistry called the Chemistry Annex and under the guidance of Professor Hopkins, Bailar was administrative officer in all of the general chemistry. When Hopkins retired 10 years later, Bailar also took over Hopkins' work as head of the Inorganic Division which included the general chemistry.......7-25
- In 1937, Dr. Bailar was asked to be secretary of the Chemistry Department. He was assistant to Professor Roger Adams who was Head, and Bailer had charge of the summer session, machine shop, placement work, etc. He did placement work for 15 years and in this capacity made lots of friends in the chemical industry (placed students 200 a year).......26-49
- As the department grew, Dr. Bailar realized he had to decide between being a placement officer or a chemist he couldn't do both. He had become involved with ACS activities by then and so he asked to be relieved of duties other than teaching and committee assignments......50-60
- Dr. Bailar's ACS activities: secretary, vice-chairman, chairman, and councilor of the Local

Discussion about publishing the Journal of Inorganic Chemistry...120-157

- Dr. Bailar spent most of his time, while president, on policy decisions, attended meetings of councils and board of directors, the publications conference each summer, gave lectures at local sections, etc. professor Therald Moeller and Dr. Bailar were instrumental in starting the division of Inorganic chemistry, which numbered 440 members to start with...158-190
- Dr. Bailar's philosophy of science.....246-284

Coordination Chemistry, Stanley Kirkschner, ed. (New York, 1969) papers presented at a 65th Birthday Symposium honoring J. C. Bailar. Videotaped Autobiography Interview, June 1988

John Bailar talks about his youth, academic work at Colorado and Michigan, isomer research coordination chemistry, research and teaching, three former students became ACS presidents.

Peoria Soybean laboratory wanted to remove bitter taste; platinum complexes for hydrogenation were investigated, 18 to 20 papers published in 3 to 4 years.

Cobalt and platinum

I request past doctoral students from former students in Japan.

I had to retire at 68. I love to teach.

Prof. B. Smith Hopkins retired and invited JB to help him on the 4th edition of a text.

I got 25% to 55% of the royalties. I started to write a general chemistry text, which eventually required four authors. The publisher then hired a style writer and a problems writer.

No you have to read reviewers comments, which is often a waste of time.

B. Smith Hopkins was professor of inorganic chemistry. Primarily a teacher, he did rare earths research. He taught classics and coached football in college. His degree was in physical chemistry at Johns Hopkins.

Illinois offered \$2100 and I accepted. "I never regretted it" Michigan Professor Willard pushed JB for the job Hopkins offered. Willard was a friend and associate.

Moses Gomberg was a Russian immigrant. Modest and shy he only took three graduate students and saw us every two or three hours. My research was on free radicals. I left organic chemistry. He was a great laboratory technician. Three faculty supervised all doctoral students.

I arrived by train from Peoria. Called on Roger Adams and B. S. Hopkins, who explained how to succeed in the department. I supervised general freshman chemistry in the Chemistry Annex at age 25 - "a lucky break". I continued for thirty years. Handled placement work for 14 years. I worked from 8 to 5 and 7 to 11. Placement led to wonderful friendships.

Accreditation teams.

Taylor-Hickey Family letters, 1852-57, 1900

Owen Hickey, Gunner, HMS Excellent, Portsmouth to Brother & Sister, July 15, 1852

Henry Wm. Taylor (NY, NY) to Sister Mary (IN), Aug. 10, 1854 about moving family to Indiana

Ellen Hickey (Dumfries, Scotland) to Henry Taylor (NY, NY)

Ellen Hickey (Dumfries, Scotland) to Sister Mary Hickey, Aug. 28, 1857

Mary Ellen Hickey to George P.

Taylor Lot Diagram, Old Cemetery, Montmorency, IN, ca. 1900

Civil War Letters, Manson Martin, Co. C, 72nd Indiana Volunteers Cavalry, 1862-65

Manson Martin (Bowling Green, KY) to Anna Hunten, mother (Lafayette, IN), Nov. 5, 1862

Marched here from Frankfort, We have been on the move for two months and almost captured Morgan. We have crackers, fat meat, coffee, sugar and beans.

Manson Martin (Scottsville, KY) to Mother, Nov. 15, 1862

We drill during the day. Our regiment is down to 500. We are 7 miles from the Tennessee line. We marched 800 to 1000 miles in 8 weeks.

Manson Martin (Near Murphreesboro, TN) to Mother, May 17, 1863

The letter I got from Mary did me as much as a good sermon.

Manson Martin (in the field) to Mother, June 11, 1864

We are guarding the left flank. We repulsed an attack 2 weeks ago. They lost 400. We were behind breastworks. We are 2 miles from Big Shanty where we had a fight on the 8th. We took 4 lines. A shot missed my foot. We must flank rebel positions.

Mason Martin (Near Atlanta, GA) to Mother, Aug. 10, 1864

Fighting on the right, but our division is not engaged.

Mason Martin (Near Atlanta, GA) to Mother, Aug 18, 1864

Send a pencil. We are writing in camp.

Mason Martin (Near Nashville, TN) to Mother, Jan. 12, 1865

We leave today, I sent a fringe from our battle flag.

Mason Martin (Gravel Springs, AL) to Mother, Feb. 27, 1865

Regiment moving out, good rations, hunting.

Mason Martin (Near Eastport, MS) to Mother, March 20, 1865

We leave soon. We captured a cook in Mississippi in a raid in the winter of 1863-64. He will stay with us.

Listed Relatives and Associates

Emma Martin Letters, March 1900-June 1901

Emma Martin Siege Diary, March 29, 1900-May 24, 1901

Emma E. Martin's Siege Diary, 117 page typescript, Fukuoka, Japan, May 24, 1901 concerning events from Emma and Lizzie Martin's departure from Otterbein, Indiana on March 29, 1900

March 30 Shopping in Chicago and visit to Chicago Theological Seminary. Religious meetings and train trip to the west.

April 3 Along the Platte River. Sightseeing in San Francisco

April 7 Departure on the sailing ship S. S. china, Seasickness

April 15 Honolulu. Left April 16. Storms

April 27 Yokohama (p. 18)

Sightseeing in tokyo, Visit to YMCA building and Palace grounds

April 28 Went on the "China" to Kobe

April 29 Nagasaki

May 3 Shanghai. shopping for Chinese books

May 6 departure for Tientsin on a steamer

Many travel references to Mr. Walker and J. Victor Martin. Chefoo (p. 28)

Arrival at Methodist compound in Tientsin.

May 12 Visit to mission hospital. Patients studying Chinese with Wang. Switched

to Mr. Li Tour of the city wall May 20 Arrived in Peking, mission meeting Attack while riding with Dr. Lowrie (p. 38) May 28 Rioting by Chinese mobs May 30 300 American marines arrive at legation Chinese Christians seek protection Tientsin Methodists come to Peking for conference Boxers (p. 42) June 5 Transportation confiscated. Unsuccessful attempt at evacuation by train to Tientsin. Crowds of chinese. Deserting servants. Refugees flee to the mission compound. The Martin girls are among eight medical missionaries. Church is barricaded and fortified. Missionaries armed. Rumors. Siege. Fires. Comparison of empress Dowager and Nero Boxer noise. Property loss. June 17-19 Siege continues. Move to the british legation (p. 58) Gunfire at night June 21 Allied troops retake some of the legations June 24 Emma Martin worked in military hospital under fire. Tending wounded soldiers. Medical care. steady firing all day June 27 June 28 "a bullet storm all day" (p. 68) Germans give up place on the wall. Sewing sandbags. July 1 Recapture of a barricade July 3 Cannonading all day July 5 July 8-9 Flies and fleas July 13-14 Chinese attacks on legations, wounded men. (p. 79) July 16 Rainy day. Military funeral (p. 82) July 19 Siege nears an end. Chinese newspaper accounts (p. 85) "Peking Siege Song" (p. 91) Very heavy firing last night (p. 96) August 10 Tours of wall and barricades "The holding of this place is more to the credit of the Japs than any one else" (p. 98) The firing was heavy all night (p. 100) August 14 Arrival of the relief troops (p. 102) Mine beneath legation (p. 108) August 18 Meeting at the mission ruins

August 21 Departure fi Diary Notes, May 20, 1900-July 30, 1901

Departure from Peking

Box 2:

Lizzie & Emma to Home from Tientsin, Sept 22-Nov. 24, 1901
Jan. 1-26, 1902
Feb. 2 - March 23, 1902
April 26 - July 10. 1902
Aug. 2-24, 1902
Sept. 11 - Dec. 28, 1902
Emma Martin, Tientsin China Clinic Photograph, 1902
Emma Martin Letters, 1903-04
(3 folders), 1910-12
1916-17
1921-23

John C. Bailar interview by student (tape cassette), April 18, 1980

- 1-150

 16 years ago I gave my last course. 1972 I retired and ceased teaching general chemistry. I was not involved with Plato. Our senior staff people gave the lectures. The lecturer's projected personality, interests, and enthusiasm is very important. I was not enthusiastic about television lectures. It's hard for students in a class of 300 to see the demonstrations. General chemistry used to concern the sources and uses of chemistry. Now freshmen study the theory of bonding. We discussed the cessation of importing sodium nitrate from Chile. Chemistry has an influence on our lives. General chemistry is not taught this way now. Texts do not cover the influence of chemistry. Applications can be discussed in sophomore organic chemistry.
- Very great changes in the methods of teaching since 1960. Old lecture and discussion approach died out about 15-20 years ago.
- Prof. Hopkins was in charge of general chemistry. We all felt that the Chemistry Annex has much more efficient use of space. In the Annex, about 80% of the space was used for instruction. Large rooms allowed more instructors and students to be in a room. I moved to the Annex and was there at 7:50 a.m. and 1 p.m. everyday. I enjoyed that.
- From 1937 to 1953, I handled all the placement work for the Chemistry Department.

 All levels of degrees and all areas. I tried to know their names, specialties, and interests. It's a wonderful way to make friends. You become the "father confessor". I don't know how I handled it all. I was a very busy and very happy person.
- World War II caused enrollments to decline, especially graduate students. Great hordes came back after war. They knew what they wanted and they worked

hard. We had a superior group for two or three years. A lot of war research on smoke screens and nerve gas went on here. Fortunately a gas that affected the eyes was not used. We made and shipped off great quantities of this gas. We developed a scattering phosphorous smoke screen. We developed a dense smoke based on ferrous oxide. When some went off by accident, we filled the whole Chemistry Annex with dense smoke and HCl fumes. We did not lose students to the draft. Things went along about the same in instruction. We have freshman students that now take subjects we used to teach to seniors.

- Textbooks have changed to lessen descriptive chemistry. Students now do not get knowledge of applied chemistry.
- Greek philosopher's statement about kindling a student's desire to learn. The desire must be aroused. Home economics and medical students sometimes do not understand the need for chemistry. Medical workers understand the importance of chemistry. Civil engineers don't understand the relevance of chemistry.
- Teachers are moving back from physical chemistry to descriptive chemistry.
- Freshman chemistry labs were not as effective as they should have been. With 2,000 students, you can't assign research problems. Everybody knows what is going on. I have never known just how to handle that problem. We used to assign extra work to those who got ahead. Some liked chemistry, others despised it. Small colleges have an advantage. 50 students in a class allows variety.
- I retired in 1972 and have kept my office. I keep busy at research and publish papers. I have Army Research Office money to study platinum atomic exchange. I still give ACS lectures outside. Each spring, I teach a two week course in Guanajuarto, Mexico.
- 75th Birthday symposium was conceived by my former graduate students. Their talks were distributed in a book. Outdoor party in our yard. It was like a 4-day circus. Last year, they had a reception at the ACS meeting in Hawaii. Japanese gave a scroll. My graduate students have been very loyal friends. 90 of my students took doctoral degrees with me. This is a "life long arrangement". You are always available.

Preview of "Chemistry" 2nd Edition by Bailar et al, 1984 MBU Videocassette of Bailar Twist and Ray and Dutt Twist - Chem School, Sydney Uni Bailar Coat of Arms Photograph of Unidentified People

Box 3:

John C Bailar Jr. Biographical Information Vitae and Bibliography of Publications Publications of John Bailar Jr. W.A. Noyes' 80th Birthday Celebration, 1937-39 Correspondence, 1940-91 Correspondence, 1950-91 (2 folders) Correspondence with John Mclean, 1960-62 Ogino Articles, 1961 Polarimeter Studies, 1961 Uden, 1964-65 Suzuki, 1964-66 Catalysts, 1965-73 American Chemical Society Mochida Letters and Articles, 1968-87 Bailar Symposium, 1969 Solid Phase Racemization, 1969

<u>Box 4</u>:

1970s

Brasted CV, 1970 Valent, 1970-71 Bruner, 1971 Catalytic Oxidation Drickamer Nomination, 1971 Journal Correspondence, 1971 Kyuno, 1971 Wood, 1971-81 Kleinberg Nominations, 1971-83 Correspondence, 1971-88 Baringer, 1972 Burmeister CV, 1972 Hydrogenation of Soybean Oil Patent, 1972-1974 Chugaev, 1973 Journal Articles - American Chemical Society, 1973 Kauffman, 1973 Din, 1973-76 Morita Letters and Articles, 1973-84 Report on Students, 1974-76 Boucher, 1974-85 Departmental, 1974-87 Kasenally, 1976

Itatani, 1976-81 Kyuno, 1976-86 Vassilian, 1977-80 Svoboda, 1978-83 Kutal Letters and Papers, 1978-84 Uehara Letters and Articles, 1978-85 Burke, 1979

Eichhorn Nomination, 1979-80

Wagner, 1979-80

Noji Letters and Articles, 1979-81

Cancer Research, 1979-85

Richard Lawrence on Berzelius Project and Philology, 1979-88 1980s

Dial Club, 1980

Fry Report, 1980

Busch Nomination, 1980-81

Chen, 1980-83

Alumni Affairs, 1980-84

Fuji Papers, 1980-85

"Bailar" 3rd Ed., 1980-88 (3 folders)

Patel, 1981-82

Reinbold, 1981-85

Brown Nomination, 1981-86

Oritz and Marquez, 1981-88

Inorganic Division, 1982

Tayim, 1982

Boston, 1982

Suib, 1982-1985

Thesis Candidates, 1982-89

Yoshikuni, 1982-1989

Das Sarma Papers, 1983-86

Mexican, 1983-91

Academic Press, 1984

Encyclopedia, 1984

<u>Box 5</u>:

Kirschner Nomination, 1984 Fujiwara, 1984-85 Interrante, 1984-85 Banerjea, 1984-86 Undergraduate Research, 1984-88 Sievers, 1985-88 Lecture Tours, 1985-89

Division of Inorganic Chemistry, 1986

Serkos Paper, 1986

Accounts, 1989-91

Basolo Nomination, 1990

Hydrogenation Lab

Quagliano Nomination

Schaap Research

Class Notes

Russian Lecture Poster

Projection Slides (2 folders)

Abstracts of Lectures

- L1 Current Research in Coordination Chemistry, 1964
- L2 Developments in Stereochemistry of Complexes, 1967
- L3 Evaluation of Research from the Viewpoint of a University Professor, 1964
- L4 Isomerism, 1948-90
- L5 International Chemistry, 1967
- L6 Research on the Borderline, 1966-88
- L8 Inversions and Rearrangements, 1967
- L9 Structure of Dye Lakes, 1958
- L10 Some Developments in Stereochemistry, 1966-76
- L11 Selective Hydrogenation, 1969-78
- L12 Mechanisms, 1949
- L13 Modern Inorganic Syntheses, 1963-64
- L14 Reactions in Inorganic Complexes, 1954-84
- L15 Development of Specific Hydrogenation Catalyst, 1965-67
- L16 Coordination Polymers, 1956-80
- L17 Phi Beta Kappa Address and Publications
- L18 Discoveries of Dmitri Mendeleev
- L19 The Nature of Ions in Solutions
- L20 Unusual Aspects of Inorganic Chemistry, 1955-87
- L21 Some Old, But Unsolved Problems, 1969-73
- L24 Industrial Applications of Complexes, 1975
- L25 Topics in Coordination Chemistry
- L26 "A Chemist's Tour", Iron Curtain Countries
- L27 Structural Problems in Complex Ions, 1959
- L28 Rewards of Scholarship, 1958-60
- L29 Wyoming Lecture History of Coordination Theory, 1970
- L30 Trends in Inorganic Chemistry, 1975
- L31 Stereospecificity
- L32 American Chemical Society
- L33 Variations in the Prices of Metals, 1933-63
- L34 Research in Industry, Government, and University, 1958
- L35 Oxidation Reduction of Metal Ions in Complexes, 1959
- L36 Problems in Teaching Chemistry, 1956-58

- L37 Russia Revisited, 1970
- L38 Balancing Equations
- L39 Coordination Compounds in Biochemistry, 1970-82
- L40 Thoughts on Research, 1968-83
- L41 Value of Undergraduate Research, 1973
- L42 Olga and Her Friends
- L43 Aspects of Inorganic Chemistry, 1962

<u>Box 6</u>:

- L44 Physical Inorganic Chemistry Reed College, 1967
- L45 Reactions in Inorganic Complexes
- L48 Expanding Universe of Chemistry
- L49 Walden Inversions in Reactions of Cobalt Complexes, 1965
- L50 The College Student in the Scientific Age, 1966
- L51 Metal-Metal Bonds
- L52 Alfred Werner
- L53 Current Trends in Inorganic Chemistry, 1985-88
- L54 Crown Ethers, 1974
- L55 Preparations and Properties of Complexes of High Ionic Charge, 1974
- L56 Heterogenizing Homogenous Catalysts
- L57 Kyushu Lectures, 1974
- L58 Pullman Lectures Field of Coordination Compounds
- L59 Fundamentals of Coordination Chemistry
- L60 Alfred Werner, 1984
- L63 Trends in Inorganic Chemistry, 1981
- L64 Pensacola, 1979
- L65 History of Chemistry
- L66 Recent Developments in Stereochemistry of Coordination Compounds, 1980
- L67 Marcel Symposium, 1981
- L68 Work on Platinum Complexes, 1982
- L69 Up to Date Industrial Processes
- L70 Opportunities for Chemists, 1983
- L71 Stereochemistry of Coordinating Compounds, 1984
- L73 Chemistry as a Science and as a Profession, 1985
- L74 Preparation of Complexes, 1985
- L75 How Theories are Formed and Changed
- L76 Uses if Complexes and Complexing Agents
- L77 Reactions in the Solid State
- L78 Shapes of Complexes (Molecules or Ions)
- L79 Scientific Discovery/ Coordination Chemistry in the USA
- L80 Stereochemistry of Coordination Compounds of Platinum
- L81 Chemistry of 1, 3 Diketone Complexes
- L83 Some Current and Projected Research

Lecture Slide Material, 1973-1988 Mexican Course, 1976-1980 Chemistry 315, 1948-55 Chemistry 408, 1959-71 (2 folders) Chemistry 408 Lecture Notes, 1969 Lectures on Coordination Chemistry Chemistry 115, 1939-43 Chemistry 16 Lectures, 1943-44 Chemistry 106A, 1943 Mobil Socony Lectures, 1943-44 Chemistry 408 and 105B Dissertation and Thesis Ph.D. Students of J.C.B. Jr. 1930s Ellis Reich Thesis, 1931 Notes on Theses, 1931-34 Inorganic Bachelor's Theses, 1931-38 Organic Bachelor's Theses, 1931-38 Box 7: Robert Wilson Auten Thesis, 1933 The Walden Inversion, 1933-35 Clarence A Stiegman Master's and Doctor's Thesis, 1934 Leallyn Clapp Thesis, 1939 Mark Woyski Thesis, 1939 1940s Mark Woyski Master's Thesis, 1942 Charles R Hance Thesis, 1943

Eugene K Maun and Matthew G Herda Thesis, 1943-45 John Arthur Mattern Master's and PhD Thesis, 1946 Clayton F Callis Master's Thesis, 1946 William Barnes Thesis, 1949 Electrochemical Research, 1949-51 1950s Walter H Triebel Research Report, 1951

Robert L Rebertus Master's Thesis, 1952 Robert L Rebertus Master's Thesis, 1953 William J Grzanich Thesis, 1956 Wilma J Hickman Thesis, 1956 Martha H Moraghan Master's Thesis, 1958 1960s

Philip E Nipcon Thesis, 1963

Ronald E Highsmith Thesis, 1963 Otto B Weinert Master's Thesis, 1964 David L Ostfield Jr. Thesis, 1964

1970s

Linda B Uthoff Thesis, 1973

Schabinger Thesis, 1974

Wood Thesis, 1989

Sinwell Thesis, 1974

Sinwell Master's Thesis, 1975

1980s

Fred Fry Research Report, 1980

Duane E Westerberg Thesis, 1982

Donald R Anderson Thesis, 1983

Hutchinson Thesis, 1983

Robert G Brown Thesis, 1983

Louis P Rector Thesis, 1983

David A Westerberg Thesis, 1983

Brian J Love Thesis, 1984

Dr. Paul E Reinbold Research Report, 1985

Michael J Benac Thesis, 1986

Mueller Thesis, 1987

Edward B Sweet Thesis, 1987

Andrew J Proctor Thesis, 1988

Elizabeth A Skach Thesis, 1990

Robert L Rav Naval Research Contract

"A Study in Optical Activity" by Kelly Fitz

Research

John Bailar Sr. Lab Manuals

Draft of Master's Thesis, 1925

Master's Thesis University of Colorado, 1925

Abstract of PhD Thesis, 1928

Notes

Research Notebook

Structure of Simple Inorganic Molecules - Notebook

Chemistry 101 Notebook, 1932

Notebook, 1942

Naval Research Contract, 1956

Naval Research Final, 1956

Polymerization through Coordination, 1957

High Polymeric Materials, 1957-63 (1 folders)

Box 8:

High Polymeric Materials, 1957-63 (10 Folders)

Air Force Contract Quarterly Report, 1958

Oil Soluble Complexes, 1958

National Science Foundation Research Proposal, 1962-87 (3 folders)

Metallurgy of Copper, 1965-78

Walden - Boston Report, 1973-82

Asymmetric Cancer Drug, 1975

Arthritis, 1978-79

Research Money, 1978-81

Hydrogenation Research Proposal, 1978-81

Cancer Screening Tests, 1978-87

Application for Public Health Service Award, 79

Walden Inversion, 1979

Grant Contracts, 1979-81

Solid State Research Proposal, 1979-84

Inorganic Syntheses, 1980-88

Application for Public Health Service Award, 1981

Petroleum Research Fund, 1981-82

Moveable Equipment Inventory, 1982

Cancer Research, Experimental, 1983

Hutchinson, 1983

Bioinorganic, 1984

Solid State ACS, 1984-85

Solid State Proposal - Army

Georgiadis Application, 1985

Interpretations of Cancer Research Data, 1985

Shapes of Molecules, 1987

Application, 1988

Cabot Correspondence, 1989

40 Years of Industrial Research

Isomerism

Stereochemistry of Bailar Inversions by Jackson

8 Coordination

Notebook

Presentation Posters

Box 9:

Organic Nomenclature and Drawings (2 folders)

Publications

General Chemistry for Colleges 5th ed, 1956

Quimica Basica, 1968

1928-85 (28 folders)

Review on 1st Edition, 1955

Das Sarma and Bailar Corrections

Some Trends in Inorganic Chemistry, 1979
Thoughts on Chemistry, 1982
Kasowsky II - Steric Effects, 1984-91
Articles to Write, 1984-88
Article Reprints, 1985-94
Textbook Manusript Chapter Summaries
Coordination Chemistry Review, 1988-90
India Article, 1989
Coordination Chemistry Review Articles
First Year Textbooks, 1990-93
Poetry and Science
Why and How to Teach Descriptive Chemistry
Kasowsky III, 1997

Awards

National Research Council Award Certificates, 1959-66 Professional Awards and Correspondence, 1959-85 1966-1988 (2 folders)

Box 10:

UCEB Chairman, 1968-69 (plaque) 20th Anniversary ACS Award, 1972, 1984 (plaque) 45 Years of Service, 1988 (plaque)