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

<u>Box 1</u>:

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

<u>Reel 1</u>

- 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'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

- 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

- 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

- 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

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

<u>Coordination Chemistry</u>, 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 ref	erences to Mr. Walker and J. Victor Martin. Chefoo (p. 28)
Aı	rival at Methodist compound in Tientsin.
May 12 V	Visit to mission hospital. Patients studying Chinese with Wang. Switched
to	Mr. Li Tour of the city wall
May 20 A	Arrived in Peking, mission meeting
At	tack 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.	
Cı	owds of chinese. Deserting servants. Refugees flee to the mission
	compound.
Tł	e Martin girls are among eight medical missionaries. Church is
	barricaded and fortified.
Missionaries armed. Rumors. Siege. Fires.	
Co	omparison of empress Dowager and Nero
Bo	oxer noise. Property loss.
June 17-1	9 Siege continues.
Μ	ove to the british legation (p. 58)
Gi	infire 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.
June 27	steady firing all day
June 28	"a bullet storm all day" (p. 68)
July 1	Germans give up place on the wall. Sewing sandbags.
July 3	Recapture of a barricade
July 5	Cannonading all day
July 8-9	Flies and fleas
July 13-14	4 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)
August 10	Very heavy firing last night (p. 96)
	Tours of wall and barricades
	"The holding of this place is more to the credit of the Japs than any
	one else" (p. 98)

August 14 The firing was heavy all night (p. 100)

Arrival of the relief troops (p. 102) Mine beneath legation (p. 108) August 18 August 21 Departure from Peking Diary Notes, May 20, 1900-July 30, 1901

<u>Box 2</u>:

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.
- 151-196 Very great changes in the methods of teaching since 1960. Old lecture and discussion approach died out about 15-20 years ago.
- 197-249 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.

- 283-379 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.
- 380-402 Textbooks have changed to lessen descriptive chemistry. Students now do not get knowledge of applied chemistry.
- 403-455 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.
- 456-465 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.
- 506-547 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.
- 548-595
 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

<u>Box 3</u>:

Biography John C Bailar Jr. Biographical Information Vitae and Bibliography of Publications Publications of John Bailar Jr. Correspondence 1930s W.A. Noyes' 80th Birthday Celebration, 1937-39 1940s 1940-91(3 folders) 1950s Rules for Inorganic Nomenclature, 1954-56 1960s 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

<u>Box 7</u>:

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)

<u>Box 8</u>:

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

<u>Box 9</u>:

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)

<u>Box 10</u>:

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