

IOWA STATE UNIVERSITY

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**RS 13/6/20**

**Robert J. Angelici (1937- )**

**Papers, 1959-2008, undated**

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Department at least two working days in advance.*

**Descriptive summary**

creator: Angelici, Robert J. (1937- )  
title: Papers  
dates: 1959-2008, undated  
extent: 19.5 linear feet (15 records center cartons)  
collection number: RS 13/6/20  
repository: University Archives, Special Collections Department, Iowa State University.

**Administrative information**

Open for research.

access: This collection is stored offsite. Please contact the Special Collections Department at least two working days in advance.

publication rights: Consult Head, Special Collections Department

preferred citation: Robert J. Angelici Papers, RS 13/6/20, Special Collections Department, Iowa State University Library.

## Biographical note

Robert Joe Angelici was born to Joseph and Alma Marie Precht Angelici on July 29, 1937, in Rochester, Minnesota. He graduated from St. Olaf College with his B.A. (1959) in chemistry and received his Ph.D. (1962) in inorganic chemistry from Northwestern University. As a National Science Foundation Postdoctoral Fellow (1962-1963), he completed research on organometallic chemistry at the University of Munich in Munich, Germany.

Angelici joined the Iowa State faculty as Instructor (1963-1965) of inorganic chemistry. One of his earliest teaching projects was to develop an inorganic laboratory course for undergraduate students. His book *Synthesis and Technique in Inorganic Chemistry* (1969; call no. GD151.An43s) was inspired in part by the experiments he developed for this course. Several editions later, this book remains a primary resource for college and university inorganic laboratory courses. Angelici was promoted to Assistant Professor (1965-1968), Associate Professor (1968-1971), Professor (1971-1987), and Distinguished Professor (1987-2007). He also served as Chairman (1977-1981) of the Department of Chemistry. Upon his retirement he was named Professor Emeritus.

The majority of Dr. Angelici's research is concentrated within the fields of organometallic and bio-inorganic chemistry. He was among the first inorganic chemists to enter the field of bio-inorganic chemistry. His research has been published in more than three hundred papers and articles in chemical journals and has been presented at many national and international meetings.

In 1970, Angelici was awarded the coveted Sloan Research Fellowship which provided him with the monetary resources necessary to carry on his research at an early stage in his career. The following year, he received the John A. Wilkinson Teaching Award (1971). Angelici also received the Outstanding Teacher Award (1978) and the Margaret Ellen White Graduate Faculty Award (1988) from Iowa State. He was awarded the Governor's Science Medal (1989) and more recently the American Chemical Society honored him with their Award for Distinguished Service in the Advancement of Inorganic Chemistry (2006).

Robert Angelici is married to Elizabeth Ann Hight of Athens, West Virginia, and is the father of two children, Scott and Karen.

## Collection description

The collection (1959-2008, undated) consists of biographical information, publications, correspondence, travel information, chemistry course information, and faculty meeting and conference notes.

The bulk of the collection is related to Angelici's teaching and research efforts at Iowa State. Publication files include copies of papers and articles on Angelici's research in organometallic and bio-inorganic chemistry, primarily in the areas of kinetics of metal carbonyls, kinetics of biologically related reactions, catalysis by gold metal, and electrochemical reduction of CO<sub>2</sub>. Course files consist of lecture notes from Iowa State chemistry classes taught by Angelici. There are also slides used during lectures and samples of exams given in different courses.

The rest of the collection consists of biographical information, correspondence, travel files, and notes. The biographical information includes news clippings, faculty information forms, and a professional biography of Angelici. Correspondence files contain letters between Angelici and students or other researchers regarding various topics of research. Travel files include travel itineraries, symposium and conference information, and some notes from conferences in Russia, Mexico, Korea and Taiwan, among other places.

## Organization

The collection is organized into three series:

[Series 1, Biographical Information and Professional Activities, 1961-2008, undated \(alphabetical\)](#)

[Series 2, Chemistry Instruction, 1963-2007, undated \(chronological\)](#)

[Series 3, Publications, 1962-2003, undated \(chronological\)](#)

[Series 4, Grants and Proposals 1959-1998, undated \(chronological\)](#)

**Description of series**

**Series 1      Biographical Information and Professional Activities      1961-2008, undated**

extent:            1.3 linear feet (1 records center carton)

description:    This series consists of biographical information, correspondence, travel files, and notes. The biographical information includes news clippings, faculty information forms, and a professional biography of Angelici. Correspondence files contain letters between Angelici and students or other researchers regarding various topics of research. Travel files include travel itineraries, symposium and conference information, and some notes from conferences in Russia, Mexico, Korea and Taiwan, among other places. The series is listed alphabetically.

**Container list**

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
13	30	Biographical Information	1970-2008, undated
8	42	Book Review, "Carbon Sulfides and their Inorganic and Complex Chemistry"	1977
13	1-2	Chairman, Division of Inorganic Chemistry (Proposals, Correspondence, Meeting Minutes)	1985
13	4	Chemical Engineering Review	1989-1990
12	30	Conference Programs	1963-1965
12	36	Congress (34th) of Pure and Applied Chemistry (IUPAC)	1993
13	24	Correspondence with Students in the Republic of China and Trip to China (1- 8x10" b/w, 7- 4x6" b/w photographs)	1980-1986
12	28-29	Correspondence, Former Students and Post Doctorates	1966-1982
13	10	Faculty Improvement Leave (Cambridge)	1993-1995
13	12	Faculty Improvement Leave (Santa Barbara)	1968-1969
13	7	GAANN Proposal – Biomass	2006
13	6	Graduate Admissions Committee	1969-1982
13	9	Graduate Students	1982-1984
13	14	<i>Inorganic Chemistry</i> , Chapter 2, "Stability of Coordination Compounds"	1969-1973
13	13	Inorganic Qualifying Diagnostic Exams	1963-1971

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
13	25	Meetings (6- 4x6" color photographs)	1986-1988
12	39	Meetings and Conferences	1981-1985
13	27	Monthly Research Reports	1961-1962
13	29	Notes, <sup>13</sup> CO Work on Mo(Co) <sub>3</sub> PNP	1973, undated
13	3	Officer Nomination and Symposium Planning Committee	1981-1985
13	8	Organometallics Journal	1987-1990
1	25	Professional Biography	1993
8	18	Review of "Carbon Sulfides and their Inorganic and Complex Chemistry"	1977
13	5	Safety Committee	1967-1981
13	11	Sciences and Humanities Faculty Development Committee	1983-1986
13	22	Slides Used in ACS National Meeting	1983
12	34	Trip to France	2001
12	37	Trip to Korea and Taiwan	1996
12	31	Trip to Mexico City	2003
12	33	Trip to National Taiwan University	1996
12	35	Trip to Russia	1998
12	38	Trip to South Africa	1992
12	32	Trip to South Korea	1996
14	35	Awards and Certificates	1988-1992
14	36	News Clippings: Amino Acids with Metal Complexes	1971
14	37	Faculty Improvement Leave	1986-1987
14	38	Correspondence: College Visits	1966-1980
14	39	Correspondence: College Visits	1966-1980
14	40	Correspondence: Meeting	1960-1980
14	41	Correspondence: College Visits	1989-1995
14	42	Faculty Meeting Notes	1977
14	53	Photo (1 Black and White photo)	1977

**Description of series**

**Series 2      Chemistry Instruction      1963-2007, undated**

extent:      7.8 linear feet (6 records center cartons)

description: This series contains lecture notes from Iowa State chemistry classes taught by Angelici. There are also slides used during lectures and samples of exams given in different courses. The series is listed chronologically.

**Container list**

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
3	20-21	Chemistry General Exams	1963-1976
4	3	Chemistry 101 and 105, General Chemistry	1964
1	14	Chemistry 102, General Chemistry	1964
4	2	Chemistry 102, General Chemistry	1964
1	15	Chemistry 203, Inorganic Chemistry	1965
4	1	Chemistry 101, General Chemistry	1966
4	4	Chemistry 101 and 102, General Chemistry	1967
3	22	Chemistry 101 and 105, General Chemistry	1967
1	16	Chemistry 506, Systematic Inorganic Chemistry	1968
1	12-13	Chemistry 309, Inorganic Chemistry Review	1968-1969
4	5	Chemistry 101, General Chemistry	1970
4	7	Chemistry 103, General Chemistry	1971
4	6	Chemistry 141, General Chemistry	1971
1	11	Chemistry 601, Selected Topics in Inorganic Chemistry	1971
4	8	Chemistry 147, General Chemistry	1972
1	10	Chemistry 507, Systematic Inorganic Chemistry	1972
4	9	Chemistry 147, General Chemistry	1973
1	9	Chemistry 507, Systematic Inorganic Chemistry	1973
1	8	Chemistry 601, Selected Topics in Inorganic Chemistry	1973
4	11	Chemistry 141, General Chemistry	1974
4	10	Chemistry 142, General Chemistry	1974
1	7	Chemistry 507, Systematic Inorganic Chemistry	1974

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
4	12	Chemistry 142, General Chemistry	1975
1	6	Chemistry 504, Organometallic Chemistry of the Transition Metals	1975
1	4-5	Chemistry 505, Physical Principles of Inorganic Chemistry	1975
4	13	Chemistry 140, Foundations of Chemistry	1976
4	14	Chemistry 148, General Chemistry	1976
1	3	Chemistry 302, Inorganic Chemistry	1976
1	2	Chemistry 302, Inorganic Chemistry	1977
1	1	Chemistry 504, Organometallic Chemistry of the Transition Metals	1977
1	17-18	Chemistry 504, Organometallic Chemistry of the Transition Metals	1979
4	16	Chemistry 177, General Chemistry	1982
4	15	Chemistry 178, General Chemistry	1982
1	19	Chemistry 501, Inorganic Preparations	1982
1	20	Chemistry 504, Organometallic Chemistry of the Transition Metals	1982
4	17-18	Chemistry 177, General Chemistry	1983
1	21	Chemistry 601, Selected Topics in Inorganic Chemistry	1983
1	23	Chemistry 500, Advanced Inorganic Chemistry	1984
1	22	Chemistry 504, Organometallic Chemistry of the Transition Metals	1984
4	19	Chemistry 179, General Chemistry	1985
1	24	Chemistry 500, Advanced Inorganic Chemistry	1985
2	8-9	Chemistry 500, Advanced Inorganic Chemistry	1986
2	7	Chemistry 504 (574X), Organometallic Chemistry of the Transition Metals	1986
2	6	Chemistry 601, Selected Topics in Inorganic Chemistry	1986
4	20-21	Chemistry 177, General Chemistry	1987
2	5	Chemistry 574, Organometallic Chemistry of the Transition Metals	1988
2	3-4	Chemistry 301, Inorganic Chemistry	1989
5	5	Chemistry 101X, Introduction to Careers in Chemistry	1990



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
5	4	Chemistry 167, General Chemistry for Engineering Students	1990
1	26	Chemistry 301, Inorganic Chemistry (1 of 2)	1990
2	1	Chemistry 301, Inorganic Chemistry (2 of 2)	1990
2	2	Chemistry 601, Selected Topics in Inorganic Chemistry	1990
2	10	Chemistry 301, Inorganic Chemistry	1991
2	11	Chemistry 301, Inorganic Chemistry	1992
5	1	Chemistry 164, General Chemistry	1993
2	12	Chemistry 506, Systematic Inorganic Chemistry	1993
2	14	Chemistry 506, Systematic Inorganic Chemistry	1994
2	13	Chemistry 601, Selected Topics in Inorganic Chemistry	1994
5	2-3	Chemistry 164, General Chemistry	1995
5	6-7	Chemistry 167, General Chemistry for Engineering Students	1996
2	16	Chemistry 506, Systematic Inorganic Chemistry	1996
2	15	Chemistry 574, Organometallic Chemistry of the Transition Metals	1996
2	17	Chemistry 402, Inorganic Chemistry	1997
2	18-19	Chemistry 506, Systematic Inorganic Chemistry	1997
2	23	Chemistry 402, Inorganic Chemistry	1998
2	21	Chemistry 550, Safety in the Chemical Laboratory	1998
2	22	Chemistry 574, Organometallic Chemistry of the Transition Metals	1998
2	20	Chemistry 601, Selected Topics in Inorganic Chemistry	1998
5	8-9	Chemistry 178, General Chemistry	1999
2	25	Chemistry 402, Inorganic Chemistry (1 of 2)	1999
3	1	Chemistry 402, Inorganic Chemistry (2 of 2)	1999
2	24	Chemistry 550, Safety in the Chemical Laboratory	1999
3	6-7	Chemistry 402, Inorganic Chemistry	2000
3	5	Chemistry 574, Organometallic Chemistry of the Transition Metals	2000
5	10-12	Chemistry 155, Foundations of Chemistry for Engineers	2001

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
5	13-14	Chemistry 167, General Chemistry for Engineering Students	2001
5	15-16	Chemistry 167, General Chemistry for Engineering Students	2002
3	9	Chemistry 574, Organometallic Chemistry of the Transition Metals	2002
3	2	Chemistry 574, Organometallic Chemistry of the Transition Metals (Problem Sets)	2002
5	18-19	Chemistry 167, General Chemistry for Engineering Students	2003
5	17	Chemistry 167, General Chemistry for Engineering Students (Administrative Files)	2003
5	20	Chemistry 178M, General Chemistry (Exams and Quizzes)	2003
6	1-2	Chemistry 178M, General Chemistry (Lecture Notes)	2003
3	3-4	Chemistry 601, Selected Topics in Inorganic Chemistry	2003
3	8	Chemistry 601 , Selected Topics in Inorganic Chemistry	2003
6	5	Chemistry 167, General Chemistry for Engineering Students	2004
6	4	Chemistry 167, General Chemistry for Engineering Students (Administrative Files)	2004
6	6-7	Chemistry 167, General Chemistry for Engineering Students (Lectures)	2004
6	3	Chemistry 167, General Chemistry for Engineering Students (Quizzes)	2004
3	10-11	Chemistry 574, Organometallic Chemistry of the Transition Metals	2004
3	19	Chemistry 574, Organometallic Chemistry of the Transition Metals	2004
6	10	Chemistry 167, General Chemistry for Engineering Students	2005
6	11-13	Chemistry 167, General Chemistry for Engineering Students (Lectures)	2005
6	8	Chemistry 167, General Chemistry for Engineering Students (Quizzes)	2005

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
6	9	Chemistry 167, General Chemistry for Engineering Students (Staff Meetings)	2005
3	12-13	Chemistry 301, Inorganic Chemistry	2005
6	14	Chemistry 167, General Chemistry for Engineering Students	2006
6	15	Chemistry 167, General Chemistry for Engineering Students (Quizzes)	2006
6	16	Chemistry 167, General Chemistry for Engineering Students (Staff Meetings)	2006
3	14-16	Chemistry 301, Inorganic Chemistry	2006
3	17-18	Chemistry 301, Inorganic Chemistry	2007
14	31	Chemistry 167, Class Notes 1/2	2002
14	32	Chemistry 167, Class Notes 2/2	2002
14	33	Course: Synthesis & Reactions of Organometallic Complexes Featuring a Double-Linked Dicyclopentadienyl Ligand	undated
14	34	Course: Sulfur Reduction in Gasoline & Diesel Fuels by extraction/absorption of Dibencothiophenes	undated
13	28	Slides, Bioinorganic	undated
13	21	Slides, Carbene	undated
13	16	Slides, Carbyne	undated
13	20	Slides, CO Substitution Kinetics in $M(CO)_4(N^N)$	undated
13	18	Slides, DiNC, DiCN	undated
13	17	Slides, $M(CO)_6$ and $Mn(CO)_5$ X-Substitution Kinetics	undated
13	26	Slides, $M-C\equiv O^+ + Nuc^-$	undated
13	23	Slides, Thermochemistry	undated
13	19	Slides, Thiocarbonyl	undated
13	15	Slides, $W(CO)_5SH^-$ , Gingerich	undated
14	1	Slides, Homo-HET Catalysis	undated
14	2	Slides, Soybean Fatty acid & Surface Studies	undated
14	3	Slides, Colorful Slides	undated
14	4	Slides, H+ Thermo	undated
14	5	Slides, HDS	undated

Box	Folder	Title	Dates
14	6	Slides, Carbynes	undated
14	7	Slides, Carbenes, Fe	undated
14	8	Slides, Carbenes W	undated
14	9	Slides, Carbenes Fe: TOP, Ma: Bottom	undated
14	10	Slides, Thiocarbonyl CS, Fe-Ru, Pt : Top	undated
14	11	Slides, Carbenes Pt: Top, Fe: Bottom	undated
14	12	Slides, Thioarbowl CS/W	undated
14	13	Slides, Thioarbowl	undated
14	14	Slides, Nucleophile Reactions of	undated
14	15	Slides, Nucleophile Reactions of	undated
14	16	Slides, Nucleophile Reactions of	undated
14	17	Slides, $CO + H_2NR \rightarrow (CO)_{10}$	undated
14	18	Slides, Nucleophilic Reactions	undated
14	19	Slides, ACS Inorganic Curriculum: Las Vegas	undated
14	20	Slides, ACS $DiNC \rightarrow DiCN$	undated
14	21	Slides, Gingerich	undated
14	22	Slides W.F. Coover, Used 47/72	undated
14	23	Slides, Kinetics/ $CpMN(CO_2)$	undated
14	24	Slides, Amino Acid Resolution	undated
14	25	Slides, Amino Acid Ester Hydrolysis + AA column resolution	undated
14	26	Slides, Metal Complex Catalysis of Amino Acid Ester Hydrolysis	undated
14	27	Slides, Metal Complex Catalysis of Amino Acid Ester Hydrolysis	undated
14	28	Slides, $M^{+N}$ Binding of Amino Acid & Peptides	undated
14	29	Slides, Ma Camphorquinone	undated
14	30	Slides, Nucleophilic Reaction of $CO + C \equiv N - R$ , Mix of Metal Systems	undated

**Description of series**

**Series 3      Publications      1962-2003, undated**

extent:      9.1 linear feet (7 records center cartons)

description: This series contains copies of papers and articles on Angelici's research in organometallic and bio-inorganic chemistry, primarily in the areas of kinetics of metal carbonyls, kinetics of biologically related reactions, catalysis by gold metal, and electrochemical reduction of CO<sub>2</sub>. The series is listed chronologically.

**Container list**

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
6	19	"Isomerism of Disubstituted Manganese Pentacarbonyl Bromide"	1962
6	21	"Metal Carbonyls. IV. Kinetics of the Reaction of Manganese Pentacarbonyl Halides with a Variety of Ligands"	1962
6	20	"Metal Carbonyls. V. Kinetics of the Reaction of Monosubstituted Manganese Pentacarbonyl Bromides with a Variety of Reagents"	1963
6	18	"New Cyclopentadienyl Complexes of Rhodium"	1963
6	22	"Preparation, Characterization, and Reactions of the Cis-Dihalotetracarboxylmanganate (I) Anions"	1964
6	17	"Kinetic Studies of Group VI Metal Carbonyl Complexes. I. Substitution Reactions of Dipyriddy Complexes of Chromium Hexacarbonyl"	1965
6	23	"Kinetic Studies of Group VI Metal Carbonyl Complexes. II. Substitution Reactions of Dipyriddy Complexes of Molybdenum and Tungsten Hexacarbonyls"	1965
6	26	"A Phosphine Derivative of Triiron Dodecacarbonyl"	1966
6	32	"Copper II Catalysis of the Hydrolysis of an Ester of Nitrilotriacetic Acid"	1966
6	25	"Infra-red Studies of Amine, Pyridine, and Phosphine Derivatives of Manganese Pentacarbonyl Bromide"	1966
6	24	"Kinetic Studies of Group VI Metal Carbonyl Complexes. III. Substitution Reactions of Molybdenum Hexacarbonyl"	1966

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
6	28	"Kinetic Studies of Group VI Metal Carbonyl Complexes. IV. Substitution Reactions of o-Phenanthroline Complexes of Chromium Hexacarbonyl"	1966
6	27	"Kinetic Studies of Olefin Substitution in Cyclopentadienyl-Manganese-Olefin-Dicarbonyl Complexes"	1966
7	4	"Equilibrium and Stereochemical Studies of the Interactions of amino Acids and their Esters with Divalent Nitrilotriacetate Complexes"	1967
6	30	"Infrared Studies of Amine, Pyridine, and Phosphine Derivatives of Tungsten Hexacarbonyl"	1967
6	29	"Kinetic Studies of Group VI Metal Carbonyl Complexes. V. Substitution Reactions of o-Phenanthroline Complexes of Molybdenum and Tungsten Hexacarbonyls"	1967
6	33	"Kinetic Studies of Group VI Metal Carbonyl Complexes. VI. Substitution Reactions of the Group VI Metal Hexacarbonyls"	1967
7	1	"Kinetics and Mechanisms of Substitution Reactions"	1967
7	2	"Mechanism of the Metal-Ion-Catalyzed Hydrolysis of Ethyl Valinate-and-Ethyl Leucinate-N, N-Diacetic Acids"	1967
7	5	"Metal Complex Catalysis of the Base Hydrolysis of Various Amino Acid Esters Coordinated to the Complex of Nitrilotriacetic Acid with Copper (II)"	1967
7	3	"Metal Ion Catalysis of the Hydrolysis of Some Amino Acid Ester-N, N-Diacetic Acids"	1967
6	36	"Preparation and Characterization of Mesitylene Tricarbonyl Molybdenum (0): An Experiment in Organometallic Chemistry"	1967
6	31	"Substitution Reaction of Trigonal Bipyramidal Complexes of Iron Pentacarbonyl"	1967
7	6	"A Thiocarbonyl Complex of Iron (II)"	1968
6	34	"Carboxamido Carbonyl Complexes of Manganese (I)"	1968
7	8	"Electron Impact Studies of Manganese and Rhenium Pentacarbonyl Halides"	1968
7	13	"Equilibrium Studies of Copper (II) Complexes of Iminodiacetates with Amino Acid Esters and the Kinetics of Ester Hydrolysis"	1968

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
7	12	"Equilibrium Studies of Phosphine and Amine Substitution Reactions of Tungsten Carbonyl"	1968
7	7	"Kinetic and Synthetic Studies of Olefin and Acetylene Complexes of Hexamethylbenzenetricarbonylchromium"	1968
7	10	"Kinetic Studies of Amine Substitution in Aminopentacarbonyltungsten (o) Complexes"	1968
7	9	"Kinetic Studies of Phosphite Ligand Substitution in o-Phenanthroline Complexes of Group VIB Metal Carbonyls"	1968
7	11	"Reactions of Cyclopentadienyliron Carbonyl Cations with Amines"	1968
6	35	"Solvent Effects on the Kinetics of Substitution Reactions of Nickel Carbonyl"	1968
7	15	"A New Synthetic Route to $[C_5H_5Fe(CO)_2(CS)][BPh_4]$ "	1969
7	14	"Reactions of Cyclopentadienyliron Tricarbonyl Cation with Hydrazines and the Azide Ion"	1969
7	16	"Stereoselective Interaction of Optically Active Amino Acids and their Esters with (L-Valine-N-Monoacetate) Copper (II)"	1969
7	17	"Synthesis and Reactions of Carboxamido Carbonyl Complexes of Rhenium (I)"	1969
7	19	"Kinetic Studies of the Reactions of Cyclopentadienyl Vanadium Tetracarbonyl with Lewis Base Ligands"	1970
7	18	"Reaction of a Cationic Cyclopentadienyliron Isocyanide Complex with Methylamine"	1970
7	23	"Reaction of Mechanism of Cyclopentadienyliron Tricarbonyl Cation with Cyanate Ion"	1970
7	20	"Reactions of the Cyclopentadienylruthenium Tricarbonyl Cation with Nucleophiles"	1970
7	43	"Carboxamido Complexes of Molybdenum and Tungsten. Alkyl Isocyanate Insertion into a Tungsten-Hydrogen Bond"	1971
7	26	"Metal Carbonyl Complexes of Adenine-like Ligands"	1971
7	21	"Metal-Ion Catalysis of Ethyl Oxalate Hydrolysis"	1971
7	41	"Reactions of Carboxamido Complexes with Halogens and Mercuric Chloride"	1971

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
7	25	"Stability Constants for Amino Acid Coordination by Substituted Diethylenetriamine Complexes of Copper (II) and the Kinetics of Amino Acid Ester Hydrolysis"	1971
7	24	"Stability Constants of N-Methyl and N-Ethyl-Substituted Diethylenetriamine Complexes of Copper (II)"	1971
7	22	"Syntheses and Reactions of Isocyanatopentacarbonyl-Rhenium (I)"	1971
7	42	"Alkylisocyanate Insertion into an Iron-Hydrogen Bond"	1972
7	38	"Carbamoyl and Alkoxy-caronyl Complexes of Transition Metals"	1972
7	39	"Carboxamido and Thiocarboxamido Complexes of Platinum and Palladium"	1972
7	40	"Carboxamido Complexes of (Arene)Tricarbonylmanganese (1+): A Correlation with Infrared Data"	1972
7	33	"Copper (II) Complexes of Glycylglycine and Glycylsarcosine and their Methyl Esters"	1972
7	27	"Partial Resolution of Amino Acids by Column Chromatography on a Polystyrene Resin Containing an Optically Active Copper (II) Complex"	1972
7	30	"A Convenient Synthetic Route to Complexes of the Types $(\pi\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2\text{X}$ and $(\pi\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2\text{L}^+$ "	1973
8	4	"Binding of Copper(II), Nickel(II), Zinc(II), and Cobalt(II) by 3-[(Carboxymethyl)thio]-L-Alanine and 3-[(2-Aminoethyl)thio]-L-Alanine"	1973
7	35	"Carbamoyl and Alkoxy-carbonyl Complexes of Manganese and Rhenium"	1973
8	1	"Chemistry of Thiocarbonyl Complexes of Chromium, Molybdenum, and Tungsten"	1973
7	32	"Copper (II)-Catalyzed Hydrolysis of the Methyl Esters of Glycylglycine and Glycylsarcosine"	1973
7	34	"Kinetic and Equilibrium Studies of Carbamoyl Complex Formation from Manganese and Rhenium Carbonyls"	1973
7	36	"Metal Ion Catalysis of S-Ethyl Thioxalate Hydrolysis"	1973
7	45	"Phosphorus-Nitrogen Donor Ligand Complexes of Chromium, Molybdenum, and Tungsten Carbonyls"	1973



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
7	37	"Stereoselectivity of N-Carboxymethyl-Amino Acid Complexes of Copper (II) toward Optically Active Amino Acids"	1973
7	44	"Steroselectivity of N-(2-Pyridylmethyl) and N-(6-Methyl-2-Pyridylmethyl)-L-Aspartic Acid Complexes of Copper (II) and Nickel (II) toward Optically Active Amino Acids"	1973
7	46	"Synthesis and Structure of Chloro(methoxaly) Bis(triphenylphosphine)-Palladium"	1973
7	31	"X-Ray Crystallographic Determination of the Molecular Structures of Bis-( $\mu$ -NN-Dimethyl/Thiocarbamoyl)-bis-(Chloro(Trimethylphosphite)Palladium (II))"	1973
9	10	"[(C <sub>5</sub> H <sub>5</sub> )Fe(CO) <sub>2</sub> (CS)]PF <sub>6</sub> and (C <sub>5</sub> H <sub>5</sub> )Fe(CO) <sub>2</sub> CS <sub>2</sub> CH <sub>3</sub> "	1973-1974
8	8	"Competitive Reactions of Coordinated Carbon Monoxide and Methyl Isocyanide with Amines"	1974
8	9	"Copper(II) and Zinc(II) Binding of Optically Active Dipeptides"	1974
8	7	"Copper(II) Complex Catalysis of Amino Acid Ester Hydrolysis: A Correlation with Complex Stability"	1974
8	3	"Crystal Structure of (N-Carboxymethyl-L-Valinato) Copper(II)"	1974
8	16	"End-to-End Bridging by the Thiocarbonyl Ligand. Complexes of the Type MC <sub>3</sub> SM"	1974
8	10	"Kinetic and Equilibrium Studies of Bi- and Tridentate Chelate Ring-Opening"	1974
8	17	"Ligand Reactions of Manganese Carbonyl Isocyanide Complexes with Amines"	1974
8	6	"Mechanism of Chelate Ring Opening in Metal Carbonyl Complexes"	1974
8	19	"Oxidative-Addition across a Carbon-Sulfur Bond: Platinum (0) Complexes with Ethylene Trithiocarbonate and Trimethylene Trithiocarbonate"	1974
8	2	"Proton Nuclear Magnetic Resonance Studies of Some Paramagnetic Nickel (II)-Amino Acid Complexes"	1974
8	5	"Stereospecific Introduction of Carbon Monoxide into Metal Carbonyl Chelate Complexes"	1974
8	14	"A Platinum(II) Complex Containing a Metallo-Dithiocarboxylate Ligand"	1975

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
8	15	"Alkoxalyl Complexes of Palladium(II) and Platinum(II)"	1975
8	13	"Metal Ion Catalyzed Racemization and $\alpha$ -Proton Exchange of N,N-Dicarboxylmethyl-D-Phenylglycine"	1975
8	12	"S-Alkylation and S-Acylation of the Thiocarbonyl Ligand in Metal Complexes"	1975
8	21	"Synthesis and Reactions of Cis- and Trans- $W(CO)_4(^{13}CO)(L)$ Compounds"	1975
8	11	"Synthesis of Carbene Complexes by Reaction of Platinum Thiocarbonyl and Thio Ester Complexes with Electrophiles"	1975
8	44	"Thiocarbonyl Complexes of Tungsten (0)"	1975-1976
8	23	"Electrophilic and Oxidative Addition Reactions of Tungsten Thiocarbonyl Complexes"	1976
8	25	"Organic Cyanate, Thiocyanate, and Selenocyanate Complexes of Chromium and Tungsten Carbonyls"	1976
8	24	"Preparation, Substitution Reactions, and Kinetic Studies of Chromium and Tungsten Thiocarbonyl Complexes"	1976
8	22	"Reactions of Tungsten Thiocarbonyl Complexes with Nucleophiles"	1976
8	27	"Stereoselective Binding of Copper(II), Zinc(II), Cobalt(II), and Ni(II) to the Optically Active Amino Acids $\beta$ -(2-Pyridyl)- $\alpha$ -Alanine and $\beta$ -(6-Methyl-2-Pyridyl)- $\alpha$ -Alanine, Analogs of Histidine and Phenylalanine"	1976
8	26	"Structure of Trans- $W(CO)_4(CNC_6H_{11})(CS)$ and a Correlation of $\nu(CS)$ Frequencies with C-S Bond Distances in Metal Thiocarbonyl Complexes"	1976
8	20	"Synthesis and Structure of Dicarboxyldi- $\eta$ -Cyclopentadienylbis( $\mu$ -Thiocarbonyl)Diiron, a Thiocarbonyl Analog of the Dicarboxyldi- $\eta$ -Cyclopentadienyliron Dimer"	1976
8	33	"A Mechanistic Investigation of the Decarbonyldimanganese-Catalyzed Carbonylation of Amines"	1977
8	31	"Crystal and Molecular Structure of an Organic Thiocyanate Complex: $(CH_3SCN)Cr(CO)_5$ "	1977
8	34	"Pentacarbonyliron-Catalyzed Carbonylation of Amines to Formamides"	1977

Box	Folder	Title	Dates
8	45	"Preparation of Manganese Pentacarbonyl Halides, $MnX(CO)_5$ ; X=Cl, I"	1977
8	29	"Preparation, Characterization, and Reactions of the Thiocarbonyl Complexes Dicarbonyl ( $\eta^5$ -Cyclopentadienyl)(Thiocarbonyl)Ruthenium (1+) and Dicarbonylbis( $\eta^5$ -Cyclopentadienyl)di- $\mu$ -Thiocarbonyl-Diruthenium"	1977
8	28	"Stereoselective Binding of Optically Active Amino Acids by Nickel(II) and Copper(II) Complexes of N-Carboxymethyl- $\beta$ -(2-Pyridyl)-L- $\alpha$ -Alanine"	1977
8	32	"Thioketone Complexes of Chromium, Molybdenum, and Tungsten Carbonyls"	1977
8	36	"Carbon-13 Nuclear Magnetic Resonance, Infrared, and Equilibrium Studies of cis- and trans- $W(CO)_4(CS)L$ Complexes"	1978
8	38	"Copper(II) Complex Catalysis of Amino Acid Ester Hydrolysis. A Correlation of Rates with Complex Stability"	1978
8	35	"Crystal and Molecular Structure of [ $\alpha$ -N-(o-Hydroxybenzyl)-L-Histidinato](L-Alaninato)Cobalt(III) Dihydrate"	1978
8	41	"Kinetic Study of Carbonyl Dissociation in $W(CO)_3(CS)(o$ -phen). Labilization by the Thiocarbonyl Ligand"	1978
8	43	"Mass Spectra of Organometallic Compounds. 7. Electron-Impact Study of Some Cyclopentadienylmetal Thiocarbonyl-Bridged Dimers"	1978
8	39	"Syntheses and Cleavage Reactions of Thiocarbonyl-Bridged $Cp_2Fe_2(CO)_3CS$ , and Preparation of the Carbene Complexes $CpFe(CO)C(N_2C_2H_6)SnPh_3$ and $[CpFe(CO)_2C(OMe)_2]PF_6$ "	1978
8	37	"Synthesis of Thiocarbonyl-Bridged( $\eta^5$ - $C_5H_5$ ) $_2Fe_2(CO)_3(CS)$ and Crystal Structure of an S-Alkylated Derivative"	1978
8	40	"Unusual Coordination of the $\alpha$ -Dioxime Ligand in Bis(Camphorquinone Dioximato)Nickel(II)"	1978
9	1	"Preparation, Structure, and Spectral Characterization of Bis[D- $\beta$ -(2-Pyridyl)- $\alpha$ -Alaninato] Cobalt(III), $Co(D-Pyala)_2^{2+}$ "	1979
9	3	"Reactions of the $SH^-$ and $S^{2-}$ Groups in $W(CO)_5(SH)^-$ and $\mu$ -S $[W(CO)_5]_2^{2-}$ "	1979

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
9	4	"Synthesis and Structure of ( $\mu$ -C <sub>5</sub> H <sub>5</sub> )W(PPh <sub>3</sub> )(CO)(CSPH): Transformation of a Thiocarbonyl Ligand into a Carbyne Ligand"	1979
9	2	"Synthesis of Cyclopentadienylcarbonyl (Dithiocarbene) Iron Cations and their Reactions with Amines"	1979
9	8	"Camphorquinone Oxime and Imine Complexes of Nickel(II) and Zinc(II)"	1980
9	7	"Chelating Bidentate Isonitrile and Nitrile Ligands and a Few of their Metal Complexes"	1980
9	14	"Coordination Chemistry of Bis( $\delta$ -Camphorquinone Dioximato) Nickel(II) and – Palladium(II). Reactions and Structural Studies of some M <sub>3</sub> Ag <sub>3</sub> Cluster Complexes of Camphorquinone Dioxime"	1980
9	18	"Molybdenum and Tungsten Complexes of Bidentate Bis(aryldiazenato) Ligands"	1980
9	5	"Novel Transition-Metal Complexes of Camphorquinone Dioxime Ligands"	1980
9	9	"Preparation and Spectral Characterization of Some Mixed-Ligand Cobalt(III) Complexes of the Form [Co(L-Pyala)(A)], A=L-Histidinate, L- or D-Aspartate, or Iminodiacetate"	1980
9	6	"Preparation, Structure, and Spectral Characterization of Bis[D- $\beta$ -(2-Pyridyl)- $\alpha$ -Alaninato] Nickel(II), Ni(D-Pyala) <sub>2</sub> "	1980
9	11	"Preparations and Spectral Characterizations of the $\beta$ -(2-Pyridyl)- $\alpha$ -Alanine Complexes: Trans-Amino Co(D-Pyala) <sub>2</sub> <sup>+</sup> , Racemic All-Cis-Co(D-Pyala)(L-Pyala) <sup>+</sup> , and Trans-Carboxylate Cr(D-Pyala) <sub>2</sub> <sup>+</sup> "	1980
9	17	"Synthesis and Metal Carbonyl Complexes of Cis, Cis-1,3,5,-Triisocyanocyclohexane, an Unusual Tridentate Ligand"	1980
9	34	"Synthesis and Reactivity of Dithiocarbene Complexes"	1980
9	15	"Synthesis and Spectral Characterization of the Mixed-Ligand Complexes [N-(2-Pyridylmethyl)-L-Aspartato][Amino Acidato] Cobalt(III), Co(PLASP)(AA)"	1980

Box	Folder	Title	Dates
9	12	"Synthesis, Spectral Characterization, and Molecular Structure of [N-(2-Pyridylmethyl)-L-Aspartato](L-Phynylalaninato)Cobalt(III) Trihydrate, [Co(PLASP)(L-Phe)]·3H <sub>2</sub> O"	1980
9	13	"Thiocarbonyl Anions: Preparation and Reactions of CpW(CO) <sub>2</sub> CS <sup>-</sup> and HB(pz) <sub>3</sub> W(CO) <sub>2</sub> CS <sup>-</sup> "	1980
9	16	"What is Happening in our Inorganic Laboratory Courses"	1980
9	24	"Preparation and Characterization of the Copper(II) and Zinc(II) Complexes of D-β-(2-Pyridyl)-α-Alaninate and their Condensation Products with Acetone"	1981
9	27	"Preparation of (η <sup>5</sup> -Cyclopentadienyl)Dicarbonyl[Tris(Organthio)Methyl]Iron Complexes and the Structure of Cp(CO) <sub>2</sub> Fe[C(SCH <sub>3</sub> ) <sub>3</sub> ]"	1981
9	25	"Preparation of Some Dithiocarbene Complexes, W(CO) <sub>5</sub> [C(SR) <sub>2</sub> ], and their Reactions with Nucleophiles"	1981
9	19	"Reactions of the Dithiocarbene Complex W(CO) <sub>5</sub> [C(SCH <sub>3</sub> ) <sub>2</sub> ] with Phosphines. Crystal Structure of a Phosphorane Produce W(CO) <sub>5</sub> [(CH <sub>3</sub> S) <sub>2</sub> C==PPh <sub>2</sub> (CH <sub>3</sub> )]"	1981
9	22	"Reactions of η <sup>5</sup> -C <sub>5</sub> H <sub>5</sub> (CO) <sub>2</sub> Fe[C(XR)YR] <sup>+</sup> Carbene Complexes, where X and Y are O, S, Se, and/or NR, with Amines"	1981
9	23	"Substitution and S-Alkylation Reactions of Thiocarbonyl-Bridged Cp <sub>2</sub> Fe <sub>2</sub> (CO) <sub>3</sub> CS"	1981
9	28	"Synthesis and Spectral Characterization of Fac- and Mer- [N-(Carboxymethyl)-L-β-(2-Pyridyl)-α-Alaninato](D-Threoninato)Cobalt(III) [Co(N-M-L-Pyala)(D-Thr)], and the Molecular Structure of the Mer Isomer"	1981
9	21	"Synthesis and Spectroscopic Study of η <sup>5</sup> -C <sub>5</sub> H <sub>5</sub> (CO) <sub>2</sub> [C(XR)YR] <sup>+</sup> Carbene Complexes, where X and Y are O, S, Se, and/or NR"	1981
9	20	"Synthesis, Reactivity, and Spectroscopic Studies of η <sup>5</sup> -C <sub>5</sub> H <sub>5</sub> (CO)(L)Fe[C(SCH <sub>3</sub> ) <sub>2</sub> ] <sup>+</sup> Carbene Complexes"	1981
9	26	"Thiocarbonyl Complexes of Cyclopentadienyltungsten and [Hydrotis(1-Pyrazolyl)Borato]Tungsten. Reactions at the CS Ligand Leading to Mercaptocarbyne and Isocyanide Complexes"	1981

Box	Folder	Title	Dates
9	29	"Kinetic Studies of the Reactions of the Carbene Complex $W(CO)_5 [C(SCH_3)_2]$ with Phosphines to Form Phosphorane Complexes $W(CO)_5[(CH_3S)_2C==PR_3]$ and the Synthesis of some Cyclic Phosphorane Complexes"	1982
9	31	"Lewis Acid Adducts of the Bridging Thiocarbonyl in $(\eta-C_5H_5)_2Fe_2(CO)_3(CS)$ "	1982
9	35	"Oxidative Conversion to a Terminal Carbene Ligand of a Bridging Carbene in a Dinuclear Iron-Cobalt Complex"	1982
9	30	"Synthesis and Spectral Characterization of the Mixed Ligand Complexes $[N-(Carboxymethyl)-L-\beta-(2-Pyridyl)-\alpha-Alaninato][Amino\ Acidato]Cobalt(III)$ , $Co(N-Cm-L-Pyala)(AA)$ "	1982
9	36	"Synthesis and Spectral Characterization of the Mixed Ligand Complexes $[N-(Carboxymethyl)-L-Histidinato][Amino\ Acidato]Cobalt(III)$ $Co(N-Cm-L-Hist)(AA)$ "	1982
9	32	"Synthesis of Chelating Bidentate Isocyano and Cyano Ligands and their Metal Complexes"	1982
9	37	"Synthesis of Cyclic Aminooxo- and Dioxocarbenes from Carbonyl Ligands in Complexes of Iron and Manganese"	1982
9	33	"Synthesis, Structure, and Reactions of 19-Electron $(\eta^5-C_5H_5)W(NO)_2(PR_3)$ Radicals"	1982
10	21	" $(\eta^5-Cyclopentadienyl)Tricarbonyl\ Iron(I)\ Cation$ , $(\eta^5-C_5H_5)Fe(CO)_3^+$ "	1983
10	1	" $^{13}C$ NMR Studies of the Carbamoyl Ligand in Organotransition Metal Complexes"	1983
9	40	"Expansion of the Three Membered Heterocycles to Five-Membered Cyclic Carbenes – Novel Reactions of Aziridine, Oxirane, and Thiirane with CO and CS Ligands in Iron, Ruthenium, and Manganese Complexes"	1983
9	39	"Iron(II) Complexes with the Chelating Bidentate Isonitrile Ligand DiNC"	1983
9	38	"Reactions of the $SH^-$ and $S^{2-}$ Ligands in $W(CO)_5(SH)^-$ and $\mu-S[W(CO)_5]_2^{2-}$ with Organic Electrophiles"	1983
10	4	"Reactions of the Thiocarbene Complex $Cp(CO)_2 Fe[CH(SMe)]^+$ with Nucleophiles"	1983

Box	Folder	Title	Dates
10	5	"Reactions of the Thiocarbene Complex $\text{Cp}(\text{CO})_2\text{Fe}[\text{CH}(\text{SMe})]^+$ with Amines"	1983
10	3	"Rhodium(I) and Platinum(II) Complexes with Chelating Bidentate Isonitrile Ligands"	1983
10	6	"Synthesis and Characterization of Homoleptic Complexes of the Chelating Bidentate Isocyano Ligand t-BuDiNC"	1983
10	2	"Synthesis of Chelating Bidentate and Tridentate Cyano Ligands and their Complexes with Group 7 Metal Carbonyls"	1983
10	8	"A Mechanistic Study of the Reaction of the Dithiocarbene Complex $(\text{CO})_5\text{W}[\text{C}(\text{SMe})_2]$ with Amines"	1984
10	9	"Molecular and Electronic Structure of $(\text{CO})_2\text{Co}(\mu\text{-C}_9\text{SMe})_2\text{Fe}(\eta^5\text{-C}_5\text{H}_5)(\text{CO})$ "	1984
10	13	"Reactions of Aziridine and Oxirane with Manganese and Rhenium Carbonyl Complexes. Syntheses of Neutral 5-Membered Cyclic Aminooxy- and Dioxycarbene Compounds"	1984
10	12	"Reactions of Aziridine, Oxirane, and Thiirane with Carbonyl Ligands in Complexes of Iron, Manganese, and Ruthenium: Synthesis of Cyclic Carbene Compounds"	1984
10	11	"Reactions of the $\pi$ -Thiopene Ligand in $(\eta\text{-C}_4\text{H}_4\text{S})\text{Mn}(\text{CO})_3^+$ . Mechanistic Possibilities for Catalytic Hydrodesulfurization"	1984
10	10	"Synthesis from Diamines of Mono- and Dinuclear Cyclopentadienyliron Dicarboxyl Carbamoyl Compounds. Crystal and Molecular Structure of $[(\mu\text{-CONH}(\text{CH}_2)_2\text{NHCO})_2]_2$ "	1984
10	7	"Synthesis of an $\eta^2\text{-CH}(\text{SMe})$ Carbene Ligand by Protonation of the Carbyen in $[\text{HB}(\text{pz})_3](\text{CO})_2\text{W}(\equiv\text{CSMe})$ . A Possible Model Step in CO Hydrogenation"	1984
10	14	"Synthesis of Chelating Trimethylsiloxy Diisonitrile Ligands and their Rhodium(I) Complexes. Crystal and Molecular Structure of $[\text{Rh}(\text{t-BuDiNC})_2\text{BPh}_4 \cdot 1.5\text{CH}_3\text{CN}]$ "	1984
7	28	"Dioxy Carbene Complexes from Reactions of $\text{Fe}(\text{CO})_5$ , $\text{Mn}_2(\text{CO})_{10}$ , $\text{Re}_2(\text{CO})_{10}$ and $\text{Ru}_3(\text{CO})_{12}$ with Oxirane"	1985

Box	Folder	Title	Dates
10	16	"Mono- and Dinuclear Thiocarbonyl Complexes of Iron, Including $[\text{CpFe}(\text{CO})(\text{CS})]_2$ , $\text{CpFe}(\text{CO})\text{CS}$ I, and $\text{CpFe}(\text{CS})_2$ I"	1985
7	29	"Reaction of $\text{Co}(\text{CO})_4^-$ with a Bridging Carbyne Complex $[\text{Cp}_2\text{Fe}_2(\text{CO})_2(\mu\text{-CO})(\mu\text{-CSMe})]\text{PF}_6$ . Crystal and Molecular Structures of $\text{Cp}_2\text{Fe}_2\text{Co}(\text{CO})_3(\mu\text{-CO})_2(\mu_3\text{-CSMe})$ and $\text{Cp}_2\text{Fe}_2\text{Co}(\text{CO})_2(\text{PPh}_3)(\mu\text{-CO})_2(\mu_3\text{-CSMe})$ "	1985
10	15	"Synthesis and Deuteration of $(\eta\text{-Thiophene})\text{Ru}(\eta\text{-C}_5\text{H}_5)^+$ : A Model for Adsorption and Deuterium Exchange of Thiophene on Hydrodesulfurization Catalysts"	1985
10	20	"A Convenient Synthesis of 2,3-Dihydrothipene"	1986
10	17	"Dinuclear Fe, Ru, and Co Complexes with C- and S-bonded Bridging $\text{C}(\text{SR})_2$ Carbene Ligands"	1986
10	22	"Metal Carbonyl $\nu(\text{CO})$ Force Constants as Predictors of $\pi$ -Ethylene and $\pi$ -Benzene Complex Reactivity with Nucleophiles"	1986
10	23	"Reactions of the Thiocarbene Complex $[\text{HB}(\text{pz})_3(\text{CO})_2\text{W}[\eta^2\text{-CH}(\text{SMe})]^+]$ with Sulfur, Carbon, and Nitrogen Nucleophiles"	1986
10	25	"Reactions of the Thiocarbyne $[\text{HB}(\text{pz})_3](\text{CO})_2\text{W}(\equiv\text{CSMe})$ and Thiocarbene $[\text{HB}(\text{pz})_3](\text{CO})_2\text{W}[\eta^2\text{-CH}(\text{SMe})]^+$ Complexes with Phosphines"	1986
10	19	"Substitution and Fragmentation Reactions of $\text{Br}_2\text{Os}_3(\text{CO})_{10}[\text{P}(\text{OMe})_3]_2$ "	1986
10	24	"Syntheses and Structures of $[\text{HB}(\text{pz})_3](\text{CO})_2(\text{CS})\text{W}-\text{Au}(\text{PR}_3)$ . First Examples of a Semibridging CS Ligand"	1986
10	18	"Synthesis and Reactivity of the Bridging Thiocarbyne Radical, $\text{Cp}_2\text{Fe}_2(\text{CO})_2(\mu\text{-CO})(\mu\text{-CSMe})$ "	1986
10	34	" $(\pi\text{-Thiophene})\text{Mn}(\text{CO})_3^+$ as a Model for Thiophene Reactivity on Hydrodesulfurization Catalysts"	1987
10	30	"C-S Bond Cleavage in a $\pi$ -Thiophene Ruthenium Complex"	1987
10	31	"Model Studies of Thiophene Hydrodesulfurization Using $(\pi\text{-Thiophene})\text{Ru}(\eta\text{-C}_5\text{H}_5)^+$ : Reactions Leading to C-S Bond Cleavage"	1987
10	35	"Structure of $[(\eta\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2(\text{CS})]\text{PF}_6$ , a Comparison of M-CS and M-CO Bonding"	1987



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
10	27	"Syntheses, Reactions, and Structures of Dioxycarbene Complexes of Rhenium"	1987
10	29	"Synthesis and Structure of (1-5- $\eta$ -6-exo-Re(CO) <sub>5</sub> C <sub>7</sub> H <sub>8</sub> ]Mn(CO) <sub>3</sub> -the First Example of Metal Carbonyl Anion Addition to a Coordinated Cyclic $\pi$ -Hydrocarbon"	1987
10	28	"Synthesis of Aminooxycarbene Complexes of Iron with N-Alkyl, -Allyl, and -Carbamoyl Groups"	1987
10	33	"Synthesis, Reactivity, and Variable-Temperature NMR Studies of Transition-Metal Complexes Containing the 2,3-Dihydrothiophene Ligand"	1987
10	32	"Transition Metal Complexes with Terminal Carbyne Ligands"	1987
10	26	" $\eta$ -Thiophene)Ru( $\eta$ -C <sub>5</sub> H <sub>5</sub> ) <sup>+</sup> as a Model for the Adsorption and Deuterium Exchange of Thiophenes on Hydrodesulfurization Catalysts"	1987
11	6	"Carbene Ligands and Metal-Carbon-Sulfur Ring Compounds of Tungsten and Iron"	1988
10	46	"Carbon-Sulfur Bond Cleavage in CpRu( $\eta^5$ -thiophene) <sup>+</sup> and Subsequent Reactions of the Butadiene-Thiolate Product"	1988
10	37	"Deuterium Exchange of Benzo[b]thiophene: Model Complex and Heterogeneous Reactor Studies"	1988
10	45	"Heterogeneous Catalysis of the Hydrodesulfurization of Thiophenes in Petroleum: An Organometallic Perspective of the Mechanism"	1988
10	40	"Hydrodesulfurization Model Complexes: Nucleophilic Addition to $\pi$ -Coordinated Benzo[b]thiophenes and Thiophene"	1988
10	43	"Phosphine Basicities as Determined by Enthalpies of Protonation"	1988
10	36	"Platinum(0) Complexes as Catalysts of Metal Carbonyl Substitution Reactions"	1988
10	41	"Ruthenium, Rhodium, and Iridium Complexes of $\pi$ -Bound Thiophene and Benzo[b]thiophenes: Models for Thiophene Binding to HDS Catalysts"	1988

Box	Folder	Title	Dates
10	38	"Synthesis and Reactions of Aminoxy Carbene Complexes of Rhenium"	1988
10	42	"Synthesis, Structure, and Catalytic Reactions of Dioxycarbene Complexes of Iron and Osmium"	1988
10	39	"Transition-Metal-Promoted Cyclization Reactions of Isocyanide Ligands. Synthesis of Cyclic Aminoxy carbene Complexes of Platinum(II) and X-ray Structure of trans- $\{(PPh_3)_2Pt[CN(C_6H_4-p-Me)CH_2CH_2O]Br\}BF_4$ "	1988
10	44	"Transition-Metal-Promoted Cyclization Reactions of Isocyanide Ligands. Synthesis of Cyclic Diaminocarbenes from Isocyanide Complexes of Palladium(II) and Platinum(II) and X-ray Structure of Cis- $Br_2Pt[CN(C_6H_4-p-Me)CH_2CH_2N(H)](PPh_3)$ "	1988
10	51	"2, 3-Dihydrothiophene (2, 3-DHT) Complexes of Tungsten. Structure of $W(CO)_3(dppe)(2,3-DHT)$ "	1989
11	3	"A Rapid Equilibrium between the Metallathiacyclopropane $Cp(CO)Fe[C(SMe)(SMe)_2]$ and its Carbene Mercaptide Form"	1989
11	9	"An $\eta^4$ -2,5-Thiophene Ligand. A New Mode of Thiophene Coordinatino in $CP \cdot Ir(\eta^4\text{-dimethylthiophene})$ "	1989
10	47	"Equilibrium Studies of the Thiophene Exchange in $(\eta\text{-}C_5H_5)^+$ : A Model for Thiophene Adsorption on Hydrodesulfurization Catalysts"	1989
11	7	"Insertion of 2,3-Dihydrothiophene into Platinum and Osmium Hydrides: a Model for Reactions Occurring during Thiophene Hydrodesulfurization"	1989
11	10	"Reaction of the Sulfur Coordinated Thiophene in $Cp\text{-}(CO)_2Re(\mu\text{-}SC_4H_4)Fe(CO)_3$ "	1989
10	48	"Reactions $CpFe(CO)_2(=C(SMe)_2)^+$ and Related Carbene Complexes with Reducing Agents and Nucleophiles. The Structure of $\{CpFe(CO)_2[=C(SMe)_2]\}PF_6$ "	1989
10	49	"Reactions of $Cp_2Fe_2(CO)_2(\mu\text{-}CO)(\mu\text{-}CSR)^+$ Bridging-Carbyne Complexes with Nucleophiles"	1989
11	5	"Studies of the Mechanism of Thiophene Hydrodesulfurization: Conversion of 2,3- and 2,5-Dihydrothiophene and Model Organometallic Compounds"	1989

Box	Folder	Title	Dates
11	2	"Synthesis and Reaction of the Cationic Thiocarbyne $[\text{HC}(\text{pz})_3](\text{CO})_2\text{W}\equiv\text{C-SMe}^+$ . Reactions of the Thiocarbene $[\text{HC}(\text{pz})_3](\text{CO})_2\text{W}[\eta^2\text{-CSHMe}]^{2+}$ with Nucleophiles"	1989
11	4	"Synthesis and Reactions of the $\eta^2$ -dithiocarbene $[\text{HB}(\text{pz})_3](\text{CO})_2\text{W}[\eta^2\text{-C(SMe)SMe}]^{+}$ "	1989
11	1	"Synthesis and Structure of the First Example of a Four-Electron Donor, Side-On Bridging Thiocarbonyl Ligand"	1989
11	8	"Synthesis of Heteronuclear Di- and Tri-metal $\mu$ -carbyne Compounds from the Thiocarbyne $[\text{HB}(\text{pz})_3](\text{CO})_2\text{W}\equiv\text{CSMe}$ "	1989
10	50	"Thiophene, 2,3-and 2,5-Dihydrothiophene, and Tetrahydrothiophene Hydrodesulfurization on Mo and Re/Y-Al <sub>2</sub> O <sub>3</sub> Catalysts"	1989
11	14	"2,5-Dimethylthiophene Coordination to Three Metal Centers in $(\eta^4, \text{S-}\mu_3\text{-2,5-Me}_2\text{T})(\text{IrCp}^*)[\text{Mo}(\text{CO})_2\text{Cp}]_2$ "	1990
11	15	"Cyclopentadienyl Thiocarbonyl Complexes of Iron: $[\text{Cp}^*\text{Fe}(\text{CO})_2(\text{CS})_2$ , $\text{Cp}_2\text{Fe}_2(\text{CO})_3(\text{CS})$ , and $\text{Cp}_2\text{Fe}_2(\text{CO})_2(\text{CS})_2$ "	1990
11	17	"Electrophilic and Nucleophilic Reactions of Complexes Formed from 2,5-dithiahex-3-yne ( $\text{MeSC}\equiv\text{CSME}$ ) and Tungsten Carbonyls"	1990
11	23	"Electrophilic and Nucleophilic Reactions Vinylidene Complex $[\text{Cp}(\text{PMe}_3)_2\text{Ru}=\text{C}=\text{C}(\text{SMe})_2]\text{BF}_4$ and its Derivatives"	1990
11	21	"Lewis Acid Adducts ( $\text{BH}_3$ , $\text{Me}^+$ , and $\text{Et}^+$ ) of the $\eta^4$ and $\eta^2$ Isomers of $\text{Cp}^*\text{Ir}(\text{thiophene})$ "	1990
11	16	"New Modes of Thiophene Coordination and Reactivity: Structures of $\text{Cp}^*\text{Ir}(\eta^2\text{-thiophene})$ , an Iridathiabenzene, and $\text{Cp}^*\text{Ir}(\eta^4\text{-thiophene}\cdot\text{BH}_3)$ "	1990
11	12	"Reactions of the $\eta^2$ - and $\eta^4$ -Isomers of $\text{Cp}^*\text{Ir}(2,5\text{-Dimethylthiophene})$ with Phospines, Co and H <sub>2</sub> "	1990
11	13	"Structural Aspects of Thiophene Coordination in Transition Metal Complexes"	1990
11	19	"Syntheses and Characterizations of $(\eta^5\text{-C}_5\text{R}_5)\text{Re}(\text{CO})_2\text{L}$ , where $\text{R}=\text{H}$ , $\text{CH}_3$ , and $\text{L}=\text{PMe}_3$ , $\text{PMe}_2\text{Ph}$ , $\text{PMePh}_2$ , $\text{PPh}_3$ "	1990

Box	Folder	Title	Dates
11	18	"Synthesis and Reactivity of Ruthenium Complexes with Dibenzothiophene and Hexahydrodibenzothiophene Ligands: Models for Catalytic Hydrodesulfurization"	1990
11	11	"Thermal and Photolytic Promotion of a $\alpha$ -Thiolate Migration in $[\text{HB}(\text{pz})_3](\text{CO})_2\text{W}[\eta^2\text{-C}(\text{SR})_2\text{SR}]$ to Give Carbyne Complexes $[\text{HB}(\text{pz})_3](\text{RS})_2\text{W}\equiv\text{CSR}$ "	1990
11	20	" $\eta^2$ - and $\eta^2(\text{Se})$ - $\mu_2$ -Selenophene (Sel) Coordination in $\text{Cp}^*(\text{CO})_2\text{Re}(2,3\text{-}\eta^2\text{-Sel})$ $\text{Cp}^*(\text{CO})_2\text{Re}(\eta^2(\text{Se})\text{-}\mu_2\text{-Sel})[\text{W}(\text{CO})_4(\text{PPh}_3)]$ "	1990
11	31	"A Phosphorus Analogue of a Semibridging Aryl Isocyanide Ligand: Synthesis and Structure of $(\text{Cl})(\text{Pet}_3)\text{Pt}(\mu\text{-C=PR})\text{Pt}(\text{PEt}_3)_2(\text{Cl})$ "	1991
11	35	"Bidentate Phosphine Basicities as Determined by Enthalpies of Protonation"	1991
11	25	"Calorimetric Determination of the Heats of Protonation of Metal in (Methyl-Substituted Cyclopentadienyl)Iridium Complexes, $\text{Cp}'\text{Ir}(1,5\text{-COD})$ "	1991
11	34	"Effect of Tridentate Phosphine Ligand Structure on the Basicities of Tungsten Tricarbonyl Complexes"	1991
11	33	"Heats of Protonation of Transition-Metal Complexes: The effect of Phosphine Basicity on Metal Basicity in $\text{CPIr}(\text{CO})(\text{PR}_3)$ and $\text{Fe}(\text{CO})_3(\text{PR}_3)_2$ "	1991
11	24	"Kinetic Studies of $\text{PPh}_3$ Substitution of Sulfur-Coordinated Thiophenes in $\text{Cp}'(\text{CO})_2\text{Re}(\text{Th})$ : A Model for Thiophene Adsorption onto Hydrodesulfurization Catalysts"	1991
11	27	"Reactions of $\text{Cp}'\text{Ir}(2,5\text{-Dimethylthiophene})$ with Iron Carbonyls: A New Mechanism for Thiophene Hydrodesulfurization"	1991
11	30	"Sulfur versus $2,3\text{-}\eta^2$ Coordination of Benzo[b]thiophene (BT) in $\text{Cp}'(\text{CO})_2\text{Re}(\text{BT})$ "	1991
11	29	"Sulfur-Coordinated Thiophene and Dibenzothiophene in $\text{Cp}'(\text{CO})_2\text{Re}(\text{Thiophene})$ Complexes"	1991
11	32	"Synthesis and Desulfurization of 2,5-Dihydrothiophene Transition-Metal Complexes: Models for Hydrodesulfurization (HDS) of Thiophene"	1991
11	36	"Synthesis Reactivity and $^{77}\text{Se}$ NMR Studies of the $\eta^2(\text{Se})$ -Selenophene Complexes $\text{Cp}'(\text{CO})_2\text{Re}(\text{Sel})$ "	1991

Box	Folder	Title	Dates
11	26	"Transition-Metal-Promoted Cyclization Reactions of Nitrile Ligands in Complexes of Platinum (II): Synthesis of 2-Oxazoline Derivatives and X-ray Structure of Cis-Cl <sub>2</sub> Pt[N=C(Ph)OCH <sub>2</sub> CH <sub>2</sub> ] <sub>2</sub> "	1991
11	22	"Vinylidene, Acetylide, and Carbene Complexes form Reactions of 2,5-Dithiahex-3-yne (MeSC≡CMe) with Cp(PMe <sub>3</sub> ) <sub>2</sub> Ru <sup>+</sup> "	1991
11	28	"W(CO) <sub>3</sub> (PMTA)(PMTA=MeN(CH <sub>2</sub> CH <sub>2</sub> NMe <sub>2</sub> ) <sub>2</sub> ) as a Starting Material for Syntheses of W(CO) <sub>3</sub> (PR <sub>3</sub> ) <sub>3</sub> , W(CO) <sub>3</sub> (η <sup>6</sup> -arene), and the Protonated W(H)(CO) <sub>3</sub> (PR <sub>3</sub> ) <sub>3</sub> <sup>+</sup> Complexes"	1991
11	37	"η <sup>1</sup> (S)- and η <sup>6</sup> - Coordination of Dibenzothiophene (DBT) in Cp <sup>*</sup> MCl <sub>2</sub> [η <sup>1</sup> (S)-DBT] and Cp <sup>*</sup> M(η <sup>6</sup> -DBT) <sub>2</sub> <sup>+</sup> (M=Ir, Rh)"	1991
12	8	"2,5-Dimethylthiophene Coordination to Three Metal Centers in the Complexes (η <sup>4</sup> , S-μ <sub>3</sub> -2,5-Me <sub>2</sub> T)(IrCp <sup>*</sup> )[M(CO) <sub>2</sub> Cp] <sub>2</sub> where M=Mo or W"	1992
11	40	"Acetylene Insertion Reactions of the C, S and η <sup>4</sup> Isomers of Cp <sup>*</sup> Ir(2,5-Dimethylthiophene) with MeSc≡CMe and MeSC≡CMe. Formation of Novel Chelated Bicyclocarbene Complexes"	1992
12	5	"Air Oxidation of (Cp <sup>*</sup> RuCl <sub>2</sub> ) <sub>n</sub> to the Oxo-Bridged Complex (Cp <sup>*</sup> RuCl <sub>2</sub> ) <sub>2</sub> O"	1992
11	38	"Calorimetric Studies of the Heats of Protonation of the Metal in Fe(CO) <sub>3</sub> (Bidentate Phosphine, Arsine) Complexes: Effects of Chelate Ligands on Metal Basicity"	1992
12	1	"Calorimetric Studies of the Heats of Protonation of the Metal in Cis-M(CO) <sub>2</sub> (Bidentate Phosphine) <sub>2</sub> Complexes of Chromium, Molybdenum, and Tungsten"	1992
11	39	"Equilibrium Studies of the Displacement of η <sup>1</sup> (S)-Thiophenes (Th) from Cp(CO)PPh <sub>3</sub> Ru(η <sup>1</sup> (S)-Th) <sup>+</sup> "	1992
12	4	"Hydride Addition to and Reduction of Cp <sup>*</sup> Ir(η <sup>6</sup> -BT) <sub>2</sub> <sup>+</sup> and Cp <sup>*</sup> Ir(η <sup>6</sup> -DBT) <sub>2</sub> <sup>+</sup> , where BT=Benzo[b]thiophene and DBT=Dibenzothiophene"	1992
12	7	"Hydride and Halide Ligand Effects on the Enthalpies of Protonation of Transition Metal Complexes"	1992
12	6	"Phosphorus Analogue (C≡P <sup>-</sup> ) of a Bridging Cyanide (C≡N <sup>-</sup> ) Ligand: Synthesis and Structure of (Cl)(PEt <sub>3</sub> ) <sub>2</sub> Pt(μ-C≡P)Pt(Pet <sub>3</sub> ) <sub>2</sub> "	1992

Box	Folder	Title	Dates
12	3	"Structure of a Ring-Opened 2,5-Dimethylthiophene Complex ( $\eta^5\text{-C}_5\text{Me}_5$ )Ir(CO)(C, S-Me <sub>2</sub> C <sub>4</sub> H <sub>2</sub> S)"	1992
11	41	"The 1, 3-Dimetallyl Tri-Ruthenium Cluster ( $\mu\text{-H}$ )Ru <sub>3</sub> ( $\mu_3\text{-}\eta^3\text{-CHCHCMe}$ )(CO) <sub>9</sub> and its PPh <sub>3</sub> Derivatives"	1992
12	2	"The Benzo[b]thiophene (BT) Complexes Cp'(CO) <sub>2</sub> Re(BT): Models for BT Adsorption on Hydrodesulfurization Catalysts"	1992
12	9	"Calorimetric Studies of the Heats of Protonation of the Dangling Phosphorus in $\eta^1\text{-Ph}_2\text{PCH}_2\text{PPh}_2$ Complexes of Chromium, Molybdenum, and Tungsten"	1993
12	10	"Equilibrium and Kinetic Studies of Sulfur-Coordinated Thiophenes (Th) in Cp(CO) <sub>2</sub> Ru( $\eta^1$ (S)-Th) <sup>+</sup> : Models for Thiophene Adsorption on Hydrodesulfurization Catalysts"	1993
12	12	"Reactions of 2-Benzo[b]thienyl (2-BTyl) Complexes with Acid to Give Cp(PMe <sub>3</sub> ) <sub>2</sub> Ru( $\eta^1$ (S)BT) <sup>+</sup> and Cp(CO)(PPh <sub>3</sub> )Ru( $\eta^1$ (S-BT) <sup>+</sup> : A Mode for Benzo[b]thiophene (BT) Cation Exchange on Hydrodesulfurization Catalysts"	1993
12	11	"Steric and Electronic Effects of Mono- and Tridentate Phosphine Ligands on the Basicities of the Metal in Tungsten Tris(Phosphine) Tricarbonyl Complexes"	1993
12	15	"Bridging Cyaphide (C $\equiv$ P <sup>-</sup> ) and Bridging Aryl Isocyaphide (C $\equiv$ P-R) Ligands: Syntheses and Characterization of (X)(Pet <sub>3</sub> ) <sub>2</sub> Pt( $\mu\text{-C=P}$ )Pt(Pet <sub>3</sub> ) <sub>2</sub> and (X)(Pet <sub>3</sub> )Pt( $\mu\text{-C=P-R}$ )Pt(Pet <sub>3</sub> ) <sub>2</sub> (X)"	1994
12	20	"Reaction of ( $\eta^5\text{-C}_5\text{Me}_5$ )Ir(2,5-Dimethylthiophene) with S <sub>8</sub> , O <sub>2</sub> , SO <sub>2</sub> , and CS <sub>2</sub> "	1994
12	16	"Reactions of Aziridine with Platinum(II) Nitriles: Formation of (Aziridino)Amidines and 2-Imidazolines and X-ray Structure of Trans-[PtCl <sub>2</sub> {N(H)=C(Ph)NCH <sub>2</sub> CH <sub>2</sub> } <sub>2</sub> ]"	1994
12	14	"Synthesis and Protonation of the Bridging Benzo[b]thiophene (BT) Complexes [Cp'(CO) <sub>2</sub> Re]( $\eta^2\text{:}\eta^1$ (S)- $\mu_2$ -BT)[Re(CO) <sub>2</sub> Cp <sup>11</sup> ]"	1994
12	13	"Synthesis of $\Delta^2$ -1,3-Oxazolines from Cationic Platinum(II) Nitrile Complexes, X-ray Structure of Trans-[Pt(CF <sub>3</sub> ) <sub>2</sub> {N=C(Ph)OCH <sub>2</sub> CH <sub>2</sub> } <sub>2</sub> ](PPh <sub>3</sub> ) <sub>2</sub> ]BF <sub>4</sub> ·O.6H <sub>2</sub> O·O.25MeOH"	1994

Box	Folder	Title	Dates
12	19	"Equilibrium and Saturation Coverage Studies of Alkyl and Aryl Isocyanides on Powdered Gold"	1995
12	22	"Iridathiabenzene, a Novel $\eta^6$ Heteroaromatic $\pi$ -Ligand"	1995
12	21	"Olefin versus Sulfur Coordination of Benzo[b]thiophene (BT) in $\text{Cp}(\text{CO})_2\text{Re}(\eta^2:\eta^6\text{-}\mu_2\text{-BT})\text{Cr}(\text{CO})_3$ "	1995
12	18	"Organometallic Complexes as Models for the Adsorption of Thiophenes on Hydrodesulfurization (HDS) Catalysts"	1995
12	23	"Reactions of the Haloalcohols $\text{HO}(\text{CH}_2)_n\text{Cl}$ ( $n=2, 3$ ) with Platinum(II)-Alkynyl and-Alkyne Complexes. X-ray Crystal Structure of Trans- [Pt(Me){C(OCH <sub>2</sub> CH <sub>2</sub> Cl)(CH <sub>2</sub> Ph)}(PPh <sub>3</sub> ) <sub>2</sub> ][BF <sub>4</sub> ]"	1995
12	17	"Synthesis, Reactions, and <sup>77</sup> Se NMR Studies of $\eta^5$ -Selenophene Complexes of Chromium, Manganese, Ruthenium, and Iridium"	1995
12	26	"Effects of Cyclopentadienyl and Phosphine Ligands on the Basicities and Nucleophilicities of $\text{Cp}^*\text{Ir}(\text{CO})(\text{PR}_3)$ Complexes"	1996
12	25	"Metal-Hydrogen Bond Dissociation Enthalpies in Series of Complexes of Eight Different Transition Metals"	1996
15	44	Journal of Organic Chemistry, "Iron Carbonyl-promoted Isomerization of Olefin Esters to their Alpha, Beta Unsaturated Esters"	1996
12	27	"Reactions of $[(\text{CO})_3\text{Mn}(\eta^5\text{-Thi})]^+$ (Thi=Thiophene or 2, 5-Dimethylthiophene) with Nucleophiles"	1996
12	24	"Unexpected Reactions of 2, 5-Dimethylthiophene (2,5-Me <sub>2</sub> T) in $\text{Cp}^*\text{Ir}(\eta^5\text{-}2, 5\text{-Me}_2\text{T})^{2+}$ , $\text{Cp}^*\text{Ir}(\eta^4\text{-}2, 5\text{-Me}_2\text{T})$ , and $\text{Cp}^*\text{Ir}(\text{C}, \text{S-}2, 5\text{-Me}_2\text{T})$ with Cobaltocene"	1996
8	30	"Correlation of C-O and C-S Stretching Frequencies in Carbonyl-Thiocarbonyl Complexes"	undated
14	43	"New Reactions of Rhenium Carbonyl Complexes"	undated
14	44	"The Preparation and Reaction of a BIS Carbene Complex of Fe"	undated
14	45	"Organometallic Complexes in Homogeneous Catalysis"	undated
14	46	"Homogeneous Catalysis of Energy-Related Reactions"	undated
14	47	"Catalysis of the Water-Gas Shift Reaction by Metal Carbonyl Complexes"	undated

Box	Folder	Title	Dates
14	48	"A Possible Route to the Production of Hydrogen"	undated
14	49	"Preparations and Reactions of Carboxamido Complexes of Platinum, Paliadium and Iron"	undated
14	50	"Mechanic investigations of $Mn_2(CO)_{10}$ – Catalyzed Reactions of CO + Amino"	undated
14	51	"A Kinetic Study of Chelate Ring Opening Metal Carbonyl Complexes"	undated
14	52	"Reaction of Metal Complexes with Amines to Form Carboxamido Complexes"	undated
14	54	"Transition Metal Compounds of Carbon Monosulfide"	undated
14	55	"Ligand and Effects on Esterase Activity of Copper(II) Complexes"	undated
14	56	"Steroselective Binding of Amino Acid Enantiomers by Optically Active Transition Metal Complexes"	undated

### Description of series

**Series 4 Grants and Proposals 1959-2004, undated**

extent: 1.3 linear feet (1 records center carton)

description: This series contains copies of papers, reports, and correspondence related to research grants and proposals.

### Container list

Box	Folder	Title	Dates
14	59	Proposal: "Committee on Rehabilitation"	1959
14	60	Proposal: "Specifically of Ligand Substitution and the Geometry of the Intermediate in SNI Substitution Reaction of Optically Active Metal Carbonyl Complexes"	1963-1970
14	62	Proposal: "A Kinetic Study of the Substitution Reactions of Metal Carbonyl and Isocyanide Complexes"	1964
14	63	Correspondence: "A Kinetic Study of the Substitution Reactions of Metal Carbonyl and Isocyanide Complexes"	1964
14	61	Proposal: "PRF Metal Carbonyl"	1964-1965



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
14	64	Correspondence: "Mechanistic Studies of Metal Carbonyls"	1965-1967
14	65	Correspondence: "Olefin Research Proposal"	1965-1968
14	67	Proposal: "Labializing and Non-Labializing Ligands," includes correspondence	1966
14	66	Proposal: "Metal Complex Catalysis of Biological Reactions Renewal"	1966-1968
14	70	Proposals/Reports: "Reactions of Metal Carbonyl and Thiocarbonyl Complexes"	1969
14	69	Correspondence: "Reactions of Metal Carbonyl and Thiocarbonyl Complexes"	1969-1971
14	68	Correspondence: "Past Research Projects"	1969-1977
14	73	Proposal: "Metal Complex Catalysis of Biological Reactions"	1970
14	72	Proposal: "NATO: Synthesis & Reactivity of New Transition Organometallic Oompounds Containing $CO_2$ , $COS$ , $CS$ Molecules"	1970-1972
14	71	Proposal: "NATO: A Search for Valency Tautomers Among Nitrosyl Complexes"	1970-1973
14	74	Correspondence: Alfred Sloan Foundation	1970-1974
14	75	Correspondence: American Chemical Society	1970-1979
14	78	Proposal: "Reversible Absorption of Co and $SO_2$ by Transition Metal Complexes"	1971
14	80	Grants: University Grants	1971
14	81	Report/Proposal: Grant 4936-AC3	1971
14	76	Correspondence: Laboratory Pumps	1971-1973
14	79	Correspondence: Inter Office ISU	1971-1981
14	77	Correspondence: Conferences	1971-1996
14	82	Correspondence: Grant 4936-AC3 Related	1972-1974
14	83	Proposals: "Transition-Metal Carbonyl Complex Chemistry and Catalysis"	1973
14	87	Correspondence: "Monsanto Grant Proposal"	1973
14	86	Correspondence: "Transition-Metal Carbamoyl Complex Chemistry and Catalysis"	1973-1974

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
14	84	Correspondence: "Metal Complex Catalysis of Biological Reactions"	1973-1975
14	88	Grants and Proposals: "Organometallic Subdivision (ACS)"	1973-1975
14	85	Correspondence: "The Metal Complex Catalysis of Biological Reactions"	1973-1977
14	89	Correspondence: Midwest Undergraduate Symposium	1974
15	1	Proposal: "Thermochemical Studies of Organometallic Complexes"	1974
14	90	Correspondence: NATO Grant/Proposals	1974-1976
15	2	Proposal: "NATO: Thiocarbonyl Complexes of the Transition Metal", includes progress reports	1974-1977
14	91	Correspondence: "Thermochemical Studies of Organometallic Complexes"	1974-1978
15	4	Proposal: "Transformation of Some Common Ligands Reactive Groups"	1975
15	6	Proposal: "Polymers Incorporating Transition Metals"	1975-1976
15	5	Correspondence: "Transition Metal Thiocarbonyl Complexes"	1975-1977
15	3	Reports: "Transition Metal Thiocarbonyl Complexes"	1975-1978
15	7	Proposal: "Metal Complex Catalysis of Biological Reactions"	1976-1977
15	8	Ames Lab: Organometallic Complexes in Homogeneous Catalysis of Coal-Derived Compounds	1977
15	9	Proposals: "The Dow Chemical Company"	1979
15	13	Correspondence: Conference on Co-Op Advances in Chemical Science and Technology	1980
15	10	Correspondence, Proposals: "Multidentate Isonitrile, Acetylide and Piazinato Ligands"	1980-1983
15	12	Report: "Final Report Grant (NATO 805) Thiocarbonyl Complexes of Transitions Metals"	1980-1983
15	11	Proposal: "Transition metal Thiocarbonyl Complexes and Their Derivatives"	1980-1984
15	14	Proposal: "Multidentate Isonitrile, Acetylide and Piazinato Ligands"	1981
15	15	Ruth Chemical Engineering Research Symposium	1981

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
15	16	Remarks to Iowa House Democratic Task Force on Education	1981
15	17	Correspondence	1981
15	18	Reports: "Technical, Transition Metal Thiocarbonyl Complexes and their Derivatives"	1982-1983
15	19	Proposals: "Synthetic Inorganic and Organometallic Chemistry Program"	1983
15	20	Correspondence: "A New Metal Ions Chelating Agent"	1983
15	21	Correspondence: Paper Related	1983
15	22	NRC	1983
15	23	Correspondence: Transition-Metal Carbamoyl Complexes as Intermediates Catalytic Reactions	1983-1991
15	26	Proposal: NSF-Italy-US Co-Op	1984
15	25	Correspondence: NSF-Italy-US Co-Op	1984-1987
15	24	Correspondence: Grant Proposals	1984-1988
15	27	National Science Foundation: "Thermo Chemical Studies of Transition Metal Complex Basicity"	1987
15	28	Proposal: "Petroleum Research Fund, Thermo"	1987
15	29	Proposals, Reports and Correspondence: "Cationic Polynuclear Transition Metal Carbonyl Compounds"	1987-1990
15	30	Progress Reports: "Thermo Chemical and Reactivity Studies of Basic Transition Metal Complexes"	1987-1991
15	31	Correspondence: "Thermo Chemical and Reactivity Studies of Basic Transition Metal Complexes"	1987-1991
15	32	Proposal, ACS-PRF Summer Research Fellowship: "Transitional-Metal Carbonyl Complexes as Intermediates in Catalytic Reaction"	1988-1991
15	33	Correspondence: John Wiley & Sons, Inc "Inorganic Synthesis"	1989
15	34	Manuscript: Inorganic Syntheses (24 b/w photographs)	1989
15	35	Proposal: "Thermo Chemical and Reactivity Studies of Basic Transition Metal Complexes"	1991
15	36	Correspondence: "Phosphorous Analogs of Cyanide and Arylisocyanide Ligands in Transition Metal Complexes"	1991-1996

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
15	37	Proposal: "Phosphorous Analogs of Cyanide and Arylisocyanide Ligands in Transition Metal Complexes"	1993
15	39	Final Report: "Thermo Chemical and Reactivity Studies of Basic Transition Metal Complexes"	1994
15	38	Correspondence: National Science Foundation	1994-1998
15	40	Report: "Catalytic Dehydrogenation of Soybean Fatty Acids to Unsaturated Products"	1994-1998
15	41	Correspondence: Iowa Soybean Promotion Board	1995
15	42	Proposal: Iowa Soybean Board	1995
15	43	United Soybean Board	1995-1999
15	45	Correspondence: Department of Energy Environmental Management Science Program	1998
15	46	Proposal: Mark E. Bussel	1998
15	47	Proposal: "Thermo Chemical, Kinetic and Catalytic Studies of Protonated Transition Metal Complexes"	1998
15	49	Application: "Sulfur Reduction in Gas and Diesel Fuels by Extract/Absorption of Refractory Debenzotheiophenes"	1999
15	48	Correspondence: " Sulfur Reduction in Gas and Diesel Fuels by Extract/Absorption of Refractory Debenzotheiophenes"	1999-2003
15	50	Proposal: "Multi-metal Ion Templates for Synthesis of Large Molecules"	2000
15	51	Correspondence: "Economical Separation of Fatty Acids and Conversion to Value-Added Products"	2000
15	52	Proposal: "Economical Separation of Fatty Acids and Conversion to Value-Added Products"	2000
15	53	Correspondence: "Thermo Chemical, Kinetic and Catalytic Studies of Protonated Transition Metal Complexes"	2000-2003
15	54	Correspondence: "Multi-metal Ion Templates for Synthesis of Large Molecules"	2000-2003
15	55	Correspondence, Reports: "Sulfur Reduction in Gas and Diesel Fuels by Extract/Absorption of Refractory Debenzotheiophenes"	2001
15	58	University Coal Research Reviewers Request	2001

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
15	59	Proposal: "Economical Separations of Fatty Acid Esters in FAMES"	2001
15	56	Grants, Statements: "Economical Separations of Fatty Acid Esters in FAMES"	2001-2005
15	57	Correspondence: "Economical Separations of Fatty Acid Esters in FAMES"	2001-2006
15	61	Proposal: "Improved Catalytic Process for the Epoxidation of Vegetable Oils"	2002
15	60	Correspondence: "Improved Catalytic Process for the Epoxidation of Vegetable Oils"	2002-2004
15	62	Proposal: "Reviewer Comments"	2003
15	63	Proposal: "Buckybowls as Ligands in Transition Metal Complexes"	2003
15	64	Reports: "Thermo Chemical, Kinetic and Catalytic Studies of Protonated Transition Metal Complexes"	2003
15	65	Reports: "Sulfur Reduction in Gas and Diesel Fuels by Extract/Absorption of Refractory Debenzotheiophenes"	2003
15	66	Proposal: "Catalytic Conversion of Oleic Acid to Polymer Precursors"	2003
15	67	Correspondence: "Buckybowls as Ligands in Transition Metal Complexes"	2003
15	68	"Buckybowls as Ligands in Transition Metal Complexes"	2004
14	57	"Mechanic Studies of Metal Catalysis"	undated
14	58	"Report for NCA Accreditation Review"	undated