



**COLLEGE ARCHIVES**

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Folke Bernadotte Memorial Library  
Gustavus Adolphus College  
800 West College Avenue, Saint Peter, MN 56082-1498

**Gustavus Adolphus College Archives**

**St. Peter, Minnesota**

**Hoogenboom, Bernard. Collection of Bernard Hoogenboom,  
1955-2008.**

**GACA Collection 249**

**Hoogenboom, Bernard. Collection of Bernard Hoogenboom, 1955-2008. GACA Collection 249. 2 Records Center Cartons and 1 ½ Hollinger boxes.**

**ABSTRACT:**

The Bernard Hoogenboom collection consists of publications, writings, research notebooks, grade books, teaching materials, and student research papers and notebooks. Hoogenboom taught chemistry at Gustavus Adolphus College from 1958-1996.

**BIOGRAPHICAL NOTE:**

Bernard Hoogenboom was born 16 March 1932 in East Goshen, Indiana. He received a Bachelor's degree from DePauw University in 1954, a Master's degree and Ph.D. in Organic Chemistry from the University of Iowa in 1956 and 1958, respectively. He also received a Master's degree in Environmental Health from the University of Minnesota in 1983.

Hoogenboom began teaching at Gustavus Adolphus College in 1958 and retired as Emeritus Professor in 1996. In 1963, he received an \$8,500 grant from the National Science Foundation for support of undergraduate research in chemistry and for the purchase of automatic balances to enlarge the rapid weighting facilities in the Nobel Hall of Science. Over the course of his career, Hoogenboom participated in teaching and research at Gustavus, University of Illinois-Champaign, Groningen University in the Netherlands, and Kansai Gaidai University in Japan. He was also a member of Sigma Xi Honorary Scientific Research Society and the American Chemical Society.

On 27 August 1955 he married Louis Brown in Mount Vernon, Ohio. Together they had three sons, Dirk, Pat, and Jon. Bernard Hoogenboom passed away at 82 years old on 30 January 2015.

**SCOPE AND CONTENT:**

This collection contains five series: Grade Books; Publications, Writings, and Research; Teaching Materials; Student Research Files; and Miscellaneous.

**Grade Books, 1958-1995 and undated** holds grades given to students of Bernard Hoogenboom. This series is restricted.

**Publications, Writings, and Research, 1955-2008 and undated** is comprised of published articles, unpublished writings, speeches, and research notebooks.

**Teaching Materials, 1964-1995 and undated** encompasses laboratory manuals, course planning, and experiment scheduling for chemistry classes at Gustavus.

**Student Research Files, 1963-1987 and undated** consists of student research papers and notebooks.

**Miscellaneous, 1965-1998 and undated** contains correspondence, grant and leave proposals, a resume, and a play about chemistry.

**RESTRICTIONS:**

There **ARE** restrictions on use of this collection due to student grades. The researcher assumes full responsibility for observing all copyright, property, and libel laws as they apply.

Researchers must use collection in accordance with the policies of the College Archives, the Folke Bernadotte Memorial Library, and Gustavus Adolphus College.

**COLLECTION CITATION:**

Hoogenboom, Bernard. Collection of Bernard Hoogenboom, 1955-2008. GACA Collection 249. Gustavus Adolphus College Archives, St. Peter, Minnesota.

**ACQUISITION:**

Louise Hoogenboom donate part of this collection during February 2017.

**PROCESSED BY:**

Gustav Bengtson, student worker, processed this collection and developed the finding aid during October 2010.

Adrianna Darden processed further materials and updated the finding aid during February 2017.

**SUBJECT HEADINGS:**

Hoogenboom, Bernard.

Gustavus Adolphus College -- Faculty.

Gustavus Adolphus College -- Chemistry Department.

<b>GACA Collection 249</b>	<b>Box</b>	<b>Folder</b>
<b>Grade Books, 1958-1995 and undated (RESTRICTED)</b>		
Grade Book, 1958 (RESTRICTED)	3	1
Grade Books, 1958 and 1958-59 (RESTRICTED)	3	2
Grade Books, 1960 (RESTRICTED)	3	3
Grade Books, 1960 and 1961 (RESTRICTED)	3	4
Grade Books, 1963 and 1964 (RESTRICTED)	3	5
Grade Books, 1965 and 1966 (RESTRICTED)	3	6
Grade Books, 1966-67 (RESTRICTED)	3	7
Grade Books, 1968-69 and 1971 (RESTRICTED)	3	8
Grade Books, 1972 and 1973 (RESTRICTED)	3	9
Grade Books, 1974 (RESTRICTED)	3	10
Grade Books, 1975 (RESTRICTED)	3	11
Grade Books, 1976 and 1977 (RESTRICTED)	3	12
Grade Books, 1978 and 1979 (RESTRICTED)	3	13
Grade Books, 1980 and 1981 (RESTRICTED)	3	14
Grade Books, 1982 and 1983-84 (RESTRICTED)	4	1
Grade Books, 1984 and 1986 (RESTRICTED)	4	2
Class list and grades, 1987-90 (RESTRICTED)	4	3
Grades, Scores, and Records, Spring 1992 (RESTRICTED)	4	4
Grades, 1992-93 (RESTRICTED)	4	5
Grades, 1993-94 (RESTRICTED)	4	6
Grades, 1994-95 (RESTRICTED)	4	7
<b>Publications, Writings, and Research, 1955-2008 and undated</b>		
“Alkylation of Phynylhydrazines,” 8 June 1955	1	13
“Appreciating Chemistry,” <i>Chemical and Engineering News</i> , 8 April 2002	1	9
Bare-Catalyzed Reactions of Sulfoacetic Acid Derivatives, Research Notebook I, 1959-61	1	1
Bare-Catalyzed Reactions of Sulfoacetic Acid Derivatives, Research Notebook II, 1960-66	1	2
Bare-Catalyzed Reactions of Sulfoacetic Acid Derivatives, Research Notebook III, 1965-74	1	3
“Chemical Accidents and Energy Exposure,” paper and oral presentation, 1990s	1	13
“The Chemistry of Sulfoacetic Acid Derivatives. I. Reactions of Chlorosulfonylacetyl Chloride with Nucleophiles,” <i>Journal of Organic Chemistry</i> , vol. 33, p. 2113, 1968	1	9
“Chemistry of Sulfoacetic Acid Derivatives. II. Reactions of Phenyl Esters and Anilides of Sulfoacetic Acid,” <i>Journal of Organic Chemistry</i> , vol. 34, p. 3414, 1969	1	9
“Chemistry of Sulfoacetic Acid Derivatives. III. Reactions of Derivatives of Sulfoacetic Acid, Benzoylmethanesulfonic Acid, and <i>p</i> -Nitrophenylmethanesulfonic Acid and Salicylaldehydes,” <i>Journal of Organic Chemistry</i> , vol. 44, p. 880, 1975	1	9

“The Chemistry of the Sulfoacetyl Functional Group. II. Mechanism of the Reaction of Derivatives of Methanesulfonic Acids with Nucleophiles in Pyridine,” undated	1	13
“Chemistry of the 1,2,4-Thiadiazine Ring System. II. A New Synthesis of 1,2,4,2 <i>H</i> -Thiadiazine-3,5(4 <i>H</i> ,6 <i>H</i> )-dione-1,1-dioxide,” <i>Journal of Organic Chemistry</i> , vol. 24, p. 1983, 1959	1	9
“Chemistry of p-Toluenesulfonylmethylisocyanide (TOSMIC): A Report of work completed at Groningen University, the Netherlands, 1970-71	1	13
“Control Energy; prevent accidents: Ten strategies to reduce exposure to hazards and the damage and injury they cause,” <i>Chemical Health &amp; Safety</i> , p. 19, May/June 1995	1	9
Cyclic Ureides of Sulfoacetic Acid, Research Notebook, 1956-60	1	4
“The Direct Alkylation of Phenylhydrazines” thesis submitted for Master of Science in the Chemistry Department of the Graduate College of the State University of Iowa, June 1956	1	5
“Energy Exposures and Farm Accidents,” Pub. Hlth. 5214, Agricultural Occupational Health, Spring 1982	1	6
“Evaluation of a Laboratory Method for Determining Atmospheric SO <sub>2</sub> ” paper submitted for Master of Science in the Department of Environmental Health of the Graduate College of the University of Minnesota, December 1982	1	7
“Evaluation of a Laboratory Method of Analysis for Atmospheric Formaldehyde” paper submitted for Master of Science in the Department of Environmental Health of the Graduate College of the University of Minnesota, March 1983	1	8
“Evidence for a Sulfene Intermediate in the Alkaline Hydrolysis of Nitro Derivatives of Phenyl Phenylmethanesulfonate,” c. 2000	1	13
Final Progress Report, F.G. Cottrell Grand from Research Corporation, undated	1	13
“Five Step Synthesis of dl-phenylalanine from Malonic Acid,” undated	1	13
“Health and Safety Aspects of the Electrochemical Machining (ECM) and Electric Discharge Machining (EDM) Processes at IBM (Rochester),” 1982	1	13
“A History of the Double-Bond-Rule,” <i>Journal of Chemical Education</i> , vol. 75, p. 596, May 1998	1	9
“A History of the Theory of Resonance,” c. 2008	1	13
“Homolytic, Cationotropic, and Anionotropic Reactions: A mechanistic approach to organic chemistry,” <i>Journal of Chemical Education</i> , vol. 41, p. 639, December 1964	1	9
“Hydrolysis and Aminolysis Reactions of Derivates of Sulfoacetic Acid,” undated	1	13
“The Knoevenagel Rx between Malonic Ester and Salicylaldehyde (with K <sub>2</sub> CO <sub>3</sub> in Acetone soln),” undated	1	13

“The Malonic Ester Synthesis in the Undergraduate Laboratory,” <i>Journal of Chemical Education</i> , vol. 68, p. 689, August 1991	1	9
“The Mechanism of Aqueous Hydrolysis of Nitro Derivatives of Phenyl Phenylmethanesulfonate. An Organic Laboratory Experiment,” <i>Journal of Chemical Education</i> , vol. 79, p. 218, February 2002	1	9
“A New and Simple Synthesis of the Pyrrole Ring System from Michael Acceptors and Tosylmethylisocyanides,” <i>Tetrahedron Letters</i> , no. 52, p. 5337, 1972	1	9
“A Novel and Efficient Synthesis of Oxazoles from Tosylmethylisocyanide and Carbonyl Compounds,” <i>Tetrahedron Letters</i> , no. 23, p. 2369, 1972	1	9
“Organic2, Computer Organic Chemistry: Self-testing Drills for Students” written under a mini-grant from UNIVAC through MECC, July 1975	1	9
“Preparation and Reductive Cyclization of Some Carbon-Alkylated Derivatives of Ethyl 3-Nitro-2-thienylpyruvate,” <i>Journal of Organic Chemistry</i> , vol. 29, p. 2165, August 1964	1	9
Qualitative Organic Analysis, Research Notebook, 1955-58	1	10
“Reactions in Organic Chemistry,” <i>Encyclopedia of Chemistry</i> , p. 740, 1973	1	9
“Reactions of Derivatives of Methane Sulfonic Acids with Salicylaldehydes,” undated	1	13
“Reactions of Salicylaldehydes with Derivates of Methanesulfonic Acids,” undated	1	13
“Recrystallization without Tears,” <i>Journal of Chemical Education</i> , vol. 51, p. 602, September 1974	1	9
Speech regarding environmental concerns, undated	1	11
“A Study of the Infrared Spectra of Some Alkyl-Substituted Carbostyrils,” <i>Journal of Organic Chemistry</i> , vol. 22, p. 211, 1957	1	9
A Study of Qualitative Analysis and other research, Research Notebook, 1950s	1	12
“The Synthesis and Acidities of 1,2,4,2H-Thiadiazine-3,5(4H,6H)-dione-1,1-dioxide and Alkyl Derivates. That Tautomeric Structure of 1,2,4,2H-Thiadiazine-3,5(4H-6H)-dione-1,1-dioxide,” 1958	1	13
“Synthesis of 1,2,4-Triazoles from Tosylmethyl Isocyanide and Aryldiazonium Compounds,” <i>Journal of Organic Chemistry</i> , vol. 41, p. 711, 1976	1	9
“Synthesis of 3-Carbophenoxycoumarin from Diphenyl malonate and Salicylaldehyde,” undated	1	13
“The 1,2,4-Thiadiazine Ring System. I. The Synthesis of 1,2,4,2H-Thiadiazine-3,5(4H,6H)-dione-1,1-dioxide,” <i>Journal of the American Chemical Society</i> , vo. 81, p. 5655, 1959	1	9

“The 1,2,4-Thiadiazine Ring System. III. The Dissociation of 1,2,4,2H-Thiadiazine-3,5(4H,6H)-dione 1,1-Dioxide,” <i>Journal of Organic Chemistry</i> , vol. 26, p. 3461, 1961	1	9
“Three Dimensional Models of Atomic Orbitals,” <i>Journal of Chemical Education</i> , vol. 39, p. 40, January 1962	1	9
“ <i>p</i> -Tolysulfonylmethyl Isocyanide,” <i>Organic Syntheses</i> , vol. 57, p. 102, 1977	1	9
“Validation of a Colorimetric Method for Determination of Atmospheric Formaldehyde,” <i>American Industrial Hygiene Association Journal</i> , vol. 48, p. 420, 1987	1	9
“Validation of a Simpler Method for Determination of Atmospheric Sulfur Dioxide,” <i>American Industrial Hygiene Association Journal</i> , vol. 47, p. 552, 1986	1	9
<b>Teaching Materials, 1964-1995 and undated</b>		
The Chemical Nature of Man and His Environment, undated	1	14
Chemistry Department Related Papers, 1987 and undated	1	15
The Chemistry in Your Life, CH03, 1986-90	1	16
Chemistry of Sulfonic Acid Derivates, undated	1	17
Double-Bond Rule, undated	1	18
Environmental Health and Safety, CH05, January 1987	1	19
General Chemistry, CH07, Fall 1993 and Fall 1994	1	20
Organic Chemistry, 131, Fall 1983; 232, Spring 1985	1	21
Organic Chemistry, Introduction to Laboratory Work, Instructor’s Guide, undated	1	22
Organic Chemistry I, Laboratory Exercises, Spring 1995	1	23
Organic Chemistry II, Laboratory Exercises, undated	1	24
Perspectives in the Sciences, Chem 250, Winter Term 1972	1	25
Radiation Studies Part III: Radiation and the Earth, Science 100, January 1964	1	26
TosMIC Chemistry, c. 1993	1	27
<b>Student Research Files, 1963-1987 and undated</b>		
Biederman, Ken, Research Book, 1967-68	1	28
Bjorling, Jean Anne, Research Paper “A Titrimetric Method for the Determination of Equilibrium Constants for Charge Transfer Complexes, 1970	1	29
Curry, Marc, Research Notebook, J-Term 1987	1	30
Dunn, Douglas, Research Notebook, 1974-75	1	31
El-Faghi, Muhammed, Research Notebook B, undated	1	32
El-Faghi, Muhammed, Research Notebook C, undated	1	33
El-Faghi, Muhammed Said, Research Paper “The Chemistry of Derivatives of $\alpha$ Ketomethnaesulfonic Acids”, 1967	1	34
Fink, Steve, Research Notebook I, Summer 1965	1	35
Fink, Steve, Research Notebook II, 1965-66	1	36
Fink, Steve, Research Notebook III, 1966	1	37
Fink, Steve, Research Notebook IV, 1967	1	38

Fink, Steve, Research Notebook I, 1967	1	39
Fink, Steve, Research Notebook II, 1967	1	40
Fink, Steve, Research Notebook III, 1967	1	41
Fink, Steve, Research Paper "The Mechanism of the Reaction of Phenyl Esters of Methanesulfonic Acids with Nucleophiles in Pyridine, 1967	1	42
Gilkey, Trish, Research Paper "Independent Study in Organic Chemistry", 1979	2	1
Hoganson, Edward and Norman Anderson, Research Notebook, 1959-63	2	2
Hynes, Roger, Research Notebook, January-August 1985	2	3
Hynes, Roger, Research Notebook, March-May 1985	2	4
Ihrig, Phillip, Research Notebook, 1963	2	5
Ihrig, Philip J., Research Paper "Sulfonium Compounds", 1964	2	6
Johnson, Vint, Research Notebook, 1983	2	7
Lindahl, Marcia, Kinetic Study, 1969	2	8
Lindberg, Steven, Research Paper "Sulfonic Acids and Derivatives", undated	2	9
Linn, Carol, Research Notebook, Summer 1965	2	10
Linn, Carol, Research Notebook I, 1965	2	11
Linn, Carol, Research Notebook II, 1965	2	12
Linn, Carol, Research Paper, "The Knoevenagel Reaction of Aromatic Aldehydes with Malono Derivatives", undated	2	13
Linn, Carol, Research Paper, "Knoevenagel Reaction of Diphenyl Sulfoacetate with Aromatic Aldehydes,"	2	13
Maehling, Kevin, Research Notebook, 1972	2	14
Mann, Chuck, Research Notebook, 1983	2	15
Morris, Don, Research Notebook, 1968-69	2	16
Morris, Don, Research Notebook, undated	2	17
Mueller, Brian, "A Proposal for Research Support from Sigma Xi: Development of a Method for the Determination of Chlorine in Water and Air, 1985	2	18
Nelson, Deanna, Research Notebook, 1963-64	2	19
Nelson, Deanna J., Research Paper "The Chemistry of Sulfoxides", undated	2	20
Nick, Paul, Research Notebook I, 1967-68	2	21
Nick, Paul, Research Notebook II, 1968 & Don Morris, Research Notebook, Kinetics - Spec. Photo Monitor, 1969	2	22
Olson, John, Research Notebooks 1 and 2, 1964	2	23
Olson, John, Research Notebook 3, 1965	2	24
Olson, John O., Research Paper "Reactions of Diphenyl Sulfoacetate and Related Compounds", 1964	2	25
Olson, John O., Research Paper "Relative Reactivities of the Sulfonyl and Carbonyl Groups in Sulfoacetic Acid Derivatives", undated	2	26
Oltmans, Dennis, Research Notebook, Summer 1966	2	27



Sandin, Howard, Research Paper “Progress Report for Independent Study”, Fall 1968	2	28
Teute, David, Research Paper “The Hydrolysis of Phenyl Esters of Alkaesulfonic Acids”, 1970	2	29
Thayer, Dean M., Research Paper “Trapping and Identifying Sulfene Intermediates Generated from Phenyl Esters of Negitively Substituted Sufonic Acids”, 1975	2	30
Various Students, Research Papers, 1974-75, 1987, and undated	2	31
Wellington, Kathryn A., Research Paper “The Nature of the Interaction Between the Sulfonyl Group and Electron-Withdrawing Groups in Phenyl Esters of Negatively Substituted Sulfonic Acids”, 1966	2	32
Wellington, Kathy, Research Notebook #1, 1965	2	33
Wellington, Kathy, Research Notebook #2, 1965	2	34
<b>Miscellaneous, 1965-1998 and undated</b>		
“Chemistry In My Life” play by Joyce Tesarek, undated	2	35
Correspondence, 1968, 1975, 1991, and undated	2	36
Correspondence with Dr. Albert M. van Leusen, University of Groningen, 1972-79 and 1998	2	37
Grant Proposals, 1965-93	2	38
Leave Proposals, 1990-94	2	39
Resume, 1996	2	40