### CHEMICAL HERITAGE FOUNDATION

## CATHERINE HURT MIDDLECAMP

Transcript of an Interview Conducted by

Hilary Domush

at

University of Wisconsin, Madison Madison, Wisconsin

on

10 and 11 December 2008

(With Subsequent Corrections and Additions)

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# CATHERINE HURT MIDDLECAMP

1950	Born in Queens, New York on 25 June	
Education		
1972	B.A., Cornell University, Chemistry	
1976	Ph.D., University of Wisconsin, Madison, Inorganic Chemistry	
1989	M.S., University of Wisconsin, Madison, Counseling Psychology and Counselor Education	
	Counselor Education	
	Professional Experience	
1976-1977	Knox College Danforth Teaching Intern, Chemistry	
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	Hobart and William Smith Colleges	
1977-1979	Assistant Professor, Department of Chemistry	
	University of Wisconsin-Madison	
1979-1983	Lecturer, Department of Chemistry	
1979-1983	Chemistry and Biology Instructor, Summer Opportunity Program	
1070 1000	for Minority Students	
1979-1988	Associate Director, Chemistry Learning Center	
1983-1985	Instructor, Chemistry, Minority Middle School Summer Enrichment Program	
1984-1987	Associate Faculty Associate, Department of Chemistry	
1985-1989	Senior Instructor, Chemistry, Minority Middle School Summer	
	Enrichment Program	
1987-1999	Faculty Associate, Department of Chemistry	
1988-present	Director, Chemistry Learning Center	
1989-1993	Program Coordinator, Chemistry, Minority Middle School Summer Enrichment Program	
2000-present	Distinguished Faculty Associate, Department of Chemistry	
2000 present 2004-present	Joint governance appointment, Integrated Liberal Studies Program	
2009-present	Chair, Integrated Liberal Studies Program	
	University of Illinois, Champaign-Urbana	
2004	Visiting Professor, Department of Chemistry	

## Honors

1971	Phi Beta Kappa
1972-1976	Fellowship for graduate study, Danforth Foundation
1972	Sigma Xi
1993	Norman Basset Award for Outstanding Achievement in Student Services
1996	Wisconsin Alumni Association Award for Excellence in Leadership
1998	University of Wisconsin, Madison Teaching Academy
2000	Pharmacia Award for Excellence in the Teaching of Chemistry
2001	Distinguished member, National Society of Collegiate Scholars
2002	Women Chemists Committee of the American Chemical Society
	Regional Award for Diversity
2003	Fellow, Association for Women in Science
2003	University of Wisconsin System Alliant Energy/Underkofler Excellence in Teaching Award
2003	Fellow, American Association for the Advancement of Science
2003-2004	University of Wisconsin System Teaching Scholar
2006	American Chemical Society Award for Encouraging Women into Careers in the Chemical Sciences
2006	Judith S. Craig Distinguished Service Award, College of Letters & Science
2009	Fellow, American Chemical Society

#### ABSTRACT

**Catherine Hurt Middlecamp** was born in Queens, New York, though she grew up in Garden City, New York. Hers was a family of teachers and so Middlecamp wanted to be a teacher as well. She loved school, was active in many sports, and played the piccolo in the band and orchestra. In 1968, she wanted to go to college at Princeton, Harvard, or Yale, but at that time, women were not admitted to these schools. Instead, she selected Cornell University, where women made up about one-fifth of the undergraduate student body. In 1971, when Princeton began to admit women, an administrator attempted to lure Middlecamp away from Cornell, but she was no longer interested. She graduated Phi Beta Kappa from Cornell with a BA and a major in chemistry. She intended to teach high school, but her mentor, Professor James Burlitch, encouraged her to attend graduate school. In addition, she was selected as a Danforth Fellow for graduate study at any institution of her choice.

Middlecamp chose to do her graduate study in chemistry at the University of Wisconsin-Madison (UW-Madison), where she entered Robert West's research lab on organosilicon chemistry. Though only about 15 percent of the doctoral students at UW-Madison were women, women composed about one-third to one-half of West's lab, one of the reasons she selected this group. While working in West's lab, she had the opportunity to teach a real-world chemistry class designed by her advisor. During her college years, she was a social activist, joining with others to speak out against nuclear weapons and the arms race of the Cold War; more than once she was arrested with the Catholic Worker Community of Iowa. Just as she left graduate school, she married.

After finishing her Ph.D., Middlecamp served for a year as a Danforth Teaching Intern at Knox College. In 1977, she took her first faculty position at Hobart & William Smith Colleges. Realizing that she would not get tenure there because of the economic times (and that the woman before her had not gotten tenure), she and her husband moved back to Madison, Wisconsin. There she taught as a lecturer in the Chemistry Tutorial Program for Minority/Disadvantaged students, later named the Chemistry Learning Center; in 1989 she became its Director.

Building on the Robert West course she taught in graduate school, Middlecamp developed (and still teaches) a general chemistry course for non-science majors, *Chemistry in Context*. Students in the course use the textbook of the same name, which was developed as a national curriculum reform project of the American Chemical Society; in 2007, Middlecamp was appointed the Editor-in-Chief of this national curriculum reform project. With a Navajo colleague, she designed and taught the first chemistry course at the UW-Madison to meet the ethnic studies requirement, *Uranium and American Indians*.

In 2003, she sought a faculty line with tenure in the Chemistry department but was turned down. At about the same time, though, she was invited to teach in the Integrated Liberal Studies (ILS) program, a long-standing interdisciplinary certificate program on campus, teaching a course on radioactivity, *The Radium Girls and The Firecracker Boys*. In the ILS Program, Middlecamp found an intellectual and social home (shortly after this oral history interview she was elected as its chair).

The interview concludes with Middlecamp's views on teaching versus research, which she believes is a false dichotomy; what she believes are the many nefarious ways in which women are seen as unserious scholars; the undervaluation and dismissal of women and teaching; and the inherent difficulties of the tenure system. She talks about her grant from the National Science Foundation—one that seeks, from her perspective, a 21<sup>st</sup> century science curriculum for a 21<sup>st</sup> century planet. She also speaks of her Master's degree in counseling psychology and her practice of the martial art of aikido. She believes that as the world becomes ever more interconnected, so must academic disciplines.

#### INTERVIEWER

**Hilary Domush** earned a B.S. in chemistry from Bates College in Lewiston, Maine in 2003. Since then she has completed a M.S. in chemistry and a M.A. in history of science both from the University of Wisconsin. Her graduate work in the history of science focused on early nineteenth-century chemistry in the city of Edinburgh, while her work in the chemistry was in a total synthesis laboratory. Hilary is currently Program Associate for Oral History at CHF, where she combines these two divergent academic paths. Her current work focuses on the oral histories related to women in chemistry. She also contributes to the podcast *Distillations* and the magazine *Chemical Heritage*.

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#### Early Years

Childhood in Queens, New York. Family background. Childhood activities. Science-of-the-Month club. School. Wanting to be teacher.

#### College Years

Matriculated into Cornell University. James Burlitch as mentor. Admissions standards at Cornell. Liked both physics and chemistry. Chose chemistry for major. BA degree because she did not want to be "science nerd". Protesting at Cornell. Conditions for university women in the 1960s. Played piccolo in Princeton University marching band.

#### Graduate School Years

Wins Danforth Foundation scholarship. Enters University of Wisconsin-Madison for PhD. Works in Robert West's lab. Discusses percentages of women in chemistry and in West's lab. Reasons why women do not succeed in chemistry. West's class in real-world chemistry. Cannot play in marching band. History of science classes with Aaron Ihde. Discusses "hippie" culture of times and effect on West's lab. Meets her husband in graduate school.

#### After Graduate School

Placed by Danforth at Knox College; teaches basic chemistry. Moves to Hobart and William Smith Colleges. No tenured women there, so returns to University of Wisconsin. Worked in and then became director of Chemistry Learning Center. Eventually given course for non-chemistry majors. Drafted to author team for *Chemistry in Context*. Teaches class to go with book. Importance of writing well. Ethnic studies class. Denied tenure in chemistry; moves to Integrated Liberal Studies (ILS). More discussion of women in chemistry; importance of good teaching vs. research. Obtains National Science Foundation grant for Mobilizing Science, Technology, Engineering, and Mathematics (STEM) Education for a Sustainable Future.

#### General Thoughts

Balancing career and family. Aikido instructor. Obtains MS in counseling psychology in order to counsel students. More about women in science. Image of science is reality. Tenure. Levels of teaching. Importance of ability to communicate, understand, observe in order to teach well. Recruiting for ILS. Complicated world demands integrated disciplines. ILS her intellectual and social home. Modeling her perseverance.

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