CHEMICAL HERITAGE FOUNDATION

JENNIE R. PATRICK

Transcript of an Interview Conducted by

Jeannette E. Brown

at

Atlanta, Georgia

on

30 March 2006

(With Subsequent Corrections and Additions)

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JENNIE R. PATRICK

1949	Born in Gadsden, Alabama on 1 January	
	Education	
1973 1979	B.S., University of California, Berkeley, Chemical Engineering Sc.D., Massachusetts Institute of Technology, Chemical Engineering	
	Professional Experience	
1979-1983	General Electric, Schenectady, New York Research Engineer, Research and Development	
1982-1985	Rensselaer Polytechnic Institute, Troy, New York Adjunct Professor, Chemical Engineering	
1983-1987	Georgia Institute of Technology, Atlanta, Georgia Adjunct Professor, Chemical Engineering	
1983-1985	Phillip Morris, Richmond, Virginia Project Manager, Research Center	
1985-1990	Rohm & Haas, Bristol, Pennsylvania Manager of Fundamental Chemical Engineering Research	
1990-1993	Southern Company Services, Birmingham, Alabama Assistant Executive Vice President	
1993-1997	Tuskegee University, Tuskegee, Alabama 3M Eminent Scholar and Professor of Chemical Engineering	
1997-2000	Raytheon Engineers and Constructors, Birmingham, Alabama	
2000-present	Environmental Wellness Institute, Atlanta, Georgia Founder	

Honors

1979	First African-American	woman in U.S. to earn	a doctorate in Traditional
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	Chemical Engineering
1980	National Organization for the Professional Advancement of Black
	Chemists and Chemical Engineers Outstanding Women in Science
	and Engineering Award
1983	Served as Principle in Ciba-Geigy Exceptional Black Scientists
	Poster Program
1984	Honorary Doctor of Science from Tuskegee University
1987	Presidential Citation from the National Association for Equal Opportunity
	in Higher Education
1989	The World Who's Who of Women
1990	Dictionary for International Biography
1994-1995	Teacher of the Year, Chemical Engineering, Tuskegee University
1996	Who's Who among America's Teachers/Who's Who in the World/Who's
	Who of American Women
2000	Williams W. Grimes Award, American Institute of Chemical Engineers

ABSTRACT

Jennie R. Patrick grew up in Gadsden, a small, typically Southern, town in Alabama, the fourth of five children. Her parents were laborers whose formal education stopped in junior high school. As a child, she had no real experience of science, except that she was a curious child who always wanted to know how and why things worked. By junior high school she had decided she wanted to be a chemist. Her high school years involved forcible integration, and she was one of only eleven black students, of whom half left the white school before graduation. Jennie, however, was determined to succeed and to get the best education she could.

Patrick's mother vetoed her scholarship to University of California, Berkeley, her dream school, so Patrick entered Tuskegee Institute. She later transferred to Berkeley, where, as the only black and only American woman in chemical engineering, she continued to suffer racism. She excelled anyway and decided to go to Massachusetts Institute of Technology (MIT) for her ScD. There she found more black students and professors, including John Turner, who was a dean of students, and less hostility. She also found a tough and challenging atmosphere that she loved. Her advisor was Robert C. Reid, and her thesis topic dealt with nucleation phenomena.

Patrick's first job was as research engineer at General Electric Research Center. Next, she became project manager at Philip Morris, working on supercritical extraction. Then she spent five years as research manager at Rohm and Haas Chemical Company in Philadelphia. She moved back south to Birmingham, Alabama, as Assistant Executive Vice President at Southern Company Services, working on increasing the efficiency of technology. She made this career change in part to enable her to care for her aging parents. She then was 3M Eminent Scholar at Tuskegee University for three years. While there she developed a mentoring program for girls in science. Five years ago, she retired from her last job, which was as technical consultant at Raytheon in Birmingham, Alabama, where she studied the education of urban children.

Near the end of the interview, Patrick reflects on people who played an important role in her early education, particularly remembers Anthony Knowledges, her fifth-grade teacher, and Pinkie Bridges, her sixth-grade home room teacher. Harry Morrison at Berkeley also encouraged her and helped her get a scholarship. Patrick's entire career was in industry, but always she was always associated with a university. She found balancing her demanding career with her personal life difficult but rewarding. She is now married to her best friend. Patrick believes that her most important contribution is her work on supercritical extraction, which formed the basis for subsequent research, though being in industry did not afford her to publish many articles. When asked what she would tell aspiring chemical engineers she advises them to persevere but to be careful of their health; chemicals are dangerous. She also advises youngsters to learn from their predecessors.

INTERVIEWER

Jeannette E. Brown has a research MS degree from the University of Minnesota and a BS degree in the Field of Chemistry from Hunter College. She started her industrial career at CIBA Pharmaceutical Co. as a junior chemist, working there for eleven years, and she held the position of Research Chemist at Merck & Co. Inc. for twenty-five years. Brown is a former

Faculty Associate in the department of Pre-College Programs at the New Jersey Institute of Technology, holding the title of New Jersey Statewide Systemic Initiative (NJSSI) Regional Director. She was appointed to the National Science Foundation Committee on Equal Opportunities for Women Minorities and Persons with Disabilities (CEOSE) and served on that committee for six years. She is the 2005 recipient of the American Chemical Society Dreyfus Award for mentoring minorities in science and she is currently working on a book about the history of African-American women chemists.

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Early Years

Grew up in Gadsden, Alabama. Family background. Curious child; always wanted to know how and why things worked. By junior high school wanted to be a chemist. Forcible integration; eleven black students. Half left white school before graduation. Determined to succeed. College prep classes. Chemistry, physics, mathematics. Mentors among black elementary teachers. Supportive parents.

College and Graduate School Years

Always dreamt of going to University of California, Berkeley. Mother vetoed choice. Attending Tuskegee Institute. First woman to major in chemical engineering. Transfer to Berkeley. Only American woman and only black in chemical engineering. Racism. Doing well but not being accorded correct grade. Accepted into Massachusetts Institute of Technology's (MIT) PhD program. More blacks, less hostility. Tough and challenging program. Shirley Mathis McBee. John Turner dean. Thesis topic nucleation phenomena. Advisor Robert C. Reid. Loved demanding atmosphere at MIT. All education on scholarship. First African-American woman to get PhD in chemical engineering, disputed by Lilia Abron.

Career Years

First job as research engineer at General Electric Research Center. Next, project manager at Philip Morris, working on supercritical extraction. Then five years as research manager at Rohm and Haas Chemical Company in Philadelphia. Back south to Birmingham, Alabama, as Assistant Executive Vice President at Southern Company Services, working on increasing efficiency of technology. Then 3M Eminent Scholar for three years at Tuskegee University. Developed program for girls; lived in dorm with and mentored about thirty-eight. Technical consultant at Raytheon in Birmingham, Alabama.

General Thoughts

No mentors except elementary teachers. Anthony Knowledges, fifth-grade teacher. Pinkie Bridges, sixth-grade home room teacher. Harry Morrison at Berkeley. Entire career in industry, but always associated with university. Balancing demanding career with personal life difficult but rewarding. Married to best friend. Believes her most important contribution her work on supercritical extraction, which formed basis for subsequent research. Industry does not foster dissemination of scientific knowledge, so not many publications. Would tell aspiring chemical engineers to persevere but to be careful of their health; chemicals are dangerous. Her own physical disabilities as result of chemicals.

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