

CHEMICAL HERITAGE FOUNDATION

WILLIAM E. HANFORD

Transcript of an Interview  
Conducted by

James J. Bohning

at

Bethesda, Maryland

on

15 March 1995

(With Subsequent Corrections and Additions)

## ACKNOWLEDGEMENT

This oral history is one in a series initiated by the Chemical Heritage Foundation on behalf of the Society of Chemical Industry (American Section). The series documents the personal perspectives of Perkin and the Chemical Industry Award recipients and records the human dimensions of the growth of the chemical sciences and chemical process industries during the twentieth century.

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THE CHEMICAL HERITAGE FOUNDATION

Oral History Program

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*W. E. Hanford*

William E. Hanford

(Date) \_\_\_\_\_

*3/13/95*

(Revised 17 March 1993)

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WILLIAM E. HANFORD

1908 Born in Bristol, Pennsylvania, on 9 December  
1996 Died in Bethesda, Maryland, on 27 January

Education

1930 B.S., Philadelphia College of Pharmacy and Science  
1935 Ph.D., organic chemistry, University of Illinois

Professional Experience

1930-1931 Analyst Chemist, Rohm and Haas Company  
1932-1935 Assistant Chemist, University of Illinois

E. I. DuPont de Nemours & Co., Inc.  
1935-1936 Research Chemist  
1936-1942 Group Leader

1942-1946 Director of Research, General Aniline & Film Corporation [GAF]

M. W. Kellogg Company  
1946-1947 Technical Consultant [?]  
1948-1950 Director, Petroleum and Chemical Research [?]  
1950-1957 Vice President [?]  
1950-1957 Director of Research [?]  
1950-1957 Member, Board of Directors [?]

Olin Corporation  
1957 Assistant to President  
1957-1973 Vice President, Research and Development

World Water Resources, Inc.  
1968-[?] Director of Research  
1968-[?] Chairman of the Board  
1973-1985 Consultant

## Honors

- 1955 Ambassador's Award, State of Pennsylvania
- 1957 Honor Scroll, New York Chapter, American Institute of Chemists
- 1961 Chemical Industry Medal, Society of Chemical Industry, American Section
- 1967 Chemical Pioneers Award
- 1974 Gold Medal, American Institute of Chemists
- 1991 Inducted into National Inventors Hall of Fame

## ABSTRACT

William Hanford begins the interview with a discussion of the importance of teamwork and the influence of Roger Adams in his career. He then continues on to his family background and youth. His high school chemistry teacher and his uncle both encouraged his interest in the sciences. After graduating from Bristol High School, he attended the Philadelphia College of Pharmacy and Science, where he earned a B.S. in chemistry in 1930. Hanford then took a position as an analytical chemist at Rohm and Haas, but soon decided to attend graduate school. He accepted an offer from the University of Illinois, and studied with Roger Adams. He worked on various problems in the laboratory, and got to know many members of the department, including Carl Marvel, Reynold Fuson, and Ralph Shriner. After earning his Ph.D. in 1935, he took a job with DuPont, working in Experimental Station. He worked on producing isothiocyanate and polymerizing caprolactam. Hanford was also involved with Teflon, polyamides, and polyesters. In 1942, he moved to GAF, where he worked on Glim, the first liquid detergent. Hanford then moved to M.W. Kellogg Company in 1946. He helped to develop KEL-F and sold it to 3M before moving again to Olin Corporation in 1957. At Olin, he worked on Head and Shoulders, carpet backing, and plastic shotgun shells, among other products. Hanford concludes the interview with a discussion of teamwork, his family, his experience with urethane, and his induction into the National Inventors Hall of Fame.

## INTERVIEWER

James J. Bohning is currently Visiting Research Scientist at Lehigh University. He has served as Professor of Chemistry Emeritus at Wilkes University, where he was a faculty member from 1959 to 1990. He served there as chemistry department chair from 1970 to 1986 and environmental science department chair from 1987 to 1990. He was chair of the American Chemical Society's Division of the History of Chemistry in 1986, received the Division's outstanding paper award in 1989, and presented more than twenty-five papers before the Division at national meetings of the Society. He has written for the American Chemical Society News Service, and he has been on the advisory committee of the Society's National Historic Chemical Landmarks committee since its inception in 1992. He developed the oral history program of the Chemical Heritage Foundation beginning in 1985, and was the Foundation's Director of Oral History from 1990 to 1995.

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## NOTES

1. William E. Hanford (to E.I. DuPont de Nemours & Co.), "Polyamides," U.S. Patent 2,281,576, issued 5 May 1942.
2. Howard N. and Lucille L. Sloane, *A Pictorial History of American Mining: The adventure and drama of finding and extracting nature's wealth from the earth, from pre-Columbian times to the present* (New York: Crown Publishers, Inc., 1970).

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