THE BECKMAN CENTER FOR THE HISTORY OF CHEMISTRY

FRANK H. WESTHEIMER

Transcript of an Interview
Conducted by

Leon Gortler

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Chemical Heritage Foundation
Oral History Program
315 Chestnut Street
Philadelphia, Pennsylvania 19106

FRANK HENRY WESTHEIMER

1912 Born in Baltimore, Maryland on 15 January

Education

1932 A.B., chemistry, Dartmouth College
1933 M.A., chemistry, Harvard University
1935 Ph.D., chemistry, Harvard University
(Mentors: James B. Conant; Elmer P. Kohler)

Professional Experience

1935-1936 National Research Fellow, Columbia University
(with Louis Hammett)
University of Chicago
1936-1941 Instructor
1941-1946 Assistant Professor
1946-1948 Associate Professor
1948-1954 Professor
1953-1954 Visiting Professor, Harvard University
Harvard University
1954-1960 Professor
1959-1962 Department Chairman
1960-1982 Loeb Professor of Chemistry
1982-1983 Senior Professor
1983- Loeb Professor of Chemistry Emeritus

1944-1945 Research Supervisor, Explosives Research Laboratory, National Defense Research Committee
1964-1965 Chairman, National Academy of Science Committee to Survey Chemistry (Westheimer Report)
1967-1970 Member, President's Science Advisory Committee

Awards

1954 Elected Member, National Academy of Sciences
1970 Willard Gibbs Medal, Chicago Section, American Chemical Society
1970 James Flack Norris Award in Physical Organic Chemistry, Northeastern Section, American Chemical Society
1976 Theodore William Richards Medal, Northeastern Section, American Chemical Society
1980 Richard Kokes Award, National Academy of Sciences
1980 Charles Frederick Chandler Award
1981 Lewis C. Rosenstiel Award, Rosenstiel Basic Medical Sciences Research Center
1982 Robert A. Welch Award, The Robert A. Welch Foundation

1982 Arthur C. Cope Award, American Chemical Society
1982 William H. Nichols Medal, New York Section, American Chemical Society
1983 Christopher Ingold Medal, The Chemical Society of London
1988 Priestley Medal, American Chemical Society

ABSTRACT

In this interview, Frank Westheimer begins with his family, his childhood and early education in Baltimore, his undergraduate days at Dartmouth, his decision to go into chemistry, and his choice of Harvard for his graduate work. Next he covers his years as a graduate student at Harvard and talks about his research with James Conant and Elmer Kohler, the faculty at Harvard and the courses they taught, and his summer work with Alsoph Corwin at Johns Hopkins. He also talks at length about his early interest in biochemistry, his view of theoretical organic chemistry in the mid-1930s and the opportunities for research open to him, the development of theoretical organic chemistry in the early part of the twentieth century, and the publications of some of the early scientists. This is followed by a description of his year as a National Research Fellow at Columbia, his research, his colleagues, and more on the development of his interest in biochemical problems. Westheimer continues with the offer of a position at the University of Chicago from Morris Kharasch, and includes an extensive discussion of the university, his research, and his collaboration with John Kirkwood, Joe Mayer and Birgit Vennesland. In the next part of the interview he comments on his selection and training of students and discusses a number of former students who have been successful in research careers. The interview concludes with more discussion of physical organic chemistry, past, present and future; a review of his work on the hydrolysis of phosphate esters and pseudorotation; comments on the future of organic chemistry; and a review of the Westheimer Report, the analysis of American chemistry by the National Academy of Sciences.

INTERVIEWER

Leon Gortler is professor of chemistry at Brooklyn College of the City University of New York. He holds A.B. and M.S. degrees from the University of Chicago and a Ph.D. from Harvard University. He has long been interested in the history of chemistry, and helped establish the Beckman Center's oral history program. He has conducted over forty oral and videotaped interviews with major American scientists.

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NOTES

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