

THE BECKMAN CENTER FOR THE HISTORY OF CHEMISTRY

RICHARD S. STEIN

Transcript of an Interview
Conducted by

James J. Bohning

at

The University of Massachusetts

on

17 June 1987

Richard S.
Stein
JH
3/15/96

BECKMAN CENTER FOR THE HISTORY OF CHEMISTRY

Oral History Program

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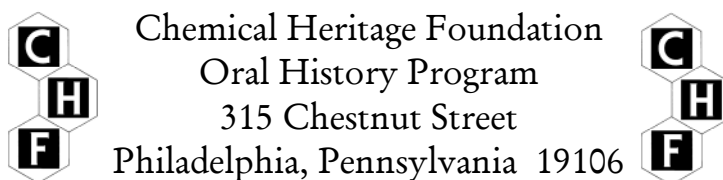
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RICHARD S. STEIN

1925 Born in New York, New York on 21 August

Education

1945 B.S., chemistry (magna cum laude), Polytechnic
Institute of Brooklyn
1948 M.A., physical chemistry, Princeton University
1949 Ph.D., physical chemistry, Princeton University

Professional Experience

1948-1949 National Research Council Fellow, Cambridge
University
1949-1950 Research Associate, Princeton University

University of Massachusetts, Amherst
1950-1957 Assistant Professor of Chemistry
1957-1959 Associate Professor of Chemistry
1959-1961 Professor of Chemistry
1961-1980 Commonwealth Professor
1980- Charles A Goessmann Professor
1961- Founder and Director, Polymer Research Institute

Honors

1968 Fulbright Visiting Professor, Kyoto University
1969 International Award, Society of Plastics Engineers
1970 Honor Scroll Award, New England Chapter, American
Institute of Chemists
1972 Applied Polymer Chemistry Award, American Chemical
Society
1972 Bingham Medal, Society of Rheology
1976 Polymer Physics Award, American Physical Society
1978 Chancellor's Medal, University of Massachusetts
1983 Polymer Chemistry Award, American Chemical Society
1985 Whitby Lecturer, University of Akron
1988 Polymer Science Society of Japan Award

ABSTRACT

Richard Stein starts this interview by reflecting on the New York City schools which provided a real stimulus, especially in mathematics and science, to him and his contemporaries. At Brooklyn technical High School he took a more vocational set of courses, thinking that the family resources would not cover college study. In the event, however, Stein was able to go to Brooklyn Polytechnic Institute and, under the wartime circumstances, was able to graduate within three years, including a productive senior project on light scattering with Paul Doty. Stein then accepted a Textile Foundation fellowship at Princeton University. In the three years of his Ph.D. program he worked under a succession of three advisors; Henry Eyring, Robert Rundle and Arthur Tobolsky. During this section of the interview Stein describes the organization of graduate study in chemistry at Princeton and recollects Eyring, Taylor, Rundle and Tobolsky. A NRC fellowship took Richard Stein from Princeton to Cambridge to work on infrared dichroism under Gordon Sutherland and he recalls the austerities of life in postwar England and the primitive facilities in the Cambridge physical chemistry laboratories. Soon after his return to this country Stein was appointed to an assistant professorship in the chemistry department of the University of Massachusetts at Amherst. Stein describes his heavy teaching load, how he started his research program and the growth of polymer interests at UMass. The latter led to the inauguration of the Polymer Research Institute at UMass and Stein reflects on the academic interactions between chemistry and polymer science. The interview concludes with recollections of the visit of a chemistry delegation to China and also with his views on research funding.

INTERVIEWER

James J. Bohning holds the B.S., M.S., and Ph.D. degrees in chemistry, and has been a member of the chemistry faculty at Wilkes College since 1959. He was chair of the Chemistry Department for sixteen years, and was appointed chair of the Department of Earth and Environmental Sciences in 1988. He has been associated with the development and management of the oral history program at the Beckman Center since 1985, and was elected Chair of the Division of the History of Chemistry of the American Chemical Society for 1987.

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