

CHEMICAL HERITAGE FOUNDATION

RAPHAEL KATZEN

Transcript of Interviews
Conducted by

David C. Brock and Arnold Thackray

at

Chemical Heritage Foundation, Philadelphia, Pennsylvania and Bonita Springs, Florida

on

20 October 2000 and 2 February 2001

(With Subsequent Corrections and Additions)

CHEMICAL HERITAGE FOUNDATION
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RAPHAEL KATZEN

1915 Born in Baltimore, Maryland on 28 July

Education

1936 B.ChE., Polytechnic Institute of Brooklyn
1938 M.ChE., Polytechnic Institute of Brooklyn
1942 D.ChE., Polytechnic Institute of Brooklyn

Professional Experience

1937-1940 Northwood Chemical Company
Chemical Supervisor
Director of Research, Chemical Products

1942-1944 Diamond Alkali Company
Technical Supervisor for Research and Development,
Northwood Project

1944-1953 Vulcan-Cincinnati, Inc.
Project Manager, Design and Construction
Manager, Engineering Division

1953-1997 Raphael Katzen Associates International, Inc.
Chairman and President, Consulting and Process Design
1953-1980 Managing Partner

1998-present Raphael Katzen, P.E.
Consulting Engineer

Honors

1986 Chemical Engineering Professional Practice Award, American
Institute of Chemical Engineers

1988 Outstanding Personal Achievement in Chemical Engineering
Award, McGraw-Hill Chemical Engineering

1990 Robert L. Jacks Memorial Award, Management Division,
American Institute of Chemical Engineers

1996 Election to National Academy of Engineering [Bioengineering,
Chemical Engineering]

- 1997 C. D. Scott Award, Symposium in Biotechnology for Fuels and
Chemicals
- 1999 Lifetime Achievement Award, Renewable Fuel Association
- 2000 Special Lifetime Achievement Award, Significant Contributions
in Engineering Biomass-to-Chemical Processing Plants,
American Chemical Society
- 2000 First Award of Excellence, International Fuel Ethanol Workshop
- 2001 Founders Award, American Institute of Chemical Engineers

ABSTRACT

Raphael Katzen begins the interview by discussing his family background and childhood. He attended an all-boys high school, DeWitt Clinton, in New York and graduated from Polytechnic Institute of Brooklyn [Poly] with a bachelor's degree in chemical engineering in 1936. While an undergraduate at Poly, Katzen became acquainted with his mentor, Donald F. Othmer. Othmer, the generous and helpful man that he was, aided Katzen whenever possible by finding Katzen summer employment, taking Katzen on off-campus consultations, and requesting permission for Katzen to obtain his master's degree in absentia while working at Northwood Chemical Company. After receiving his doctorate in 1942, Katzen became involved with the acid hydrolysis of wood in the production of ethanol at Vulcan-Cincinnati Incorporated. With nearly seventeen years experience behind him, nine years at Vulcan, and seven years in the operating industry, in 1953 Katzen decided to start his own company, Raphael Katzen Associates International, Inc., focusing on process design engineering and consultation. Katzen Associates, now known as KATZEN International, Inc., has consulted and reorganized numerous companies over the last fifty years, such as Vulcan-Cincinnati, Air Products and Chemicals Inc., and Union Carbide Corporation. Katzen concludes the interview with a discussion of his current work with Raphael Katzen, PE, his marriage to and life with Selma M. Katzen, and his friendship with Donald and Mildred Topp Othmer.

INTERVIEWERS

David C. Brock is Program Manager for Educational and Historical Services at the Chemical Heritage Foundation in Philadelphia. He is currently a Ph.D. candidate in the History Department, Program in the History of Science at Princeton University. In 1995, Mr. Brock received his M.A. in the History of Science from Princeton University and in 1992, he earned a M.Sc. in the Sociology of Scientific Knowledge from the University of Edinburgh.

Arnold Thackray is President of the Chemical Heritage Foundation. He majored in the physical sciences before turning to the history of science, receiving a Ph.D. from Cambridge University in 1966. He has held appointments at Oxford, Cambridge, Harvard, the Institute for Advanced Study, the Center for Advanced Study in the Behavioral Sciences, and the Hebrew University of Jerusalem. In 1983 he received the Dexter Award from the American Chemical Society for outstanding contributions to the history of chemistry. He served on the faculty of the University of Pennsylvania for more than a quarter of a century. There, he was the founding chairman of the Department of History and Sociology of Science, where he is the Joseph Priestley Professor Emeritus.

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