

CHEMICAL HERITAGE FOUNDATION

GEORGE ROSENKRANZ

Transcript of an Interview
Conducted by

James G. Traynham

at

New York City, New York

on

17 May 1997

(With Subsequent Corrections and Additions)

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GEORGE ROSENKRANZ

1916 Born in Budapest, Hungary, on 20 August

Education

1938 B.S., chemical engineering, Swiss Federal Institute of Technology
1939 Dr. Sci, Tech., Swiss Federal Institute of Technology

Professional Experience

1939-1941 Swiss Federal Institute of Technology
Research Assistant

1941-1945 Vieta Plasencia Lab
Director of Research

1945-1980 Syntex Corporation
Scientific Director, Syntex, S. A.
1949-1956 Vice President and Director of Research, Syntex, S. A.
1957-1980 President and Chairman of the Board
1976-1982 Chairman of the Board and CEO

1996-present Industria, Ciencia, Tecnologia [ICT]
Founder

Honors

1949 Mexican Citizenship Award
1994 National Prize of Pharmaceutical Sciences "Dr. Leopold Rio de la Loza"

ABSTRACT

George Rosenkranz begins the interview with a discussion of his childhood years in Budapest, Hungary. After graduation from the German School, Rosenkranz attended the renowned Swiss Federal Institute of Technology. There, he received his B.S. in chemical engineering in 1938 and his Ph.D. in 1939. Rosenkranz studied under several luminaries in chemistry, most notably, Leopold Ruzicka. After receiving his Ph.D., Rosenkranz worked as a research assistant in Leopold Ruzicka's lab, where he headed a group researching triterpenes. In 1941, Rosenkranz had agreed to teach organic chemistry at the University of Quito, leaving in October 1941 to make the long trip to Ecuador. His three-week-long boat trip eventually stalled in Cuba. While waiting for the boat to Ecuador, Rosenkranz decided to remain in Havana. There he also met his future wife, Edith Stein. Rosenkranz soon landed a position as Director of Research at the Vieta Plasencia Lab. In 1945, Rosenkranz joined Syntex Corporation in Mexico as Scientific Director. His immediate work was on progesterone synthesis. Rosenkranz hired several up-and-coming scientists to work at Syntex, including Carl Djerassi and Alejandro Zaffaroni. Syntex's major successes were the synthesis of cortisone and Djerassi's synthesis of oral contraceptives, thus turning a little-known company into a major pharmaceutical powerhouse. In 1982, Rosenkranz retired as chairman of the board, president, and CEO of Syntex. Rosenkranz concludes the interview with a discussion of Syntex's growth, and thoughts on his family and future endeavors.

INTERVIEWER

James G. Traynham is a Professor of Chemistry at Louisiana State University, Baton Rouge. He holds a Ph.D. in organic chemistry from Northwestern University. He joined Louisiana State University in 1963 and served as chemistry department chairperson from 1968 to 1973. He was chairman of the American Chemical Society's Division of the History of Chemistry in 1988 and is currently councilor of the Baton Rouge section of the American Chemical Society. He was a member of the American Chemical Society's Joint-Board Council on Chemistry and Public Affairs, as well as a member of the Society's Committees on Science, Chemical Education, and Organic Chemistry Nomenclature. He has written over ninety publications, including a book on organic nomenclature and a book on the history of organic chemistry.

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NOTES

1. Paul Karrer. *Lehrbuch der organischen Chemie* (Leipzig: Thieme, 1933).
2. Carl Djerassi. *The Pill, Pygmy Chimps, and Degas' Horse : the Autobiography of Carl Djerassi* (New York: Basic Books, 1992).
3. Carl Djerassi. *Steroids Made It Possible* (Washington, DC: American Chemical Society, 1990).
4. See for example:

George Rosenkranz. *The Romex System of Bidding; a Dynamic Approach to Bridge* (New York: World Publishing Company, 1970).

George Rosenkranz. *Win with Romex: the Key to Accurate Bidding* (New York: Crown Publishers, 1975).
5. John Horgan. *The End of Science* (Reading, MA: Addison-Wesley Publishers, 1996).

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