CHEMICAL HERITAGE FOUNDATION

LINUS PAULING

Transcript of an Interview
Conducted by

Jeffrey L. Sturchio

in

Denver, Colorado

on

6 April 1987

(With Subsequent Additions and Corrections)

THE BECKMAN CENTER FOR THE HISTORY OF CHEMISTRY

Oral History Program

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(Signature) Linus Pauling

(Date) 5 April 1993

(Revised 20 February 1989)

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

LINUS PAULING

1901 Born in Portland, Oregon on 28 February

Education

1922 B.S., chemical engineering, Oregon State College
1925 Ph.D., physical chemistry and mathematical physics, summa cum laude, California Institute of Technology

Professional Experience

1925-1926 National Research Council Fellow
1926-1927 Guggenheim Fellow, Universities of Münich, Zürich, and Copenhagen
California Institute of Technology
1922-1925 Teaching Fellow
1923-1927 Research Associate
1927-1929 Assistant Professor
1929-1931 Associate Professor
1931-1964 Professor
1936-1958 Chairman, Division of Chemistry and Chemical Engineering
1936-1958 Director, Gates and Crellin Chemical Laboratories
1945-1948 Member, Executive Committee, Board of Trustees
1963-1967 Research Professor, Center for Study of Democratic Institutions
1967-1969 Professor of Chemistry, University of California, San Diego
Stanford University
1969-1974 Professor of Chemistry
1974- Professor Emeritus
Linus Pauling Institute of Science and Medicine
1973-1975 President
1978-1979 President
1973- Research professor

Honors

Among the numerous awards in chemistry are:

1931 Langmuir Prize, American Chemical Society
1941 Nichols Medal, New York Section, American Chemical Society
1947 Davy Medal, Royal Society
1948 United States Presidential Medal for Merit
1952 Pasteur Medal, Biochemical Society of France
1954 Nobel Prize, Chemistry
1955 Addis Medal, National Nephrosis Foundation

1955 Phillips Memorial Award, American College of Physicians
1956 Avogadro Medal, Italian Academy of Science
1957 Paul Sabatier Medal
1957 Pierre Fermat Medal in Mathematics
1957 International Grotius Medal
1963 Nobel Peace Prize
1965 Order of Merit, Republic of Italy
1965 Medal, Academy of the Rumanian People's Republic
1966 Linus Pauling Medal
1966 Silver Medal, Institute of France
1966 Supreme Peace Sponsor, World Fellowship of Religion
1972 United States National Medal of Science
1972 International Lenin Peace Prize
1978 Lomonosov Medal, USSR Academy of Science
1979 Medal for Chemical Sciences, National Academy of Science
1984 Priestley Medal, American Chemical Society
1984 Award for Chemistry, Arthur M. Sackler Foundation
1987 Award in Chemical Education, American Chemical Society
1989 Vannevar Bush Award, National Science Board
1990 Richard C. Tolman Medal, Southern California Section, American Chemical Society

ABSTRACT

Linus Pauling begins this interview by describing his early interest in science. While growing up in Portland, Oregon, he collected laboratory equipment and carried out chemistry experiments in his home. He also worked in the chemistry laboratory of his high school. Pauling supported himself through his undergraduate years at Oregon State Agricultural College by working in the chemistry department stockroom and assisting an engineering professor. During graduate school at Caltech, he learned x-ray crystallography from Roscoe Dickinson and published his first paper. Pauling continued to use crystallography to attack more complex chemical problems. In 1926, Pauling was awarded a Guggenheim Fellowships to study in Europe. In Zürich, he carried out research on the interaction of two helium atoms which later led him to develop the theory of the three-electron bond. Pauling concludes this interview with his return to Caltech as assistant professor of chemistry.

INTERVIEWER

Jeffrey L. Sturchio received an A.B. in history from Princeton University and a Ph.D. in the history and sociology of science from the University of Pennsylvania. He was Associate Director of the Beckman Center for the History of Chemistry from 1984 to 1988, and has held teaching appointments at the New Jersey Institute of Technology, Rutgers University, and the University of Pennsylvania as well as a fellowship at the Smithsonian Institution's National Museum of American History. After a sojourn on the senior staff of the AT&T Archives, Dr. Sturchio joined Merck & Co., Inc. as Corporate Archivist in June 1989. He is currently Director, Science & Technology Policy, in the Public Affairs Department at Merck.

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NOTES

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