

CHEMICAL HERITAGE FOUNDATION

MARION DAVID FRANCIS

Transcript of an Interview
Conducted by

James G. Traynham

at

Cincinnati, Ohio

on

24 January 1997

(With Subsequent Corrections and Additions)

ACKNOWLEDGEMENT

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MARION DAVID FRANCIS

1923 Born in Campbell River, British Columbia, Canada, on 9 May

Education

1946 B.A., chemistry, University of British Columbia
1949 M.A., chemistry, University of British Columbia
1953 Ph.D., biochemistry, University of Iowa

Professional Experience

1946-1946 Chemist, Canadian Fishing Company
1946-1949 Instructor, University of British Columbia
1949-1951 Research Assistant, University of Iowa
1951-1952 U.S. Public Health Fellow, University of Iowa

Procter & Gamble Company

1952-1976 Research Chemist
1976-1985 Senior Scientist

1985-1990 Senior Scientist, Norwich Eaton Pharmaceuticals, Inc.
1990-1993 Research Fellow, Victor Mills Society

1993-present Consultant, Procter & Gamble Company

Honors

1977 Cincinnati Chemist of the Year Award, American Chemical Society, Cincinnati Section
1979 Professional Accomplishment Award in Industry, Technical and Scientific Societies Council of Cincinnati
1990 Technical Innovation Award, Victor Mills Society
1994 National Industrial Chemistry Award, American Chemical Society
1996 Perkin Medal, Society of Chemical Industry
1996 Morley Award and Medal, American Chemical Society, Cleveland Section

ABSTRACT

Marion David Francis begins his interview with a discussion of his childhood in Canada. Deeply influenced by his industrious parents and siblings, Francis worked his way through high school and college at a logging camp. He received his B.A. in chemistry in 1946 and his M.A. in chemistry in 1949, both from the University of British Columbia. Francis married shortly after, and he and his wife moved to Iowa, where he continued his studies at the University of Iowa, obtaining a Ph.D. in biochemistry in 1953. Francis accepted a position with Procter & Gamble in 1952. His first work there involved research on detergents and skin penetration. Procter & Gamble then moved Francis into hair research. Finally, Francis moved to the dental section, where he became involved with fluoride research. Using both human and bovine dental samples, Francis explored enamel resistance to calcium fluoride. He also proved in other lab tests on rats that fluoride had an anti-enzymatic effect on teeth, and that fluoride treatments helped protect rats' teeth from decay. Francis continued to do dental research on calculus and its safe removal from teeth without damaging the enamel. Speaking on scientific innovation, Francis touches on team effort and support, as well as management and research and development. Francis concludes the interview with a reflection on winning his scientific awards and final thoughts on his family.

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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