

THE BECKMAN CENTER FOR THE HISTORY OF CHEMISTRY

CALVIN S. FULLER

Transcript of an Interview
conducted by

James J. Bohning

at

Vero Beach, Florida

on

29 April 1986

Calvin S. Fuller

THE BECKMAN CENTER FOR THE HISTORY OF CHEMISTRY

Oral History Program

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CALVIN S. FULLER

1902 Born in Chicago, Illinois on 25 May

Education

1926 B.S., chemistry, University of Chicago
1929 Ph.D., physical chemistry, University of Chicago

Professional Experience

1920-1922 Analyst, General Chemical Company, Chicago
1924-1930 Chicago Tribune
1930-1942 Physical Chemist, Bell Telephone Laboratories
1942-1944 Chief, Polymer Research, Office of the Rubber
Director

Bell Laboratories
1944-1950 Plastics Chemist
1950-1967 Chemical Physicist
1945-1950 Consultant, Research and Development Board,
Department of Defense

Honors

1956 John Scott Medal, City of Philadelphia
1963 John Price Wetherill Medal, Franklin Institute
1964 Fellow, American Association for the Advancement
of Science
1981 Krupp Prize
1985 Photovoltaic Founders Award, IEEE

ABSTRACT

In this interview Dr. Fuller traces his early years and the development of his interests in radio and in chemistry. Encouraged by an outstanding high school teacher, Fuller wins a scholarship to the University of Chicago. Economic pressures force him to break studies for periods of employment in the analytical laboratories of the General Chemical Company and as a photoengraver at the Chicago Tribune, but Fuller persists with his studies and completes his doctorate under W. D. Harkins. Dr. Fuller enlivens the interview with recollections of Harkins and Julius Steiglitz. Appointment as a research chemist under R. R. Williams at Bell Laboratories introduces Calvin Fuller to the infant science of synthetic polymers and to x-ray crystallography. World War II sees Fuller in Washington, D.C. heading polymer chemistry research as part of the synthetic rubber program. On return to Bell Laboratories after the war, Fuller decides to move to solid state chemistry and describes his work on semiconductors, leading to the development of the photovoltaic cell.

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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