

CHEMICAL HERITAGE FOUNDATION

R. BYRON BIRD

Transcript of an Interview  
Conducted by

James G. Traynham

at

Madison, Wisconsin

on

1 October 1998

(With Subsequent Corrections and Additions)

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## R. BYRON BIRD

1924 Born in Bryan, Texas on 5 February

### Education

1947 B.S., chemical engineering, University of Illinois  
1950 Ph.D., chemistry, University of Wisconsin  
1950-1951 Post-doctoral Fellow, theoretical physics, University of Amsterdam

### Professional Experience

1950-1951 University of Wisconsin  
Project Associate in Chemistry

1951-1952 Cornell University  
Assistant Professor of Chemistry

1952 E. I. DuPont de Nemours and Co., Inc.  
Research Chemist

1953-1955 University of Wisconsin  
Project Associate, Department of Chemical Engineering

1955-1957 Associate Professor, Department of Chemical Engineering

1957-1992 Professor, Department of Chemical Engineering

1964-1968 Chairman, Department of Chemical Engineering

1968-1972 Burgess Professor, Department of Chemical Engineering

1972-1992 Vilas Research Professor

1982-1992 John D. MacArthur Professor

1995-present Professor Emeritus

1958 Technische Universiteit Delft, The Netherlands  
Fulbright Lecturer and Guggenheim Fellow

1994 J. M. Burgers Professor

1962-1963 Kyôto University and Nagoya University, Japan  
Fulbright Professor

1994 Université Catholique de Louvain, Belgium  
Visiting Professor

## Honors

- 1959 Curtiss-McGraw Award, American Society for Engineering Education
- 1960 Westinghouse Award, American Society for Engineering Education
- 1962 William H. Walker Award, American Institute of Chemical Engineers
- 1965 Professional Progress Award, American Institute of Chemical Engineers
- 1970 American Physical Society, Fellow
- 1972 Honorary Doctorate, Lehigh University
- 1973 Honorary Doctorate, Washington University, St. Louis
- 1974 Bingham Medal, Society of Rheology
- 1974 Warren K. Lewis Award, American Institute of Chemical Engineers
- 1977 Honorary Doctorate, Technische Universiteit Delft, The Netherlands
- 1979 Honorary Doctorate, Clarkson University
- 1981 American Academy of Arts and Science, Fellow
- 1982 Wisconsin Academy of Sciences, Arts, and Letters, Fellow
- 1983 Eringen Medal, Society of Engineering Science
- 1983 American Academy of Mechanics, Fellow
- 1986 Benjamin Smith Reynolds Award, University of Wisconsin
- 1986 Honorary Doctorate, Colorado School of Mines
- 1987 Corcoran Award, American Society for Engineering Education
- 1987 National Medal of Science
- 1989 Founders Award, American Institute of Chemical Engineers
- 1989 Hilldale Award, University of Wisconsin
- 1989 LAS Achievement Award, University of Illinois
- 1991 Institute Lecturer Award, American Institute of Chemical Engineers
- 1993 Centennial Medallion, American Society for Engineering Education
- 1993 Honorary Doctorate, Technion, Israel Institute of Technology
- 1994 Centennial Medallion, College of Engineering, University of Maryland
- 1994 Corcoran Award, American Society for Engineering Education
- 1994 Honorary Doctorate, Eidgenössische Technische Hochschule, Zürich
- 1996 Honorary Doctorate, Kyôto University, Japan
- 1997 Distinguished Alumni Award, Chemical Engineering Department,  
University of Maryland
- 1998 Engineering Innovation Hall of Fame Award, College of Engineering,  
University of Maryland

## ABSTRACT

R. Byron Bird opens the interview with a brief discussion of his childhood. Born in Texas, Bird's family moved frequently, following Bird's father, a professor of civil engineering. During high school in Washington, DC, Bird developed his interest in foreign languages, and wanted to pursue either language or music in college. However, his father pushed him towards a degree in chemical engineering. Bird completed two years of study at the University of Maryland before entering the Army to fight in World War II. When he left the Army, he resumed his studies after a brief hiatus in a biochemistry lab of the U.S. Department of Agriculture. Bird completed his degree at the University of Illinois, at Urbana. It was there that he decided he wanted to enter a Ph.D. program in chemistry, and he chose to study at the University of Wisconsin. While in graduate school, Bird conducted rigorous research under Joseph Hirschfelder, and went on to a post-doctoral, Fulbright grant for research in the Netherlands. Bird returned to the United States to take a teaching position in the chemistry department at Cornell University, and after a year there, accepted a position in the chemical engineering department at the University of Wisconsin. Before returning to Wisconsin, Bird spent a summer working for DuPont, where he was introduced to the subject of rheology. Bird was extremely active at Wisconsin; he introduced a curriculum in transport phenomena, and as there existed no satisfactory textbook for this subject, he wrote one with colleagues Warren Stewart and Ed Lightfoot. After publishing a few influential books in his field, Bird returned to his original interest in foreign languages and collaborated with William Shetter on two books of Dutch literature. As a result of another Fulbright, Bird spent a year in Japan as a visiting professor. Frustrated by his inability to understand technical Japanese, he produced a book outlining a program for learning technical Japanese. Bird retired in 1992, but has continued to teach at least one semester each year. He closes his interview by discussing his awards, and talking about his hobbies: music and outdoor activities.

## 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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