

CHEMICAL HERITAGE FOUNDATION

NORMAN HACKERMAN

On the Gordon Research Conferences

Transcript of an Interview  
Conducted by

Arnold Thackray and Arthur Daemmrich

at

Philadelphia, Pennsylvania

on

12 March 2002

(With Subsequent Corrections and Additions)

## ACKNOWLEDGMENT

This oral history is one in a series initiated by the Chemical Heritage Foundation in collaboration with the Gordon Research Conferences. The series documents the perspectives of key individuals who organized and managed the Gordon Research Conferences and records the Conferences' impact on scientists' research, careers, and lives.

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## NORMAN HACKERMAN

1912 Born in Baltimore, Maryland, on 2 March

### Education

1932 A.B., chemistry, Johns Hopkins University  
1935 Ph.D., chemistry, Johns Hopkins University

### Professional Experience

1935-1939 Assistant Professor of Chemistry, Loyola College  
1936-1940 Research Chemist, Colloid Corporation  
1939-1941 Assistant Chemist, United States Coast Guard  
1941-1943 Assistant Professor of Chemistry, Virginia Polytechnic Institute  
1944-1945 Research Chemist, Kellogg Corporation

#### University of Texas at Austin

1945-1946 Assistant Professor of Chemistry  
1946-1950 Associate Professor of Chemistry  
1948-1961 Director, Corrosion Research Laboratory  
1950-1970 Professor of Chemistry  
1952-1961 Chairman, Chemistry Department  
1960-1961 Dean of Research and Sponsored Programs  
1961-1963 Vice President and Provost  
1963-1967 Vice Chancellor for Academic Affairs  
1967-1970 President  
1985-present Professor Emeritus of Chemistry

#### Rice University

1970-1985 President  
1970-1985 Professor of Chemistry  
1985-present President Emeritus  
1985-present Distinguished Professor Emeritus of Chemistry

#### The Robert A. Welch Foundation

1982-present Chairman, Scientific Advisory Board

## Honors

- 1956 Whitney Award, National Association of Corrosion Engineers
- 1964 Joseph L. Mattiello Award
- 1965 Palladium Medal, The Electrochemical Society
- 1965 Southwest Regional Award, American Chemical Society
- 1972 LL.D., St. Edwards University
- 1975 D.Sc., Austin College
- 1975 Honor Scroll, Texas Institute of Chemists
- 1978 D.Sc., Texas Christian University
- 1978 LL.D., Abilene Christian University
- 1978 Gold Medal, American Institute of Chemists
- 1981 Mirabeau B. Lamar Award, Association of Texas Colleges and Universities
- 1982 Distinguished Alumnus Award, Johns Hopkins University
- 1984 Edward Goodrich Acheson Award, The Electrochemical Society
- 1984 Alumni Gold Medal for Distinguished Service, Rice University
- 1987 Charles Lathrop Parsons Award
- 1987 AAAS-Philip Hauge Abelson Prize
- 1993 Vannevar Bush Award, National Science Board
- 1993 Doctor of Public Service, University of North Texas
- 1993 National Medal of Science
- 1999 Texas Distinguished Scientist Award, Texas Academy of Science

## ABSTRACT

Norman Hackerman begins the interview with a description of his graduate experience and encounters with Neil [E.] Gordon while at The Johns Hopkins University [JHU]. After graduating from JHU with his Ph.D. in chemistry, Hackerman became a steady participant in the Gordon Research Conferences [GRC], mainly the Corrosion Conference. In 1950, Hackerman acted as chair of the Corrosion Conference. Hackerman recalls the atmosphere of the Corrosion Conference, as well as the many others that he has attended, as informal, interactive, and informative. From 1970 to 1973, Hackerman served as a member of the GRC Board of Trustees. Functioning in the capacity of participant and Board member, Hackerman has watched the GRC evolve from a fledgling symposium to an international force that unites academe and industry. Hackerman concludes the interview with a discussion of the GRC's role in public education and understanding of science.

## INTERVIEWERS

Arnold Thackray is President of the Chemical Heritage Foundation. He majored in the physical sciences before turning to the history of science, receiving a Ph.D. from Cambridge University in 1966. He has held appointments at Oxford, Cambridge, Harvard, the Institute for Advanced Study, the Center for Advanced Study in the Behavioral Sciences, and the Hebrew University of Jerusalem. In 1983 he received the Dexter Award from the American Chemical Society for outstanding contributions to the history of chemistry. He served on the faculty of the University of Pennsylvania for more than a quarter of a century. There, he was the founding chairman of the Department of History and Sociology of Science, where he is the Joseph Priestley Professor Emeritus.

Arthur Daemmrich is a policy analyst at the Chemical Heritage Foundation. He has published on the history of medicine, DNA typing (genetic fingerprinting), biotechnology policy and politics, and comparative work on pharmaceutical drug regulation. Current research projects include a study of scientific instrumentation, regulation of the chemical industry, and the history of environmental policy in the United States and Europe. Daemmrich has held fellowships from the Social Science Research Council/Berlin Program for Advanced German and European Studies, the Kennedy School of Government at Harvard University, and the Chemical Heritage Foundation. He has a Ph.D. from Cornell University (Science and Technology Studies) and a B.A. from the University of Pennsylvania (History and Sociology of Science and German Literature).

## TABLE OF CONTENTS

- 1 Reflections on Neil E. Gordon  
Johns Hopkins University. Early days of the Gordon Research Conferences [GRC].  
Neil E. Gordon. Samuel C. Hooker Scientific Laboratory. GRC funding.
- 4 Gordon Research Conferences  
Gibson Island Conferences. Herbert H. Uhlig. Acting as chair of the 1950  
Corrosion Conference. Conference structure. Evolution of the Conferences. Joining  
the GRC Board of Trustees. George W. Parks. Alexander M. Cruikshank.  
Changing role of industrial involvement. The academic and industrial stream.  
Participant changes. Carlyle B. Storm. Financial issues. Creation of “breakout  
sessions.” The importance of the Conferences. The effect of the World Wide Web  
on the GRC. Alexander M. Cruikshank. GRC tradition. Start of Conferences in  
California. Linus Pauling. Alan H. Cowley and chemical education. GRC 50 Years  
in New Hampshire. Start of European Conferences.
- 27 Conclusion  
GRC’s roll in public education and public understanding of science. The Robert A.  
Welch Foundation. Alan H. Cowley.
- 30 Index



## NOTES

1. The first conferences held on Gibson Island, Maryland were Heavy Hydrogen, Surface Phenomena, Structure of Solids, Liquids, and Gases, and Thermal Energy and the Structure of Molecules in 1934. See "Research Conferences on Chemical Physics," *Science* 79, no. 2043 (23 February 1934): 176-7.

The Catalysis Conference and the Frontiers in Petroleum Chemistry Conference were held at Gibson Island in 1940. See "Special Research Conferences on Chemistry," *ibid.* 91, no. 2366 (3 May 1940): 434-435.

The first Corrosion Conference at Gibson Island was held in 1941. See Forest R. Moulton, "The American Association for the Advancement of Science; Special Research Conferences on Chemistry," *ibid.* 94, no. 2434 (22 August 1941): 179-180.

2. W. George Parks resigned in 1968.
3. The Gibson Island Conferences were called the Chemical Research Conferences in 1947, their first year at Colby Junior College.
4. Neil Gordon persuaded AAAS to manage the conferences starting in 1938 on the condition that the conferences would remain financially independent. See "Gordon Research Conferences; 50 Years in New Hampshire," (see note 10): 4-5.
5. Hackerman chaired the Physical Electrochemistry Conference in the summer of 1986. See Alexander M. Cruickshank, "Gordon Research Conferences," *Science* 231, no. 4742 (7 March 1986): 1163-1198.
6. In 1947, W. George Parks became director and Alexander M. Cruickshank became assistant director.
7. Carlyle B. Storm retired as director in 2003 and Nancy Ryan Gray became director.
8. The first two conferences held in California in 1964 were Polymers (West) and Electrochemistry. See W. George Parks, "Winter Gordon Research Conferences," *Science* 142, no. 3594 (15 November 1963): 984, 987-988.
9. See Alexander M. Cruickshank, "Gordon Research Conferences," *Science* 254, no. 5029 (11 October 1991): 302-308.
10. "Gordon Research Conferences; 50 Years in New Hampshire," (program for GRC's 50th Anniversary celebration, held 8 August 1997).
11. See Alexander M. Cruickshank, "Gordon Research Conferences," *Science* 247, no. 4946 (2 March 1990): 1100-1124.

12. The Science Education Conference (see note 9) was held only in 1992. The Innovations in College Chemistry Teaching Conference has been held nearly every year since 1995. See Alexander M. Cruickshank, "Gordon Research Conferences," *Science* 262, no. 5131 (8 October 1993): 262-272; Carlyle B. Storm, *ibid.* 266, no. 5183 (14 October 1994): 302-306; *ibid.* 271, no. 5250 (9 February 1996): 826-846; *ibid.* 278, no. 5336 (10 October 1997): 312-315; Gordon Research Conferences Web site, "Innovations in College Chemistry Teaching," (<http://www.grc.org/programs/1999/innovat.htm>; <http://www.grc.org/programs/2001/innov.htm>; <http://www.grc.org/programs/2002/innov.htm>) accessed 9 December 2004.

In 1994, the Innovations in College Chemistry Teaching Conference was renamed 'Chemistry Education Research and Practice.' See Gordon Research Conferences Web site, "Chemistry Education Research and Practice," (<http://www.grc.org/programs/2004/chemedu.htm>; <http://www.grc.org/programs/2005/chemedu.htm>), accessed 9 December 2004.

## INDEX

### A

Agent Orange, 16  
American Association for the Advancement of Science [AAAS], 10-11  
American Cyanamide Company, 13  
American Institute of Chemical Engineers [AIChE], 10-12

### B

Baltimore, Maryland, 12  
Bauer, Simon H., 26  
Bell Laboratories, 6  
Bockris, John O'M., 3  
Burns, Robert M., 6, 7

### C

California at Los Angeles, University of [UCLA], 16  
Central College, 3  
Chesapeake Bay, Maryland, 5  
Chromium, 1  
Colby Junior College. *See* Colby-Sawyer College  
Colby-Sawyer College, 7, 23-24  
Compton, K.G., 6  
Copson, Harry R., 6  
Cornell University, 26  
Cowley, Alan H., 24, 27-28  
Cruickshank, Alexander M., 10, 17-18, 22-23, 25, 28

### D

Denison, I.A., 6  
Detroit, Michigan, 3  
Dow Chemical Company, 9, 13-14, 16  
DuPont, E.I. de Nemours and Company, 13

### E

Europe, 9, 27

### F

Fackler, John P., Jr., 27

### G

General Electric Company, 13  
Gibson Island, Maryland, 1-3  
Gordon Research Conferences [GRC], 1-6, 9-14, 18-28  
"Gordon Research Conferences; 50 Years in New Hampshire" 26

becoming a non profit organization, 12  
board of trustees, 10, 13, 15, 17-18, 22-24, 26  
Catalysis Conference, 15  
Chemical Research Conferences, 11  
Chemistry at Interfaces Conference, 3  
Corrosion Conference, 3-8, 13-15, 19-20  
Electrochemistry Conference, 3, 24  
Gibson Island Conferences, 1-3, 4  
Microbiological Deterioration Conference, 17  
Science Education Conference, 24-25, 27  
Gordon, Neil E., 1-5, 9, 26

## **H**

Hackerman, Norman  
as a GRC trustee, 10, 13, 15, 17  
as chairman of the Corrosion Conference, 3, 5, 7-8, 10, 19  
as chairman of the Physical Electrochemistry Conference, 15  
as chairman of various conferences, 3  
at Johns Hopkins University, 1-3  
at the American Institute of Chemical Engineers conferences, 12  
children, 12  
conference attendance, 3, 14-16, 23-27  
wife, 12  
Holiday Inn, 24-26  
Hooker Chemical Company, 3  
Hooker Scientific Library, Samuel C., 3  
Hooker, Samuel C., 3

## **J**

Johns Hopkins University, 1, 3

## **K**

Kresge, Sebastian S., 3

## **L**

Logan International Airport, 26

## **M**

Manganese, 1  
Massachusetts Institute of Technology [MIT], 5  
McCulloch, John P., 26  
Missouri, 3  
Mobil Chemical Company, 26

**N**

New London, New Hampshire, 7  
Niagara Falls, New York, 3  
Nickel Company, 6

**O**

Oxnard, California, 25

**P**

Parks, W. George, 10, 17-18  
Parry, Robert W., 26  
Pauling, Linus, 24  
Phi Beta Kappa Society, 2  
Potentiostat, 20

**R**

Ramada Logan Hotel, 26

**S**

Santa Barbara, California, 24-25  
Sawyer, H. Leslie, 24  
Stoddart, J. Fraser, 16  
Storm, Carlyle B., 18, 25

**T**

Texas A&M University, 27  
Texas, University of, 27

**U**

Uhlig, Herbert H., 5-6  
Union Carbide Corporation, 9, 16  
United Engineering Foundation, 12  
Utah State University, 26

**V**

Volterra, Italy, 27

**W**

Wayne State University, 3  
Welch Foundation, Robert A., 27