CHEMICAL HERITAGE FOUNDATION

MARK A. RATNER

Transcript of an Interview
Conducted by

Arthur A. Daemmrich and Cyrus Mody

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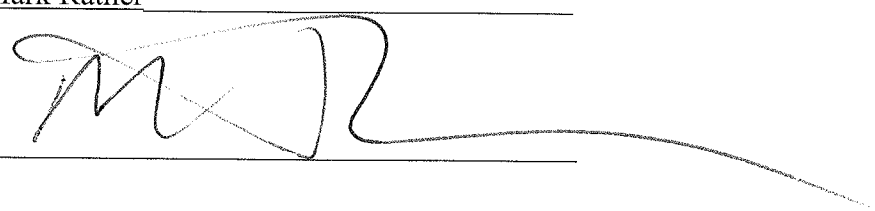
Signature of Interviewee: 

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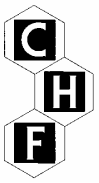

MARK A. RATNER

1942	Born in Cleveland, Ohio on 12 August

Education

1964	B.A., chemistry, Harvard University
1969	Ph.D., chemistry, Northwestern University

Professional Experience

	Aarhus University, Denmark
1970-1971	Postdoctoral Fellow
	New York University
1971-1975	Associate Professor, Chemistry
	Northwestern University
1975-1979	Associate Professor, Chemistry
1979-1994	Professor of Chemistry
1994-2007	Morrison Professor of Chemistry
2007-present	Lawrence B. Dumas Distinguished University Professor
1980-1984	Associate Dean, College of Arts and Sciences
1988-1991	Chair, Department of Chemistry
	Odense University, Denmark
1984	Postdoctoral Fellow

Honors

1972-1975	A.P. Sloan Foundation Fellow
1981	Fellow, American Physical Society
1980	Fellow, Advanced Study Institute, Hebrew University
1992	Fellow, American Association for Advancement of Science
1993	Fellow, Advanced Study Institute, Hebrew University
2001	Member, American Academy of Arts and Sciences
2002	Member, National Academy of Sciences
2002	Feynman Prize
2004	Langmuir Award
2004	Foreign Member, Royal Danish Academy of Science
2004	Member, International Academy of Quantum Molecular Sciences

2005	Mulliken Medal
2005	Dr. Sci. (H.C.), Hebrew University of Jerusalem
2008	Hirschfelder Prize in Theoretical Chemistry, University of Wisconsin

ABSTRACT

Mark A. Ratner begins the interview by describing his early connection to science while growing up in Cleveland, Ohio, working at the Harshaw Chemical Company as a high school summer job, and switching between various majors as an undergraduate student at Harvard University. After Harvard, Ratner attended graduate school at Northwestern University and became a postdoctoral fellow in Denmark and Munich. Upon returning to the US, Ratner began teaching at New York University for several years and worked with graduate student Avi Aviram to explore molecular rectifiers (later called molecular electronics). Ratner returned to Northwestern in 1975, this time as a faculty member in the Chemistry Department. Next Ratner reflected on collaboration with various institutions such as IBM and DARPA, and the development of molecular electronics research with Aviram. Moving on to the Gordon Research Conferences (GRC), Ratner described his experiences as an organizing chair; a member of the board of directors; and being on steering and selection (S&S) committee. Finally, Ratner concluded the interview reflecting on evolving funding practices, the importance of having a staff at research centers, and offering some thoughts on the future of nanotechnology.

INTERVIEWERS

Arthur Daemmrich is an assistant professor in Business, Government, and International Economy at Harvard Business School and a Senior Research Fellow at the Chemical Heritage Foundation. His research and teaching focus on business in regulated environments and international comparative analysis of risk and regulation. At HBS he also plays an active role in an interdisciplinary Healthcare Initiative, advancing scholarship and developing applied lessons for the business of creating and delivering health services and health-related technologies. Daemmrich was previously the director of the Center for Contemporary History and Policy at the Chemical Heritage Foundation. He earned a Ph.D. in Science and Technology Studies from Cornell University in 2002 and has held fellowships at 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 published widely on pharmaceutical and chemical regulation, biotechnology business and policy, innovation, and history of science.

Cyrus Mody is an Associate Professor of History at Rice University. Prior to that position he was the manager of the Nanotechnology and Innovation Studies programs in the Center for Contemporary History and Policy at the Chemical Heritage Foundation. He has a bachelor's degree in mechanical and materials engineering from Harvard University and a Ph.D. in science and technology studies from Cornell. He was the 2004-2005 Gordon Cain Fellow at CHF before becoming a program manager. Mody

has published widely on the history and sociology of materials science, instrumentation, and nanotechnology.

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