

**Education:**

1961 City University of New York (CUNY), Brooklyn, B.S., Chemistry.  
1964 University of Chicago, Chicago, IL, Ph.D., Chemical Physics  
1964-65 University of Chicago, Chicago, IL, Postdoc, Chemical Physics  
1965-66 University Libre de Bruxelles, Brussels, NATO Postdoc, Chemical Physics

**Research and Professional Experience:**

1964-1965 Research Associate, University of Chicago, Department of Physics  
1966-1969 Assistant Professor of Chemistry, Columbia University  
1969-1972 Associate Professor of Chemistry, Columbia University  
1972 Visiting Professor of Chemistry, University of Tel Aviv, Israel.  
1972 Full Professor of Chemistry, Columbia University  
2002 Chairman, Columbia University, Chairman, Department of Chemistry  
1998 Higgins Professor of Chemistry, Columbia University

**Honors:**

1962 National Science Foundation Predoctoral Fellow  
1963-1964 NASA Predoctoral Fellow  
1965 NATO Postdoctoral Fellow with I. Prigogine at Universite Libre de Bruxelles  
1967-1970 Sloan Foundation Fellow  
1972 Guggenheim Foundation Fellow  
1977 Fellow of the American Physical Society  
1984-86 NSF Creativity Awards  
1990-92 NSF Creativity Awards  
1995-97 NSF Creativity Awards  
1992 Alexander von Humboldt-Stiftung Senior Scientist Award  
1994 Miller Institute Visiting Professor, U. California, Berkeley  
1995 American Chemical Society Award in Theoretical Chemistry  
1995 Fellow of the American Academy of Arts and Sciences  
1998 Fellow of the American Association for the Advancement of Science  
1998 Member of National Academy of Sciences  
2001 Joseph O. Hirschfelder Prize in Theoretical Chemistry, U. Wisconsin  
2002 Joel Henry Hildebrand Award in the Theoretical and Experimental Chemistry of Liquids of the American Chemical Society  
2005 IBM Research Achievement Award  
2008 IBM Research Achievement Award  
2009 Mulliken Medal, University of Chicago  
2012 Kenneth S. Pitzer Memorial Lecture, Univ. California, Berkeley

**Named Lectures:**

1985 Raymond and Beverly Sackler Distinguished Lecturer, University of Tel Aviv, Israel  
1997 Reilly Lecturer, Notre Dame University  
1998 Davidson Lecturer, University of Kansas  
1999 Albert J. Moscovitz Memorial Lecturer, University of Minnesota  
2000 Moses Gomberg Lecturer, University of Michigan  
2001 Joseph O. Hirschfelder Lecturer, University of Wisconsin  
2004 Joe E. Franklin Lecturer, Rice University

2007 Palke Lecture, UC Santa Barbara  
2009 Frontiers in Science Lectures, Texas A & M University  
2009 Mulliken Lecturer, The University of Chicago  
2010 Washburn Award Lectureship, University of Nebraska  
2012 Pitzer Lecture, UC Berkeley  
2013 Arthur D. Little Lectures, MIT  
2013 Annesur Rahman Lecture, Argonne National Laboratory 2013

**Committees, and Editorial Boards:**

1976-1979 Member, Editorial Board of Journal of Statistical Physics  
1985-1988 Member, Advisory Board of Journal of Physical Chemistry  
1986-1989 Member, Editorial Board of Journal of Chemical Physics  
1985- Member, Editorial Board of Advances in Chemical Physics  
1997-2002 Editorial Board of Theoretical Chemistry Accounts  
2000-2003 Editorial Board Chemical Physics Letters  
2000-2003 Divisional Associate Editor Physical Review Letters  
2000-2003 Board of Trustees Telluride Conferences  
2003-2009 Editorial Board of Proceedings of the National Academy of Sciences  
2004- Editorial Board of Journal of Chemical Theory and Computation!!