

CURRICULUM VITAE

William Esco (W. E.) Moerner
Harry S. Mosher Professor and Professor of Applied Physics (courtesy)
Department of Chemistry and Biophysics Program
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Education

1975	B.S. Physics (Final Honors) B.S. Electrical Engineering (Final Honors) A.B. Mathematics (summa cum laude)	Washington University St. Louis, Missouri
1978	M.S. (Physics)	Cornell University Ithaca, New York
1982	Ph.D. (Physics)	Cornell University Ithaca, New York

Thesis Topic: Vibrational Relaxation Dynamics of an IR-Laser-Excited
Molecular Impurity Mode in Alkali Halide Lattices
Thesis Advisor: Professor A. J. Sievers

Academic Honors

1963-82	Grade Point Average of All A's (4.0)
1971-75	Alexander S. Langsdorf Engineering Fellow, Washington University
1975	Dean's Award for Unusually Exceptional Academic Achievement
1975	Ethan A. H. Shepley Award for Outstanding Achievement (university-wide)
1975-79	National Science Foundation Graduate Fellow

Career Summary

2016-	Affiliated Faculty Member, Stanford Neurosciences Institute
2014-	Faculty Fellow, Sarafan ChEM-H at Stanford
2011-2014	Chemistry Department Chair
2005-	Professor, by courtesy, of Applied Physics, Stanford University
2002-	Harry S. Mosher Professor of Chemistry, Stanford University
1998-	Professor of Chemistry, Stanford University
1995-1998	Distinguished Chair in Physical Chemistry, Department of Chemistry and Biochemistry, University of California, San Diego

- 1997-1998 Robert Burns Woodward Visiting Professor, Department of Chemistry, Harvard University
- 1989-1995 Research Staff Member and Project Leader, IBM Almaden Research Center, San Jose, California
- 1993-1994 Visiting Guest Professor, Laboratory for Physical Chemistry, ETH Zentrum (Swiss Federal Institute of Technology), Zürich, Switzerland
- 1988-1989 Manager, Laser-Materials Interactions, IBM Almaden Research Center, San Jose, California
- 1981-1988 Research Staff Member, IBM Almaden Research Center, San Jose, California
- 1975-1981 Graduate Research Assistant and NSF Graduate Fellow, Laboratory for Atomic and Solid State Physics, Cornell University, Ithaca, New York
- 1972-1975 Research Assistant, Department of Physics, Washington University, St. Louis, Missouri

Honors and Awards

- Fellow of the Biophysical Society 2023, for achieving the first optical detection and spectroscopy of a single molecule in condensed phases and for establishing optical study of single molecules for broad applications in biophysics
- W. E. (William E.) Moerner Festschrift, *The Journal of Physical Chemistry* virtual special issue, February 17, 2022
- Co-recipient, Chemistry Biology Interface Division Horizon Prize from the Royal Society of Chemistry, 2021
- Hall of Honor, Sigma Xi, The Scientific Research Honor Society, 2018
- Wu Zheng Kai Chemistry Prize, Fudan University, 2018
- Distinguished Eagle Scout Award, National Eagle Scout Association, 2017
- Photonics Pioneer Award, Duke University Fitzpatrick Institute for Photonics, 2016
- Distinguished Alumnus Award, Washington University, St. Louis, 2015
- Julio Palmaz Award for Innovation in Healthcare and Biosciences, Biomed SA, 2015
- Fellow, SPIE-The International Society for Optics and Photonics, 2015
- Honorary Fellow, Royal Society of Chemistry, 2015
- Nobel Prize in Chemistry, 2014
- John Gamble Kirkwood Medal for Outstanding Achievement in Science, from Yale University and the New Haven Section of the American Chemical Society, 2013
- Engineering Alumni Achievement Award, Washington University, 2013
- Peter Debye Award in Physical Chemistry, 2013
- Pittsburgh Spectroscopy Award, 2012
- Irving Langmuir Prize in Chemical Physics, 2009
- Wolf Prize in Chemistry, 2008
- Member, National Academy of Sciences, 2007
- Fellow, American Association for the Advancement of Science, 2004
- Geoffrey Frew Fellow, Australian Academy of Sciences, 2003
- Fellow, American Academy of Arts and Sciences, 2001
- Earle K. Plyler Prize for Molecular Spectroscopy, American Physical Society, 2001
- Robert Burns Woodward Visiting Professor, Department of Chemistry, Harvard University, 1997-1998

IBM Outstanding Technical Achievement Award for Single-Molecule Detection and Spectroscopy, November 22, 1992

Fellow, American Physical Society, November 16, 1992

Fellow, Optical Society of America, May 28, 1992

Senior Member, Institute of Electrical and Electronics Engineers, June 17, 1988

IBM Outstanding Technical Achievement Award (with R. M. Macfarlane and R. M. Shelby) for Photon-Gated Spectral Hole-Burning, July 11, 1988

National Winner of the Roger I. Wilkinson Outstanding Young Electrical Engineer Award for 1984, from the electrical engineering honorary society, Eta Kappa Nu, April 22, 1985

Doctor Honoris Causa

University Aix Marseille, November 9, 2016

University of Chile, December 10, 2015