CURRICULUM VITAE
Carl J. Williams

Education:

1977-1981	Rice University, Houston, B.A.
1981 (Summer)	International Summer School, University of Oslo, Oslo, Norway
1981-1982	University of Oslo, Oslo, Norway
1982-1987	University of Chicago, Chicago, Ph.D.

Appointments:

1983-1987	Research Asstistant with Prof. K.F. Freed, James Franck Inst., U. Chicago
1987 (Summer)	Visiting Scientist with Prof. K.F. Freed, James Franck Inst., U. Chicago
1987-1989	Research Associate with Professor M.A. Ratner, Northwestern U.
1990-1991	Research Associate with Professor D.J. Tannor, U. Notre Dame
1991 (Fall)	Assistant Professor, Univ. Notre Dame
1992-1997	Research Scientist, James Franck Inst., U. Chicago
1997-1998	Research Staff Member, System Evaluation Div., Inst. for Defense Analyses
1998-2000	Physicist, ZP-IV, Atomic Physics Div., National Inst. of Standards & Tech.
2000-2004	Physicist, ZP-V, Atomic Physics Div., National Inst. of Standards & Tech.
2000-	Coordinator, Quantum Info. Program, National Inst. of Standards & Tech.
2004-	Chief, Atomic Physics Div., National Inst. of Standards & Tech.
2006-	NIST Co-Director, Joint Quantum Inst., NIST and U. Maryland

Professional Affiliations and Service:

American Physical Society (Fellow); Optical Society of America;
American Association for the Advancement of Science; Sigma Xi

Fellowships, Honors and Visiting Positions:

1977-1981	Robert A. Welch Foundation Scholarship in Chemistry
1977-1981	Houston Endowment Inc., Jesse Jones Scholarship
1981 (Summer)	Nansen Fund, John Dana Archbold Fellowship, U., Oslo, Norway
1981-1982	Nansen Fund / Norway American Asso. Fellowship, U. Oslo, Oslo, Norway
1986 (Sept.)	Kipping Visiting Fellowship, U. Nottingham, Nottingham, England
1993 (Spring)	Visiting Professor, Ben Gurion U., Beer-Sheva, Israel
1994	Visiting Scientist, National Inst. of Standards & Tech., Gaithersburg, MD
1995 (Spring)	Visiting Scientist, Institute for Theoretical Atomic and Molecular Physics, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA
1995-1997	Visiting Scientist, National Inst. of Standards & Tech., Gaithersburg, MD
1997 (Spring)	Visiting Prof., Lab. Photophysique Moleculaire, U. Paris South, Orsay, France
1999 (Spring)	Visiting Prof., Lab. Aime Cotton and Lab. Kastler Brossel - ENS, Centre National de la Recherche Scientifique, Orsay / Paris, France
2002	Fellow, American Physical Society
2003	Silver Medal for Leadership, Department of Commerce
2005	Arthur S. Flemming Award for Scientific Excellence in Government Service

Publication List

1. Spectroscopy of Low-Energy Non-Adiabatic Resonances in Photodissociation to Open-Shell Atoms: CH^+, A Model System, *Chem. Phys. Lett.* **127**, 360 (1986), C.J. Williams and K.F. Freed.

2. Dynamics and Spectroscopy of Near Threshold Nonadiabatic Resonances in Photodissociation to Open Shell Atoms: CH^+ A Model System, *J. Chem. Phys.* **85**, 2699 (1986) C.J. Williams and K.F. Freed.

3. Non-Adiabatic Effects on Oxygen Atom Fine Structure Populations in the Predissociation of the $A^2\Sigma^+$ State of OH, *Chem. Phys. Lett.* **130**, 271 (1986), S.Lee, C.J. Williams, and K.F. Freed.

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5. Nonadiabatic Effects on the Photodissociation of Diatomic Molecules to Open Shell Atoms: Resonances, Polarizations and Angular Distributions for the CH^+ Model System, *Faraday Disc. Chem. Soc.* **82**, 51 (1986), C.J. Williams, K.F. Freed, S.J. Singer, and Y.B. Band.

6. Nonadiabatic Effects on the Photodissociation of Diatomic Molecules to Open Shell Atoms, *J. Phys. Chem.* **91**, 5402 (1987), with Y.B. Band, K.F. Freed, S.J. Singer, and C.J. Williams.

7. Low Energy Atomic Scattering of Ground State $C^+(^2P)$ Ions by Atomic Hydrogen: Role of Nonadiabatic Couplings and Resonances in Elastic and Inelastic Processes, *J. Phys. B: At. & Mol. Phys.* **20**, 5737 (1987), C.J. Williams and K.F. Freed.

8. Close-coupled Calculations of Resonance Widths Observed in Photodissociation Spectra of CH^+, *J. Chem. Phys.* **90**, 6070 (1989), K.F. Freed, P.J. Sarre, C.J. Whitham, and C.J. Williams.

9. Theory of Diatomic Photodissociation to Atomic Hyperfine Structure States, *Israel J. Chem.* **30**, 3 (1990), S.Lee, C.J. Williams, and K.F. Freed.

10. Three-Dimensional Analytical Quantum Theory for Triatomic Photodissociation. II. Angle Dependent Dissociative Surfaces and Rotational Infinite Order Sudden Approximations for Bent Triatomic, *J. Chem. Phys.* **92**, 7283 (1990), H. Grinberg, K.F. Freed, and C.J. Williams.

* 11. Vibrational States of Van der Waals and Hydrogen-Bonded Clusters: A Self Consistent Field Approach, *Dynamics of Polyatomic Van der Waal Clusters*, ed. N. Halberstadt and K.C. Janda, (Plenum Press, New York, 1990), R.B. Gerber, T.R. Horn, C.J. Williams, and M.A. Ratner.

* 12. Static Self Consistent Field Methods for Anharmonic Potentials: An Update, *Adv. Molec. Vibr. and Coll. Dynamics,* **1A**, 215 (1991) M.A. Ratner, C.J. Williams, R.B. Gerber, and T.R. Horn.

13. Dynamics of Triatomic Photodissociation in the Interaction Representation. I. Methodology, *J. Chem. Phys.*, **95**, 1721 (1991), C.J. Williams, J. Qian, and D.J. Tannor.

14. Influence of Initial State Bend-Stretch Couplings on Product Rotational Distributions in Photodissociation of Bent Triatomic Molecules, *Chem. Phys. Lett.* **182**, 297 (1991), H. Grinberg, K.F. Freed, and C.J. Williams.

15. Nested Interaction Representations in Time Dependent Quantum Mechanics, *J. Chem. Phys.*, **96**, 2998 (1992), D.J. Tannor, A. Besprozvannaya, and C.J. Williams.

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