

CV Hugh Ferrel Bowen

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Education

University of Houston
PhD in Physical Chemistry 1992

University of Alabama at Birmingham
BS in Chemistry 1976
Minors: Biology and Mathematics

Texas Educator Certificates

Classroom Teacher, Secondary Mathematics, Grades 6-12, 9/2007-9/2013.
Classroom Teacher, Chemistry, Grades 8-12, 9/2007-9/2013.

Experience

SRSU-RGC
Visiting Assistant Professor of Chemistry 2010 - present

SRSU-RGC Title V
Chemistry Curriculum Development Specialist 2009 - 2010

Hightower High School, Fort Bend ISD
Secondary Mathematics Teacher 2008-2009
AP Calculus BC and AP Statistics

Humble High School, Humble ISD
Secondary Mathematics Teacher 2007-2008
College Readiness Algebra, TAKS Exit Level Tutoring

Lamar University, Chemistry Department
Taught chemistry courses 2002-2007

Stafford High School, Stafford MSD
Secondary Mathematics Teacher 2001-2002
AP Calculus AB and Algebra II

Channelview High School, Channelview ISD
Secondary Science Teacher 2000 - 2001
Chemistry and IPC

Publications

- (1) Jewel A.G. Gomes, John L. Gossage, H. Balu, Mehmet~Kesmez, Ferrel Bowen, Richard S. Lumpkin, and David L. Cocke, ``Experimental and Theoretical Study of the Atmospherically Important O₂-H₂O Complex," *Spectrochimica Acta Part A* v61, 3082-3086 (2005).
- (2) Vaishali Shah, Ferrel Bowen, and Brian Space, ``The Effective Mass of Excess Electrons at Metal--Dielectric Interfaces," *J Chem. Phys.* v112, 10998-11004 (2000).
- (3) H. F. Bowen and Brian Space, ``The Effective Mass of Excess Electrons in Condensed Xenon: Toward Methods for Modeling Metal-Dielectric Interfaces," *J. Chem. Phys.* v107, 1922-1930 (1997).
- (4) V. A. Mandelshtam, H. S. Taylor, C. Jung, H. F. Bowen, and D. J. Kouri, ``The Extraction of Dynamics from the Resonance Structure of HeH₂⁺ Spectra," *J. Chem. Phys.* v102, 7988 (1995).
- (5) H. F. Bowen, R. C. Mowrey, D. J. Kouri, A. T. Yinnon, and R. B. Gerber, ``Molecule-Corrugated Surface Collisions: Converged Close Coupling Wave Packet and Quasi-classical Trajectory Calculations for N₂ Scattering from Corrugated Lattices," *J. Chem. Phys.* v99, 704-720 (1993).
- (6) O. A. Sharafeddin, H. F. Bowen, D. J. Kouri, and D. K. Hoffman, ``Numerical Evaluation of Spherical Bessel Transforms via Fast Fourier Transform," *J. Comput. Phys.* v100, 294-296 (1992).
- (7) O. A. Sharafeddin, H. F. Bowen, D. J. Kouri, S. Das, D. J. Tannor, and D. K. Hoffman, ``Time Dependent Quantum Mechanics using Picosecond Time Steps: Application to Predissociation of HeI₂ - Comment," *J. Chem. Phys.* v95, 4727-4728 (1991).
- (8) R. C. Mowrey, H. F. Bowen, D. J. Kouri, A. T. Yinnon, and R. B. Gerber, ``Quantum Oscillations in Rotationally Inelastic Molecule-Surface Scattering: Energy Dependence of Transition Probabilities," *J. Chem. Phys.* v89, 3925-3926 (1988).

- (9) R. C. Mowrey, H. F. Bowen, and D. J. Kouri,
``Molecule-Corrugated Surface Scattering Calculations using the
Close Coupling Wave Packet Method,"
J. Chem. Phys. v86, 2441-2442 (1987).
- (10) G. S. Vigee, C. L. Watkins, and H. F. Bowen,
``The Chemical Dynamics of 1,4,8,11-Tetraazacyclotetradecane
Nickel(II) Perchlorate with Several Solvents. I. Thermodynamics
of Base Adduct Formation," Inorg. Chim. Acta v35, 255-259 (1979).
- (11) D. V. Gupta, J. Grawe, H. F. Bowen, I. Cabasso, and J. K. Smith,
Technical Report, titled ``Encapsulated Multifunction Corrosion
Inhibitive Primer;" AD #: ADA144311;
Air Force Contract #: F33615-79-C-8061; November, 1983;
approved for public release, available from DTIC.

MASTER'S DEGREE SUPERVISED by Hugh Ferrel Bowen
``Steered and Interactive Molecular Dynamics Studies on Cyclodextrin
Inclusion Complexation with Clarithromycin," by Rakesh K. Daram;
Lamar University, 2006.