

Janet B. Foley
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Education:

Ph.D. Inorganic Chemistry; Aug. 1996; University of Maine; Orono, ME
**“Chemical and Photochemical Reactivity of Gold(I) Dinuclear
Complexes.”** Advisors: Alice Bruce and Mitchell Bruce

New York State Education Certification in Chemistry and General
Science, Secondary Level; 1975; Herbert Lehman College of the City
University of New York; Bronx, NY

BA in Political Science, 1971; Fordham University; Bronx, NY
Completed general requirements for a chemistry major: General chem
with lab (2 semesters; 10 credit course) Organic chem (2 semesters with
lab). Completed three semesters of Physical chemistry (Thermodynamics,
Kinetics, Quantum) at City University of New York.

Professional Experience:

Professor of Chemistry: (9/98 to present) Bennington College, Bennington, VT
05201

- Research Interests: the photochemical and medicinal properties of gold(I) complexes. Environmental chemistry interests include arsenic in Vermont drinking water, ocean acidification.
- Undergraduate Research: supervising students working on research in gold chemistry and environmental water chemistry.
- Student teaching supervisor for science students at Mt. Anthony High School
- Director of the Post Baccalaureate Pre-Medical Program.

Researcher: (9/96 to 8/98) Biode, 20 Freedom Parkway, Hermon, ME 04401

- Worked as the chemist in a biosensor research and development company. Used surface techniques to characterize self-assembled monolayers on gold surfaces for use as biosensors for pathogenic antigens.

Chemistry Instructor: (9/96 to 8/98) Chemistry Department; University of
Maine; Orono, Maine 04469

- Full-time instructor, responsible for all aspects of course preparation, testing and grading. Courses taught: General Chemistry, The Chemistry of Everyday Living (including the Lab), and Applications of Chemistry

Publications:

Foley, J.B., A., Herring, Li, B., and Dikarev, E. V., "Photochemical Reactivity of Two Gold(I) Dinuclear Complexes, *Cis/Trans*-(AupNBT)₂dppee: Isomerization for *Cis*-(AupNBT)₂dppee Isomer, Wavelength Dependent Radical Substitution for *trans*--(AupNBT)₂dppee", *Inorg Chim Acta*, **2012**, 392, 300-310

Foley, J.B.; Gay, S.; Vela, M.; Foxman, B.; Bruce, A. E.; Bruce, M. R. M. "Structure and Photoisomerization of the Dinuclear Gold(I) Halide Bis(diphosphino)ethylene Complexes; Correlation Between Quantum Yield and Auophilicity", *Eur. J. Inorg. Chem.*, **2007**, 4946.

Foley, J. B.; Gay, S. E.; Turmel, C.; Wei, G.; Jiang, T.; Naranyanaswamy, R.; Foxman, B. M.; Vela, M. J.; Bruce, A. E., Bruce, M. R. M., "Electronic Structure of Dinuclear Gold(I) Complexes", *Metal-Based Drugs*, **1999**, 6,4-5, 255.

Andle, J., Schweyer, M., Munson, J., Roderick, R., McCallister, D, French, L., Vetelino, J., Watson, C., Foley, J., Bruce, A., Bruce, M., "Electrochemical Piezoelectric Sensors for Trace Ionic Contaminants", **1998**, 45, 5, 1408, *IEEE Transactions on UFFC* (Ultrasonics, Ferroelectrics and Frequency Control)

Foley, J. B., Bruce, A. E., Bruce, M. R. M., "An Unprecedented Photochemical *Cis* to *Trans* Isomerization of Dinuclear Gold(I) Bis(diphenylphosphino)ethylene Complexes", *J. Am. Chem. Soc.*, **1995**, 117, 9596.

Selected Presentations:

2013: ACS Conference, New Orleans, LA: Sensitive Photoionization (PID) Method for the measurement of ppb levels of arsenic in well water. Driscoll, Maclachlan, Foley.

August 19, 2012: Talk at ACS National Conference, Philadelphia, "Photochemical reactivity of two gold(I) dinuclear complexes, *cis/trans*-(AupNBT)₂dppee" Janet B. Foley, Angela Herring, Bo Li, and Evgeny V. Dikarev

Invited talk: SUNY Plattsburgh: 2/24/2012" "The Chemistry of Gold: Relativity, Drugs, and Photochemistry"

June 29, 2008: (1.) Talk at Northeastern Regional ACS Meeting, Burlington, VT, "Photochemical reactivity of Two Gold(I) Dinuclear Complex, *Cis/Trans*-(AupNBT)₂dppee: A Story with a Radical Twist" Janet Foley (2) Talk at Northeastern Regional ACS Meeting, Burlington, VT, education division, "The Whole is better than the Parts: Organic and general chemistry integrated through a four course sequence, using the research literature, experimental projects, and student exploration as a vehicle", J. Foley, J. Bullock

Professional Affiliations:

Member of the American Chemical Society

Member of American Association of University Women

Member of NEAHP (New England Association of Advisors to the Health Professions)
and NAAHP (National Association of Advisors to the Health Professions)