

GERALD J. MEYER

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Education:

Ph. D. (1989) **University of Wisconsin at Madison**, Department of Chemistry with Professor Arthur B. Ellis

B.S. (1985) **State University of New York at Albany**, Departments of Chemistry and Mathematics

Research Experience:

Professor: University of North Carolina at Chapel Hill, Department of Chemistry, (1/14 – present)
Bernard N. Baker Professor of Chemistry Johns Hopkins University (7/09 –12/13)
Chairman of Chemistry Johns Hopkins University (7/11 – 6/13)
Johns Hopkins University, Department of Chemistry (7/00 – 12/13)
Johns Hopkins University, Department of Materials Science & Engineering (7/00 – 12/13)

Associate Professor: Johns Hopkins University, Department of Chemistry (7/97 – 6/00)

Assistant Professor: Johns Hopkins University, Department of Chemistry (7/91 - 6/97)

Postdoctoral Associate: University of North Carolina at Chapel Hill with Thomas J. Meyer (10/89 - 6/91)

Research Assistant: University of Wisconsin-Madison (1/87 - 10/89)
State University of New York at Albany (2/84 - 8/85)

Memberships and Awards:

American Chemical Society	Langmuir Advisory Board (January 2001 – 2009)
Materials Research Society (1998-2008)	Inorganic Advisory Board Chemistry (January 2006-2008)
Electrochemical Society (1991- 2008)	Chemistry of Materials Advisory Board (January 2007 – 2013)
Kavli Frontiers of Science Alumna (2006)	J. Phys. Chem. Advisory Board (September 2012 – 2014)
Inter-American Photochemical Society	Boy Scouts of America, Eagle Rank (1980)
Golden Key Honor Society (1998)	Carrier of the Year Award (1977)
3M Untenured Faculty Award (1994)	IPS Organizing Committee (2014-2016)

Research Group

Current: Graduate Students (Total 11): Timothy Barr, Evan Beauvilliers, Katherine Davis, Brian DiMarco, Tilden Hagan, Erica James, Wesley Swords, Tyler Motley, Sara Wehlin, Andrew Maurer, and Eric Piechota.

Post-Doctoral Associates Renato Sampaio and Ludovic Troian-Gautier

Former: Ph.D. Graduates (Total 36): Shane Ardo (2010), Laura A. Bauer (2004), Bryan Bergeron (2003), Nira S. Birenbaum (2005), Erinn Brigham (2015), Felix N. Castellano (1996), Chris Clark (2006), Darryn Achey (2013), Byron Farnum (2012), Fereshteh Farzhad (1999), Amanda Fond (2007), James Gardner (2008), George Hasselman (2000), Todd A. Heimer (1996), Gerard Higgins (2006), Paul Hoertz (2003), Ke Hu (2014), Tamae Ito (2006), Ryan O'Donnell (2014); Patrick Johanssen (2012), Minh C. Ko (1997), Feng Liu (2005), Andras Marton (2006), Amanda Morris (2009), Ping Qu (2001), Mark Ruthkosky (1998), Donald V. Scaltrito (2002), Aaron Staniszewski (2008), Jeremy M. Stipkala (1997), Jonathon Stromberg, (2007), Arnold Stux (2003), Atefeh Taheri (2013), Hailong Xia (2009), John Rowley (2011), William Ward (2014), and Mei Yang (2003).

Post-Doctoral Associates (Total 8): Maria Abrahamsson, Jovan Giamio, Craig Kelly, Guocan Li, Sherine O'Bare, David Thompson, Cassandra Ward, and David Watson.

Undergraduates (Total 29): Michael Balfour, Eugene Ceppa, Erica Dun, Arthur Esswein, Lee Friedman, Robert Freundlich, Joseph Gordonecker, Jacqueline Heath, Angela Jones, Jeffrey Jou, Michelle Kim, David Klein, David Sambade, Taisei Kobayashi, Bert Lai, Kanini Mjuguna, John O'Callahan, Emily Orimilikwe, Timothy Park, Rachele Pinlac, Ely Rothblatt, Andrea Sachs, Shin Shoj, Solito Sumulong, Michael Thandasetti, Griffon McCutcheon, Matthew Ryan, and Mark Zaros.

University Services

EFRC Deputy Director (2014-present):

Co-deputy director of the Department of Energy UNC Energy Research Frontier Center (EFRC) on solar fuels.

CRAEMS Center Director (2000-2007):

Principle Investigator and director of an NSF Center for Collaborative Research Activities in Environmental Molecular Science (CRAEMS) entitled "Environmental Redox-Mediated Dehalogenation Chemistry."

Committees:

Chemistry Department Colloquium Chair, 1995-96	Faculty Student Interaction Program Host 1994
Chemistry Department Graduate Admissions 1994-04	Consortium for Nanostructured Materials Participant
Chemistry Department Graduate Admissions Chair 1999-00	Dunning Hall Renovation Ad Hoc Committee
Chemistry Department Graduate Student Advising 1992-99	Hughes Undergraduate Summer Program, 1998
Chemistry Department Oral Exams 1993-06	NSF Engineering Research Center, DOGEE, 1995
Committee for a New EPR for Chemistry 1995, 1996	Search Committee for Inorganic Hopkins Faculty, 1997
Graduate Student Recruitment Committee Chair, 2000	Search Committee for Physical Hopkins Faculty, 1996
Faculty Committee on Pre-Medical Education, 2007- present	Meyerhoff Bridge Summer Program, 2004-2008
Applied Physical Sciences Search Committee, 2014-present	Strategic Planning Committee Chair, 2014 - present

Courses Taught:

030.101 *Introductory Chemistry I*, Fall 1997, 1999, 2000, 2005, 2006, 2007, 2008
030.112 *Introductory Chemistry with Problem Solving*, Fall 2013
030.356 *Advanced Inorganic Laboratory*, Spring 1992 -98
030.449 *Chemistry of Inorganic Compounds*, Fall 1993 – 1995, Spring 2010, Fall 2013
030.466 *Physical and Analytical Methods*, Fall 1996, 1998, 2006
030.611 *Electron Transfer*, Fall 1992, Spring 1999, 2001, 2009
030.688 *Physical Inorganic Methods*, Spring 2006, 2008
Chem 451 *Theoretical Inorganic Chemistry*, Fall 2016
Chem 452 *Electronic Structure*, Spring 2015, 2016

New Courses Developed:

Advanced Inorganic Laboratory: Designed and offered for the first time in 1992. The lab has been offered every year since and is required by the American Chemical Society (ACS) for a certified degree. The ACS Committee on Professional Training reviewed and rated the lab course as excellent.

Physical and Analytical Methods: The objective is to teach the fundamental principles upon which modern analytical instrumentation is based. The course is designed for senior undergraduate and first year graduate students.

Electron Transfer: The ubiquitous and essential role electron transfer processes play in many physical, chemical, and biological processes is highlighted in this course. Basic theory, techniques, and literature examples and reviewed in this graduate level course.

Physical Inorganic Methods: This course provides fundamental examples of the kinds of information that can be obtained by applications of methods to inorganic chemistry. Topics covered include symmetry, group theory, spectroscopy, magnetism and ionization methods.

Outside Services

President of the Intra-American Photochemical Society (I-APS), January 2015 – present.

Associate Editor of ACS-Applied Materials & Interfaces, May 2012- present.

Conference and Workshop Co-Organizer:

1. "Photochemistry" Gordon Research Conference, Boston, MA, July 2011.
2. "Electron Donor-Acceptor Interactions" Gordon Research Conference, Newport RI, July 2010.
3. NSF Workshop on Sustainability and Chemistry, Arlington VA, May 30-June 1 2006.
4. XIVth Inter-American Photochemical Society (I-APS) Meeting, Clear Water Beach FL, January 2-5, 2003.

Symposium Co-Organizer:

1. "Organic-Inorganic Photocells" 240th A.C.S. Meeting, COLL Division, Boston MA, August 24-26, 2010.
2. "Science & Technology of Next Generation Photovoltaics" 232nd A.C.S. Meeting, PMSE Division, San Francisco CA, September 10-12, 2006.
3. "Nanostructured Electronic and Photonic Materials" 200th Electrochem. Soc. Meeting, Philadelphia, PA, 2002.
4. "State of the Art: Semiconductor and Metal Nanoparticles for Light Energy Conversion" 222nd A.C.S. Meeting, Chicago, IL, 2001.
5. "Nanostructured Materials in Electrochemistry" 187th E.C.S. Meeting, Reno, NV May 21-26, 1995.

Panel Review and Workshop Participant:

1. “Catalytic H₂ Generation (H₂Gen)” National Science Foundation (NSF), Arlington, VA, February 11-12, 2016.
2. “Catalysis for Energy” National Science Foundation (NSF), Arlington, VA, March 1-2, 2012.
3. “Germany-USA Conference on Energy and Climate Research” NSF, Arlington, VA, February 18, 2010.
4. “Molecular Solar Workshop”, National Science Foundation, Estes Park, CO, September 4-9, 2007.
5. Solar Energy Technologies Program Review, Department of Energy, Denver CO November 6-9, 2005.
6. “Basic Research Needs for Solar Energy Utilization”, Department of Energy, Bethesda MD, April 18-21, 2005.
7. Review of Notre Dame Radiation Laboratory, Notre Dame, IN April 17-19, 2002.
8. “Career Grants”, National Science Foundation, Arlington, VA Oct 23-24, 2000.
9. “Small Business Innovative Research/Small Business Technology Transfer” NSF, Arlington, VA Sept. 14, 1999.
10. “Basic Research Opportunities in Photovoltaics” NREL, Seattle, WA May 3, 1999.
11. “Research Opportunities in Photochemical Sciences” Department of Energy, Estes Park, CO February 5-8, 1996.

Invited Presentations

National/Governmental Laboratories (8 Total): Argonne National Laboratory, Argonne IL; Army Research Laboratory at Adelphi, MD; Brookhaven National Laboratory, Upton NY; Los Alamos National Laboratory, Los Alamos NM; National Institute of Standards, Gaithersburg MD; National Renewable Energy Laboratory, Golden CO; Office of Naval Research, Washington DC; and the US Naval Academy, Annapolis, MD.

Industry (8 Total): BP Solar, Taona VA; DuPont, Wilmington DE; GE Global Research, Schenectady NY; Pittsburg Paint & Glass, Pittsburg PA; Polysciences Inc., Warrington PA; Rohm & Haus, Philadelphia PA; 3M Company, St. Paul MN; and Watson Pharmaceuticals, Salt Lake City UT.

US Universities and Colleges (91 Total): Amherst College, Amherst MA; Arizona State University, Tempe AZ; Auburn University, Auburn AL; Bloomsburg University, Bloomsburg PA; Bowdoin College, Brunswick, ME; Bowling Green State University, Bowling Green OH; Brigham Young University, Provo UT; California Institute of Technology, Pasadena CA; Case Western Reserve University, Cleveland OH; City College of New York, New York NY; Catholic University of America, Washington DC; Colorado State University, Fort Collins CO; Davidson College, Davidson, NC; Drexel University, Philadelphia PA; Duke, Durham NC; Eastern College, St. David’s PA; Emory, Atlanta GA; George Mason University, Fairfax VA; George Washington University, Washington DC; Georgetown University, Washington DC; Georgia Institute of Technology, Atlanta GA; Gettysburg College, Gettysburg PA; Goucher College, Towson MD; Hood College, Frederick, MD; Howard University, Washington DC; Indiana University, Bloomington, IN; Johns Hopkins University, Baltimore MD; La Salle University, Philadelphia PA; Lebanon Valley College, Annville PA; Lincoln University, Lincoln PA; Loyola College, Baltimore MD; Marquette, Milwaukee WI; Michigan State University, East Lansing MI; Muhlenberg College, Allentown PA; North Carolina State University, Raleigh, NC; Northwestern University, Evanston IL; Ohio State University, Columbus OH; Ohio University, Athens, OH; Penn State University, College Station PA; Princeton University, Princeton NJ; Rensselaer Polytechnic Institute, Troy, NY; Rice University, Houston TX; Rochester University, Rochester NY; Roger Williams University, Bristol RI; Rutgers University, Passaic NJ; Rutgers University, Newark NJ; St. Michael’s College, Burlington, VT; SUNY-Binghamton, Binghamton NY; SUNY-Buffalo, Buffalo NY; Temple University, Philadelphia PA; Towson University, Towson MD; Tulane University, New Orleans LA; University of Alabama, Birmingham AL; University of California, Berkeley CA; University of California, Irvine CA; University of California, Los Angeles CA; University of California, San Diego CA; University of California, Santa Barbara CA; University of Chicago, Chicago IL; University of Delaware, Newark DE; University of Florida, Gainesville FL; University of Maryland, College Park MD; University of Maryland at Baltimore County, Catonsville, MD; University of Maryland at Baltimore, Baltimore MD; University of Massachusetts-Boston; University of Miami, Miami FL; University of Minnesota, Minneapolis, MN; University of New Hampshire, Durham, NH; University of North Carolina, Chapel Hill NC; University of South Carolina, Columbia SC; University of Southern California, Los Angeles, CA; University of Pennsylvania, Philadelphia PA; University of Pittsburgh, Pittsburgh, PA; University of Richmond, Richmond VA; University of Texas at Houston, Houston TX; University of Utah, Salt Lake City UT; University of Washington, Seattle WA; University of Wisconsin, Madison WI; University of Wyoming, Laramie WY; Utah State, Logan UT; Vanderbilt University, Nashville, TN; Virginia Tech, Blacksburg VA; Virginia Wesleyan College, Norfolk VA; Washington University, St. Louis MO; Wayne State University, Detroit MI; Washington College, Chestertown MD; West Virginia University, Morgantown WV; and William Paterson University, Wayne NJ.

International Universities and Colleges (15 Total): Catholic University of Chile, Temuco Chile; Imperial University, London England; Lund University, Lund Sweden; Nanyang Technological University, Singapore; Pontifical Catholic University of Chile, Santiago Chile; Stockholm University, Stockholm Sweden; KTH Royal Institute of Technology, Stockholm Sweden; Ciudad Universitaria, Buenos Aires Argentina; Unidad Mérida, Mérida, Yucatán, México; Universidad De Santiago De Chile, Santiago Chile; University of Calgary, Alberta Canada; University of Ferrara, Ferrara Italy; University of Strasbourg, Strasbourg, France; and Uppsala University, Uppsala, Sweden.

Invited Presentations at Professional Meetings (2009→present):

The 2016 Makhoul Haddadin Symposium, American University of Beirut, Lebanon (October 20, 2016)

Dye Sensitization for Sustainable Energy

Southern California Inorganic Photochemistry (SCIP) Conference, Catalina Island, CA (September 17, 2016)

Charge Transfer Excited States at Metal Oxide Interfaces

“Manipulation of Energy & Electron Transfer in Molecules” 252nd National A.C.S. Meeting Philadelphia PA (August 24, 2016)

Light-driven, multi-electron transfer activation of a water oxidation catalyst

21st International Conference on Photochemical Conversion and Storage of Solar Energy, St. Petersburg Russia (July 27, 2016)

Photocatalytic Water Oxidation with Dye-Sensitized Metal Oxides

5th International Conference from Nanoparticles and Nanomaterials to Nanodevices, Porto Helio Greece (June 27, 2016)

Dye-Sensitized Core-Shell Nanostructures for Sustainable Energy.

“Inorganic Complexes for Solar Energy Harvesting” Pacificchem. Honolulu HA (December 18, 2015)

Ruthenium Polypyridyl Complexes that Photo-oxidize Halide Ions in Fluid Solution and at TiO₂ Interfaces

“International Conference on Materials Science” ICMS 2015 Valdivia Chile (October 19, 2015)

A Through-Bond Mechanism for Light Driven Interfacial Electron Transfer

“Biological Inspiration for Environmental Sustainability...” 250th National A.C.S. Meeting Boston, MA (August 19, 2015)

Bioinspired approaches for energy storage: Molecular excited states that drive bond formation

“Solar Solutions to Energy and Environmental Problems” TSRC, Telluride CO (August 4, 2015)

Dye-Sensitized Photoelectrosynthesis Cells

Hybrid Organic Photovoltaics (HOPV15), Rome Italy (May 11, 2015)

Halide Electron Transfer Chemistry for Solar Energy Conversion.

25th Inter-American Photochemical Society Conference, Sarasota, FL (January 3, 2015)

Do Atomistic Changes to Molecular Sensitizers Influence Interfacial Electron Transfer in Dye-Sensitized Solar Cells?

“Workshop on Applied Functional Materials Chemistry” KAUST, Saudi Arabia (October 27, 2014)

Local Electric Fields at Sensitized Semiconductor Interfaces

“9th Workshop of Computational Chemistry and Molecular Spectroscopy”, Punta de Tralca, Chile (October 15, 2014)

Hole Transfer Reactions at Semiconductor Interfaces

“Renewable Energy Generation at the Interface ... Experiment” 243rd National A.C.S. Meeting, San Francisco CA (August 13, 2014)

Mechanisms of iodide electron transfer chemistry for solar energy conversion

Hybrid Organic Photovoltaics (HOPV14), Lausanne Switzerland (May 12, 2014)

The Roles of Iodide Ions in Dye Sensitized Solar Cells

“Molecular Inorganic Chemistry at the Frontiers of Energy Research” 247th National ACS Meeting, Dallas TX (March 16, 2014)

Photoinduced electron transfer at TiO₂ interfaces sensitized to visible light with triarylamine-appended bis(tridentate) cycloruthenated complexes

“Photovoltaics, Solar Energy Materials & Technologies” XXII International Materials Research, Cancun Mexico (August 11, 2013)

New Donor-Acceptor Compounds for Dye Sensitized Solar Cells.

“Solar Solutions to Energy and Environmental Problems” Telluride Workshop, Telluride CO (August 7, 2013)

Mechanisms of Sensitization and Regeneration in Dye Sensitized Solar Cells.

Invited Presentations at Professional Meetings (2009→) (Con't):

“Photochemistry” Gordon Research Conference, Stone Hill MA (July 16, 2013)

Solar Photochemistry with Charge Transfer Excited States

“Organic and hybrid interfaces in excitonic solar cells: from fundamental science to applications” European Materials Research Society, Strausburg France (May 28, 2013)

Substitution of O with S Heteroatoms in Organic Dyes at TiO₂ Interfaces

30th Eastern Regional Photosynthesis, Woods Hole MA (April 12, 2013)

Electron Transfer at Sensitized TiO₂ Interfaces : Surface Electric Fields and Mechanisms for I-I Bond Formation

“Electron Donor-Acceptor Interactions” Gordon Research Conference, Newport RI (August 8, 2012)

Making chemical bonds with light for solar energy conversion and storage.

19th International Conference on Photochemical Conversion and Storage of Solar Energy (IPS-19), Pasadena, CA (July 31, 2012)

Efficient Sensitization of TiO₂ with Co(I) Coordination Compounds

2nd International Workshop: Natural and Artificial Photosynthesis, Bioenergetics and Sustainability, Nanyang Technical University, Singapore (June 12, 2012)

Surface Electric Fields and Mechanisms of I-I Bond Formation

Canadian Chemistry Conference and Exhibition, Calgary CA (May 28, 2012)

Regeneration Mechanisms at Sensitized TiO₂ Interfaces

“Photons-to-Fuel...” 243rd National A.C.S. Meeting, San Diego CA (March 26, 2012)

Non-Nernstian Two-Electron Transfer Photocatalysis at Metalloporphyrin-TiO₂ Interfaces

SANS Workshop, Les Disablerets, Switzerland (March 14, 2012)

Excitonic Solar Cells

24th Austin Symposium on Molecular Structure and Dynamics at Dallas, Dallas TX (March 6, 2012)

Dynamics of Molecules at Semiconductor Interfaces for Energy Conversion

Workshop on Emerging Materials for Thin Film Solar Cells, Santa Barbara, CA (August 11, 2011)

Dye sensitized solar cells

VIII International Krutyn Summer School, Krutyn Poland (June 14-20, 2011)

1. Metal-to-ligand Charge Transfer Excited States; and 2. Optimization of Energy Conversion Efficiencies

21st Inter-American Photochemical Society Conference, Mendoza Argentina (May 22, 2011)

Chemical Bond Formation with Light

Saudi International Electronics, Communications and Photonics Conference, Riyadh Saudi Arabia (April 24, 2011)

Electron Transfer Dynamics in Efficient Solar Cells

AAAS National Meeting, Washington DC (February 19, 2011)

Making Chemical Bonds with Visible Light

UK Semiconductor Photocatalysis Meeting, London England (January 7, 2011)

Multi-Electron Transfer Catalysis at Molecular-TiO₂ Interfaces

“Light Driven Generation of Hydrogen ...” International Chemical Congress of Pacific Basin Societies (December 16, 2010)

Photo-initiated formation of chemical bonds in fluid solution and at semiconductor interfaces

“Molecular Photonics” International Chemical Congress of Pacific Basin Societies (December 17, 2010)

Stark effects at sensitized TiO₂ molecular photonic materials

Invited Presentations at Professional Meetings (2009→) (Con't):

45th Midwest Regional ACS Meeting (October 28, 2010)

Photo-Induced Iodide Redox Chemistry in Fluid Solution and at TiO₂ Interfaces

7th Workshop in Computational Chemistry and Molecular Spectroscopy, Punta deTralca Chile (October 20, 2010)

Electron Transfer from Molecular Excited States and Semiconductor Nanoparticles

“Inorganic-Organic Solar Cells” 240th National A.C.S. Meeting, Boston, MA (August 24, 2010)

Electric Field Effects in Dye Sensitized Solar Cells

“Molecular Systems for Efficient Solar ...” 240th National A.C.S. Meeting, Boston, MA (August 23, 2010)

Visible Light into Chemical Bonds: Dynamics and yields of I-I bond formation in fluid solution and at sensitized interfaces

SPIE, San Diego CA (August 3, 2010)

Two sequential photo-reductions ... for multi-electron transfer chemistry

Solar Photochemistry and Materials for Energy and Environment, Pohang University, Korea (July 31, 2010)

Photodriven Multi-Electron Transfer Reactions at Molecular Semiconductor Interfaces

18th International Conference on Photochemical Conversion and Storage of Solar Energy, Seoul Korea (July 25, 2010)

Photo-sensitized Formation of I-I Bonds in Fluid Solution and at TiO₂ Interfaces

The 5th Advanced Photovoltaics Center Seminar, National Institute for Materials Science, Tsukuba Japan (July 13, 2010)

Redox Mediators for Dye Sensitized Solar Cells

NIMS 2010 Conference; Challenges of Nanomaterials Science, Tsukuba Japan (July 13, 2010)

Visible Light Generation of Chemical Bonds in Fluid Solution and at Sensitized TiO₂ Interfaces

National Science Foundation Inorganic Chemistry Workshop, Santa Fe, NM (May 18, 2010)

Chemical Bond Formation with Visible Light in Fluid Solution and at TiO₂ Interfaces

Third International Conference on Semiconductor Photochemistry, Glasgow, Scotland (April 3, 2010)

Photosensitized Formation of I-I Bonds in Fluid Solution and at TiO₂ Interfaces

Solar Fuels and Energy Storage: The Unmet Needs, SERC Chapel Hill, NC (January 14, 2010)

Photodriven Chemical Bond Formation in Fluid Solution and at Semiconductor Interfaces

“Photons-to-Fuel...” 238th National A.C.S. Meeting, Washington DC (August 16, 2009)

Photosensitized I-I Bond Formation in Fluid Solution and at Semiconductor Interfaces

International Workshop on Materials and Devices for Solar Energy Conversion, Wichita, KS (May 23, 2009)

Photoinduced Interfacial Charge Transfer in Efficient Molecular Solar Cells

“Capturing and Storing Solar Energy-...” 237th National A.C.S. Meeting, Salt Lake City, UT (March 22-26, 2009)

Sensitized Iodide Redox Chemistry

2009 F.A. Cotton Award Symposium 237th National A.C.S. Meeting, Salt Lake City, UT (March 22-26, 2009)

Small Molecule Activation with Light and Karlin Compounds

Inter-American Photochemical Society Annual Meeting, St. Pete’s Beach, FL (January 2-6, 2009)

Photochemical Approaches to Solar Energy Conversion

Publications:

Journal Publications:

- 1) **Evidence For Adduct Information at the Semiconductor-Gas Interface. Photoluminescent Properties of Cadmium Selenide in the Presence of Amines.** Meyer, G.J.; Lisensky, G.C.; Ellis, A.B. *J. Amer. Chem. Soc.* **1988**, *110*, 4914.
- 2) **A Selective Detector for Gas Chromatography Based on Adduct-Modulated Semiconductor Photoluminescence.** Lisensky, G.C.; Meyer, G.J.; Ellis, A.B. *Anal. Chem.* **1988**, *60*, 2531.
- 3) **Dioxygen-Copper Reactivity. Models for Hemocyanin: Reversible O₂ and CO Binding to Structurally Characterized Dicopper(I) Complexes Containing Hydrocarbon-Linked Bis[2-(2-pyridyl)ethyl]amine Units.** Karlin, K.D.; Haka, M.S.; Cruse, R.W.; Meyer, G.J.; Farooq, A.; Gultneh, Y.; Hayes, J.C.; Zubieta, J. *J. Amer. Chem. Soc.* **1988**, *110*, 1196.
- 4) **Semiconductor-Olefin Adducts. Photoluminescent Properties of Cadmium Sulfide and Cadmium Selenide in the Presence of Butenes.** Meyer, G.J.; Leung, L.K.; Yu, J.C.; Lisensky, G.C.; Ellis, A.B. *J. Amer. Chem. Soc.* **1989**, *111*, 5146.
- 5) **Time-Resolved Luminescence of Electron-Hole Pairs in Cd(S,Se) Graded Semiconductors.** Hane, J.K.; Prisant, M.G.; Harris, C.B.; Meyer, G.J.; Leung, L.K.; Ellis, A.B. *J. Phys. Chem.* **1989**, *93*, 7975.
- 6) **Modulation of the Time-Resolved Photoluminescence of Cadmium Selenide by Adduct Formation with Gaseous Amines.** Leung, L.K.; Meyer, G.J.; Lisensky, G.C.; Ellis, A.B. *J. Phys. Chem.* **1990**, *94*, 1214.
- 7) **Synthesis of Redox Derivatives of Lysine and Related Peptides Containing Phenothiazine or Tris(2,2'-bipyridine)ruthenium(II).** Peek, B.M.; Ross, G.T.; Edwards, S.W.; Meyer, G.J.; Meyer, T.J.; Erickson, B.W. *Int. J. Peptide Protein Res.* **1991**, *38*, 114.
- 8) **Photoelectrochemical Solar Energy Conversion at Nanostructured Materials.** Meyer, G.J.; Searson, P.C. *Interface* **1993**, *2*, 23-27.
- 9) **Molecular Level Photovoltaics: The Electro-Optical Properties of Metal Cyanide Complexes Anchored to Titanium Dioxide.** Heimer, T.A.; Bignozzi, C.A.; Meyer, G.J. *J. Phys. Chem.* **1993**, *97*, 11987-11994.
- 10) **Molecular Level Electron Transfer and Excited State Assemblies on the Surfaces of Metal Oxides and Glass.** Meyer, T. J.; Meyer, G.J.; Pfenning, B.; Schoonover, J. R.; Timpson, C.; Wall, J.F.; Kobusch, C.; Chen, X.; Peek, B.M.; Wall, C.G.; Ou, W.; Erickson, B. W.; Bignozzi, C.A. *Inorg. Chem.* **1994**, *33*, 3952-3963.
- 11) **Photophysical Properties of Ruthenium Polypyridyl Photonic SiO₂ Gels.** Castellano, F.N.; Heimer, T.A.; Thandasetti, M.; Meyer, G.J. *Chem. Mater.* **1994**, *6*, 1041-1048.
- 12) **Spectroscopic and Excited State Properties of Titanium Dioxide Gels.** Castellano, F.N.; Stipkala, J.M.; Friedman, L.A.; Meyer, G.J. *Chem. Mater.* **1994**, *6*, 2123-2129.
- 13) **Enhanced Spectral Sensitivity from Ru(II) Polypyridyl Photovoltaic Devices.** Argazzi, R.; Bignozzi, C.A.; Heimer, T.A.; Castellano, F.N.; Meyer, G.J. *Inorg. Chem.* **1994**, *33*, 5741-5749.
- 14) **Photodriven Energy Transfer from Cuprous Phenanthroline Derivatives.** Castellano, F.N.; Ruthkosky, M.; Meyer, G.J. *Inorg. Chem.* **1995**, *34*, 3-4.
- 15) **Dynamic Quenching of Porous Silicon Photoluminescence by Anthracene and 10-Methylphenothiazine.** Ko, M.C.; Meyer, G.J. *Chem Mater.* **1995**, *7*, 12-14.
- 16) **Optical and Electrical Properties of Nanostructured Titanium Dioxide Films.** Cao, F.; Oskam, G.; Searson, P.C.; Stipkala, J.; Farzhad, F.; Heimer, T.A.; Meyer, G.J. *J. Phys. Chem.* **1995**, *99*, 11974-11980.
- 17) **DNA Dynamics Observed with Long Lifetime Metal-Ligand Complexes.** Lakowicz, J.R.; Malak, H.; Gryczynski, I.; Castellano, F.N.; Meyer, G.J. *Biospectroscopy* **1995**, *1*, 163-168.

- 18) **Dynamic Electron Transfer in SiO₂ Aqua- and Alco- Gels.** Castellano, F.N.; Meyer, G.J. *J. Phys. Chem.* **1995**, *99*, 14742-14748.
- 19) **Photosensitization of Wide Bandgap Semiconductors with Antennae Molecules.** Bignozzi, C.A.; Argazzi, R.; Schoonover, J.R.; Meyer, G.J.; Scandola, F. *Sol. Energy Mater. Sol. Cells* **1995**, *38*, 187-198.
- 20) **Long-Lived Photo-Induced Charge Separation Across Nanostructured TiO₂ Interfaces.** Argazzi, R.; Bignozzi, C.A.; Heimer, T.A.; Castellano, F.N.; Meyer, G.J. *J. Am. Chem. Soc.* **1995**, *117*, 11815-11816.
- 21) **An Acetylacetonate Based Semiconductor-Sensitizer Linkage.** Heimer, T.A.; D'Arcangelis, S.T.; Farzad, F.; Stipkala, J.M.; Meyer, G.J. *Inorg. Chem.* **1996**, *35*, 5319-5324.
- 22) **Luminescence of Charge Transfer Sensitizers Anchored to Metal Oxide Nanoparticles.** Heimer, T.A.; Meyer, G.J. *J. Lumin.* **1996**, *70*, 468-478.
- 23) **Dynamic Quenching of Porous Silicon Excited States.** Ko, M.C.; Meyer, G.J. *Chem. Mater.* **1996**, *8*, 2686-2692.
- 24) **Electron Transport Properties in Porous Nanocrystalline TiO₂ Photoelectrochemical Cells.** Cao, F.; Oskam, G.; Searson, P.C.; Meyer, G.J. *J. Phys. Chem.* **1996**, *100*, 17021-17027.
- 25) **Photodriven Electron and Energy Transfer from Copper Phenanthroline Excited States.** Ruthkosky, M.; Castellano, F.N.; Meyer, G.J. *Inorg. Chem.* **1996**, *35*, 6406-6412.
- 26) **Light Induced Processes in Molecular Gel Materials.** Castellano, F.N.; Meyer, G.J. *Prog. Inorg. Chem.* **1997**, *44*, 167-209.
- 27) **Remote Electron Injection from Supramolecular Sensitizers.** Argazzi, R.; Bignozzi, C.A.; Heimer, T.A.; Meyer, G.J. *Inorg. Chem.* **1997**, *36*, 2-3.
- 28) **Light Induced Charge Separation Across Ru(II) Modified Nanocrystalline TiO₂ Interfaces with Phenothiazine Donors.** Argazzi, R.; Bignozzi, C.A.; Heimer, T.A.; Castellano, F.N.; Meyer, G.J. *J. Phys. Chem. B* **1997**, *101*, 2591-2597.
- 29) **Efficient Light-to-Electrical Energy Conversion: Nanocrystalline TiO₂ Films Modified with Inorganic Sensitizers.** Meyer, G.J. *J. Chem. Ed.* **1997**, *74*, 652-656.
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