

**MARK MARONCELLI**  
*Curriculum Vitae (01/08/2020)*

The Pennsylvania State University  
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**EDUCATION:**

- 1979-1983 The University of California, Berkeley, CA  
Ph. D. in Chemistry  
Thesis: "Infrared Studies of Conformational Disorder in Solid n-Alkanes"  
Advisor: Professor Herbert L. Strauss
- 1975-1979 Williams College, Williamstown, MA  
B.A. in Chemistry

**EMPLOYMENT:**

- 2015 - Distinguished Professor, The Pennsylvania State University  
2014-2015 Interim Director, PSU Forensic Science Program  
2004-2018 Associate Department Head for Undergraduate Education  
2004 - Chemistry Coordinator for Non-UP Campuses  
1997-2015 Professor, The Pennsylvania State University  
1993-1997 Associate Professor, The Pennsylvania State University  
1987-1993 Assistant Professor, The Pennsylvania State University
- 1985-1987 Research Associate, The University of Chicago, Chicago, IL  
Advisor: Professor Graham R. Fleming
- 1984-1985 Research Associate, Oregon State University, Corvallis OR  
Advisor: Professor Joseph W. Nibler

**HONORS AND AWARDS:**

- Joel Henry Hildebrand Award in the Theoretical and Experimental Chemistry of Liquids, 2015  
Penn State Distinguished Professor, 2015  
Humboldt Research Award, 2009  
Fellow of the American Association for the Advancement of Science, 2008  
Visiting Faculty Member, University of Kyoto, August – November 2005  
Guggenheim Fellow, 2001-2002  
Camille and Henry Dreyfus Distinguished New Faculty Award, 1987  
Chevron Research Fellowship, 1981-82  
Coblentz Society Outstanding Graduate Student Award, 1982  
Magna cum Laude, with Highest Honors in Chemistry, Williams College, 1979

**PROFESSIONAL AFFILIATIONS:**

American Chemical Society, American Physical Society, Inter-American Photochemical Society

**SERVICE TO PROFESSION:**

Co-Chair, Symposium on Ionic Liquid Bulk and Interfacial Chemistry, Mid-Atlantic Regional Meeting of the ACS, Hershey PA, 6/4-6/2017  
Co-Chair, Gordon Research Conference on Electronic Spectroscopy and Dynamics, Waterville, Maine, 7/19-24/2009  
Member Organizing Committee, 2<sup>nd</sup> International Conference on Ionic Liquids, Yokohama Japan, 8/5-10/2007  
Vice-Chair, Gordon Research Conference on Electronic Spectroscopy and Dynamics, Les Diablerets, Switzerland, 9/10-15/2006.  
Co-Organizer, Symposium on Fundamental Chemical Processes in Supercritical Fluids at Pacifichem 12/15-12/20/2005

Editorial Board, *J. Mol. Liquids*, 1995-present

Editorial Board, *J. Chem. Phys.* 2000-2003

NSF: Review Panel 2/2018, 2/2019

DOE Review Panel for Early Career Awards 1/2011

DOE Office of Science Graduate Fellowship reviewer 3/2011

DOE Review Panel for Energy Frontier Research Center proposals 2/2009

Reviewed Kutztown University Chemistry Program for the ACS Committee on Professional Training 4/28/05

DOE Site Review Panel (PNNL) 2/22-24/2005

Proposal reviewing for NSF, ACS-PRF, DOE, and international funding agencies (3-8/year over the past decade)

Article reviewing for numerous journals (25-30/year over the past decade)

**RESEARCH INTERESTS:**

Solvation and solvent effects on chemical reaction, liquid-phase dynamics, electron transfer reactions, supercritical fluids and expanded liquids, ionic liquids, ultrafast spectroscopy, computer simulation.

**COURSES TAUGHT:**

PSU 016: Freshman Seminar (F08)

CHEM 110: Chemical Principles I (F90, F95, F96, F18, F19)

CHEM 316: The Professional Chemist (F11-F19)

CHEM 408: Computational Chemistry (Sp05, Sp06, Sp08)

CHEM 450: Physical Chemistry I, Thermodynamics (Sp07, Sp15)

CHEM 452: Physical Chemistry II, Quantum Chemistry (F04)

CHEM 544: Chemical Thermodynamics (F98, F99, F00, F02, F03)

CHEM 565: Quantum Chemistry I (F87)

CHEM 457/458: Physical Chemistry Laboratory (F91, Sp92, F92, Sp93, F93, Sp94)

CHEM 464: Chemical Kinetics & Dynamics (F97, F98)

CHEM 545: Statistical Thermodynamics (Sp88)

CHEM 560A: Topics in Physical Chemistry: Computer Simulation (Sp96)

CHEM 560B: Topics in Physical Chemistry: Electronic Structure Calculation (Sp01, Sp04)

**COMMITTEE ASSIGNMENTS: (2011 – present)**

Chemistry Coordinator for Non-UP Campuses (2004-present)  
Head, Non-Tenure-Track Faculty Review Committee (2004-present)  
Chemistry Department Advisory Committee (2004-2018)  
Undergraduate Advising and Awards (2004-present)  
University Academic Measurement Committee (12-present)

Associate Department Head for Undergraduate Education (2004-2018)  
ECoS Undergraduate Education Advisory Committee (2004-2018)  
Head, Undergraduate Curriculum Committee (2004-2018)  
ECoS Data Analyst Search Committee (9/15-1/16)  
Interim Director of the Forensic Science Program (6/14-6/15)  
Board Member, ECoS Center for Excellence in Science Education (11/12-12/13)  
Senate Taskforce on Student Internships (8/11-2/12)  
University Faculty Senate, Faculty Affairs Subcommittee (08-12)

**GRADUATE STUDENTS AND POSTDOCTORAL ASSOCIATES:*****Current Postdocs:***

Sourav Palchowdhry, (Ph. D. National Institute of Science Education and Research of India, 2017)  
Kallol Mukherjee (Ph. D. Jadavpur University, 2017)

***Current Students:***

Marissa Saladin, Ph. D. candidate (B. S. Aquinas College, 2014)

***Former Students:***

Brian Conway (B. S. Notre Dame University, 2012), Ph. D. 8/19  
Caleb Uitvlugt (B. S. Calvin College, 2014), M. S. 5/19  
Christopher Rumble (B. S. University of Michigan, 2011), Ph. D. 8/17  
Michael Shadeck (B.S. St. John Fischer College, 2012), M. S. 08/15  
Jens Breffke (M. S. Humbolt University, 2009), Ph. D. 12/14  
Jacob Schesser (B.S. Benedictine College, 2011), M. S. 8/13  
Xin-Xing Xiang (one of 3 doctoral advisors), Ph. D. Nankai University 5/13  
Anne Kaintz (M.S. Penn State, 2009), Ph. D. 12/12  
Min Liang (B. S. Southeast University, 2006), Ph. D. 8/12  
Xiang (Lilian) Li (B.S. Fudan University, 2005), Ph. D. 05/11  
Hui Jin (B. S. Shanghai Jiao Tong U., 2003), Ph. D. 5/09  
Jing Dong (B.S. Shepherd University, 2003), M. S. 8/07  
Zemin Su (B. S. Nankai University, 2001), M.S. 12/05  
Weiping Song (M.S. Beijing Normal University, 1997), Ph. D. 8/05  
Kevin Dahl (B.S., University of Wisconsin, LaCrosse, 1996), Ph.D. 11/03  
Nikhil Patel (B.S., Northern Ohio, 1996), Ph. D. 5/03  
Lewis Reynolds (B.S., Calvin College, 1993) Ph. D. 8/02  
Joseph Gardecki (B.S., Purdue University, 1990), Ph. D. 8/99  
Scot Mente (B.S., North Arizona University, 1993), Ph.D. 5/99  
Jennifer E. Lewis (B.S., North Dakota State University, 1992), Ph.D. 12/98  
Sarah-Jane Frankland (B.S., Geneva College, 1991), Ph. D. 10/97

Richard S. Fee (B.A., Colorado College, 1985), Ph.D. 5/94  
Arno Papazyan (B.S., Bogazici University, Turkey, 1987), Ph.D. 5/94  
Scott Boryschuk, (B.S., Eastern Nazarene College, 1991), M.S. 12/93  
Curtis F. Chapman (B.S., Lynchburg College, 1987), Ph. D. 5/93

***Former Postdoctoral Scholars and Visitors:***

Dr. Minako Kondo, 2010-2012 (Ph. D. University of East Anglia, 2010)  
Dr. Durba Roy, 2009-2011 (Ph. D. Jadavpur University, 2007)  
Dr. Chet Swalina, 2006-2008 (Ph. D. Penn State University, 2006)  
Dr. Sergei Arzhantsev, 2000-2008 (Ph. D. Moscow State University, 1997)  
Dr. Anjan Chakraborty, 2007 (Ph. D. Indian Institute of Technology, Khanragpur, 2006)  
Dr. Hongping Li, 2004-2006 (Ph. D. 2002 Chinese Academy of Sciences, Beijing)  
Dr. Yi Wang, 2005 (Ph.D., Jinlin University, Changchun PRC, 1988)  
Prof. Noritsugu Kometani, faculty visitor 2003-2004 (Osaka City University)  
Dr. Naoki Ito, 2002-2004 (Ph.D. Kyoto University, 2002)  
Dr. Matthew Philpot, (2000 (Ph. D., University of Washington, Seattle, 2000)  
Dr. Ranjit Biswas (Ph. D., Indian Institute of Science, Bangalore, 1998)  
Dr. Mark Heitz (Ph.D., University of Buffalo, 1995)  
Dr. Min-Liang Horng (Ph.D., Texas Tech University, 1992)  
Dr. Vijaya P. Kumar (Ph.D., University of Hyderabad, 1992)  
Dr. Douglas Miller (Ph.D., Penn State, 1987)

**RESEARCH SUPPORT:**

***Current:***

Agency: U.S. Department of Energy  
Title: "Ion Solvation and Hydrogen Bonding in Liquid Electrolytes"  
Other PIs: Hyung Kim (Carnegie Mellon)  
Award: \$ 510,354 (Maroncelli/Penn State share)  
Period: September 15, 2018 – September 14, 2022

Agency: U.S. National Science Foundation  
Title: "Understanding Solute Diffusion and Friction in Ionic Liquids"  
Award: \$450,000  
Period: September 15, 2018 – September 14, 2022

***Completed (since 2012):***

Agency: U.S. Department of Energy  
Title: "SISGR: Physical Chemistry of Reaction Dynamics in Ionic Liquids"  
Other PIs: PI: Edward Castner, Jr. (Rutgers); Co-PIs: Gary Baker (U. Missouri), David Blank (U. Minnesota), Claudio Margulis (U. Iowa), James Wishart (Brookhaven)  
Award: \$605,000 (Maroncelli/Penn State share)  
Period: September 15, 2012 – March 14, 2017

Agency: Department of Energy (DE-SC0001780)  
Title: "SISGR: Physical Chemistry of Reaction Dynamics in Ionic Liquids"

Other PIs: PI: Edward Castner, Jr. (Rutgers); Co-PIs: David Blank (U. Minnesota),  
Claudio Margulis (U. Iowa), James Wishart (Brookhaven)

Award: \$475,125 (Maroncelli/Penn State share)

Period: September 15, 2009 – September 14, 2012

Agency: U.S. Department of Energy

Title: “Solvation and Reaction in Ionic Liquids”

Amount: \$75,000

Period: April 15, 2011 – April 14, 2012

#### **INVITED TALKS (2012-PRESENT):**

Chemistry Colloquium, Carnegie Mellon University, Pittsburgh, PA, April 5, 2019

ACS National Meeting, Orlando, FL, March 31-April 4, 2019

14<sup>th</sup> Condensed Phase and Interfacial Molecular Science Meeting, Gaithersburg, MD, Oct.  
14-17, 2018

255<sup>th</sup> American Chemical Society Meeting, New Orleans, LA, March 18-22, 2018

Chemistry Colloquium, University of Geneva, Geneva Switzerland, October 11, 2017

Chemistry Colloquium, University of Amsterdam, Amsterdam, Netherlands, Oct. 9, 2017

253<sup>rd</sup> American Chemical Society Meeting, San Francisco, CA, April 2-6, 2017

European/Japanese Molecular Liquids (EMLG/JMLG) Meeting, Chania, Greece, Sept. 11-  
16, 2016

Workshop on Chemistry and Dynamics in Complex Environments, Telluride, CO, June 22-  
27, 2015

Workshop on Shape-Responsive Fluorophores, Telluride, CO, June 22-27, 2015

37<sup>th</sup> DOE Solar Photochemistry Research Meeting, Annapolis MD, May 31-June 4, 2015

249<sup>th</sup> American Chemical Society Meeting, Denver, CO, March 22-26, 2015

Chemistry Colloquium, Johns Hopkins University, Baltimore MD, Sept. 30, 2014.

Chemistry Colloquium, Bucknell University, Lewisburg, PA, Sept. 24, 2014.

Gordon Research Conference on Ionic Liquids, Sunday River Resort, Newry ME, August 1-  
21, 2014.

Polish Photochemistry Society Meeting (plenary speaker), Zakopane, Poland Sept. 23-27,  
2013.

Chemistry Colloquium, Iowa State, Cedar Rapids, IA Sept. 20, 2013.

Gordon Research Conference on the Physics & Chemistry of Liquids, Holderness NH,  
August 4-9, 2013.

Post Symposium on Ionic Liquids, AIST Tokyo Waterfront, July 13, 2013.

International Solution Chemistry Meeting, Kyoto Japan, July 7-12, 2013.

SciMix in Kanazawa II, Kanazawa University, Kanazawa Japan, July 6, 2013.

Franklin & Marshall College, Lanchaster PA, April 2, 2013.

34<sup>th</sup> Solar Photochemistry Program Research Meeting, Annapolis Maryland, June 3-6, 2012.

**PUBLICATIONS:** 132 peer reviewed publications; H-index: 63 (Web of Science), 66 (Google Scholar)