# **Andrew B. Bocarsly**

# **Professor of Chemistry**

Office Address:

Department of Chemistry

Frick Laboratory, Princeton University

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#### Education:

Massachusetts Institute of Technology - PhD - June 1980

Major Field: Physical Inorganic Chemistry Thesis Advisor: Professor Mark Wrighton

Thesis Title: "Characterization and Manipulation of Charge Transfer Processes at the

Semiconductor Electrolyte Interface"

University of California at Los Angeles, B.S., Magna Cum Laude with Departmental

Honors in Chemistry - June 1976

Major Field: Double Major in Chemistry and Physics

Research Advisor: Professor John Gladysz

Research Area: "Metal Atom Cocondensations for Organometallic Synthesis"

## Academic Experience:

2002 - 2008	Director of Graduate Studies, Chemistry
1995 - 1998	Director of Graduate Studies, Chemistry
1994 - Present	Professor of Chemistry, Princeton University
1987 - 1994	Associate Professor of Chemistry, Princeton University
1980 - 1987	Assistant Professor of Chemistry, Princeton University
1976 - 1980	Graduate Research Assistant, M.I.T.
1975 (Summer)	Laboratory Assistant, Department of Chemistry, UCLA
1973 - 1974	Laboratory Assistant Department of Chemical Eng., UCLA

## External Science Consulting (2000-present)

Co-founder, Liquid Light Inc. (2009-present)

President, Science Advisory Board, Liquid Light Inc. (2009-present)

NASA, Mars Oxidation Experiment Science Team (1997-8)

Science Advisor, Applied Semiconductor (2006-2009)

Science Advisor, Millennium Cell Inc. (1995-2008)

NSF Advisory Panel to E=mc<sup>2</sup>, Elem. Science Ed. in Central Jersey (1994-2000)

## Professional Associations and Editorial Activities (2000-present):

American Chemical Society

The Electrochemical Society

Materials Research Society

Bocarsly, A.B.

Associate Editor for Electrochemistry, Methods in Materials Research

Editorial Advisory Board Member, J. Physical Chemistry Lett. (2013 - 2015)

Co-Editor Fuel Cells and Hydrogen Storage, Structure and Bonding, 141 (2011)

Princeton Section, ACS, Secretary-Treasurer (1992), Chairman, (1994) (2008)

Princeton Section, ACS, Education Outreach Chair (1992-2010)

Director, New York - New Jersey Partners in Science Program (2000-2007)

#### **Honors**:

Sigma Xi Science Education Award (2003)

New York Academy of Sciences, Honorary Member (2001)

Alfred P. Sloan Fellow (1986 - 1988)

American Chemical Society, EXXON Solid State Chemistry Award (1984)

Dreyfus Foundation Newly Appointed Faculty Grant (1980)

DuPont Young Faculty Grant (1980)

Sigma Pi Sigma - National Physics Honor Society (1996)

Phi Beta Kappa (1996)

President's Undergraduate Research Fellowship UCLA (1975)

## Present Research Interests:

Elevated Temperature Proton Exchange Membrane Fuel Cells

Non-hydrogen Based Fuel Cell Catalysts

Photoelectrochemical and Electrochemical Conversion of CO<sub>2</sub> to Alcohols

The Photochemistry of Multielectron Intervalent Charge Transfer Complexes

Cyanogels: Hydrogel Coordination Polymers as Materials Precursors

#### Scholarly Symposia Organized (2000- present)

2015 Host and organizer of the Third International CO<sub>2</sub> Workshop at Princeton University.

2012 Host and organizer of the Second International CO<sub>2</sub> Workshop at Princeton University.

2011 Organized and Chaired Symposium on CO<sub>2</sub> activation chemistry in the Physical Chemistry Division of the ACS for the Spring National Meeting, Anaheim, CA.

2010 Host and organizer of an international workshop held in Frick on chemistry related to conversion of exhaust carbon dioxide to fuels.