

*Curriculum Vitae***RICHARD EISENBERG**

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PROFESSIONAL DATA:***Professional Positions***

Assistant Professor, Department of Chemistry, Brown University, 1967-'71
Associate Professor, Department of Chemistry, Brown University, 1971-'73
Associate Professor, Department of Chemistry, University of Rochester, 1973-'76
Professor, Department of Chemistry, University of Rochester, 1976-present
Associate Dean, College of Arts and Science, 1989-'91
Chair, Department of Chemistry, University of Rochester, 1991-'94
Tracy H. Harris Professor of Chemistry, University of Rochester, 1996-2011
Tracy H. Harris Professor of Chemistry *Emeritus* and Professor (Research), 2011-2022

Professional Honors, Awards, Appointments, and Elected Positions

Alfred P. Sloan Foundation Fellowship, 1972-'74; John S. Guggenheim Foundation Fellowship, 1977-'78; Visiting Scientist, Caltech, 1977-'78; Visiting Scholar, Cambridge Univ., 1978; Founding Organizer, NSF Workshop on Organometallic Chemistry, 1977; Member, Advisory Board, *Journal of the American Chemical Society*, 1982-'84; Chairman, Organometallic Subdivision, Inorganic Division, American Chemical Society, 1982; Alternate Councilor, Inorganic Division, American Chemical Society, 1985-'87; Visiting Professor, Columbia University, 1985; University Mentor, 1986-'87; Vice-Chairman, Organometallic Gordon Research Conference, 1987; Chairman, Gordon Research Conference on Organometallic Chemistry, 1988; Councilor, Inorganic Division, American Chemical Society, 1988-'91; Member, PRF Advisory Board, 1988-'91; Visiting Professor, Universite de Rennes, 1989; Bridging Fellow, Institute of Optics, 1991; Chair-Elect, Inorganic Division, American Chemical Society, 1992; Chair, Inorganic Division, American Chemical Society, 1993; Closs Lecturer, Univ. Chicago, 1994; Visiting Professor, Chemistry Research Promotion Center, Republic of China, 1994; Coates Lecturer, Univ. Wyoming, 1996; Visiting Scientist, Caltech, 1996; Varon Visiting Professor, Weizmann Institute, 1997; Lady Davis Fellow, Hebrew Univ., 1997; Member, Editorial Advisory Board, *Inorganic Chemistry*, 1997-'98; Editorial Advisory Board, *Organometallics*, 1998-'00; Editor-in-Chief, *Inorganic Chemistry*, 2001-2012; ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry, 2003; ACS Committee on Science, 2003-'05; Rochester ACS Section Award, 2003; Miller Visiting Professorship, UC-Berkeley, 2005; Fellow of the American Association for the Advancement of Science (AAAS), 2005; Morley Medal, Cleveland ACS Section, 2007; Member, Scientific Advisory Board, NSF CCI on "Powering the Planet", 2007-2019; Sackler Lecturer, Tel Aviv University, Israel, 2008; Member, Editorial Advisory Board, *Accounts of Chemical Research*, 2009- ; Nanqiag Lecturer, Xiamen Univ., PRC, 2009; Fellow of the American Academy of Arts and Sciences, 2009; Fellow of the American Chemical Society, 2009; Member Scientific Advisory Board, DOE Energy Frontier Research Center for "Catalytic Hydrocarbon Functionalization," 2009-2012; Member, National Academy of Sciences, 2010; 34th Dwyer Memorial Lecturer New South Wales, Australia, 2010; University of Rochester Lifetime Achievement Award in Graduate Education, 2010; ACS Nobel Laureate Signature Award in Graduate Education (with Ph.D. student Pingwu Du), 2011; Chair, Committee to evaluate Bachelors, Masters and Doctoral programs in chemistry for the Israeli Council of Higher Education, 2011; Fred Basolo Medal for Outstanding Research in Inorganic

Chemistry, 2012; William H. Nichols Medal for Contributions to Inorganic Photochemistry, 2013; Oesper Award of the Cincinnati Section of the ACS, 2013; Member, NAS Board on Chemical Science and Technology, 2012-2018; Associate Editor, *Proceedings of the National Academy of Sciences*, 2013-2020; Abraham Clearfield Lecturer, Texas A&M University, 2014; Russell Marker Lecturer, Penn State University, 2014; John C. Bailar, Jr. Medal, University of Illinois, 2014; Member, External Review Committee, Caltech CCE Division, 2015; Edinburgh Lecturer in Photochemistry and Photophysics, Duke University, 2016; Hans B. Jonassen Lecturer, Tulane University, 2018; Review Committee, BES Photosynthetic Systems and Solar Photochemistry Programs, Argonne National Laboratory, 2019; Lord Lecturer, Allegheny College, 2019; Lecturer, Rochester ACS Section 2019 Lecture.

Research Interests

Light-to-chemical energy conversion; artificial photosynthesis and light-driven generation of hydrogen from water; photochemistry of platinum group complexes; homogeneous catalysis; organometallic chemistry of the platinum metals; bond activation chemistry; parahydrogen induced polarization; structure-function relationships in catalytic systems.

Courses Taught

Graduate and undergraduate inorganic chemistry; organometallic chemistry; general chemistry for chemistry majors; "Energy and the Environment" – a majors level introductory chemistry course developed with faculty colleague James M. Farrar.

EDUCATIONAL DATA

Degrees: A.B. Columbia University, 1963; M.A. Columbia University, 1964;
Ph.D. Columbia University, 1967

Academic Honors and Fellowships: George B. Pegram Honorary Fellowship, 1964-'65

RICHARD EISENBERG
LIST OF PUBLICATIONS

- (1) The Molecular and Electronic Structure of Bis(maleonitriledithiolate)nickelate(II) Ion, Eisenberg, R.; Ibers, J. A.; Clark, R. J. H.; Gray, H. B. *J. Am. Chem. Soc.* **1964**, *86*, 113.
- (2) The Crystal and Molecular Structure of Di(tetramethylammonium) Bis(maleonitrile-dithiolate)nickelate(II), Eisenberg, R.; Ibers, J. A. *Inorg. Chem.* **1965**, *4*, 605.
- (3) The Structure of Hydridochlorobis(diphenylethylphosphine)platinum, Eisenberg, R.; Ibers, J. A. *Inorg. Chem.* **1965**, *4*, 773.
- (4) Trigonal Prismatic Coordination. The Molecular Structure of Tris(*cis*-1,2-diphenylethene-1,2-dithiolato)rhenium, Eisenberg, R.; Ibers, J. A. *J. Am. Chem. Soc.* **1965**, *87*, 3776.
- (5) Trigonal Prismatic Coordination. The Crystal and Molecular Structure of Tris(*cis*-1,2-diphenylethene-1,2-dithiolato)rhenium, Eisenberg, R.; Ibers, J. A. *Inorg. Chem.* **1966**, *5*, 411.
- (6) Six Coordinate Trigonal Prismatic Complexes of First-Row Transition Metals, Eisenberg, R.; Stiefel, E. I.; Rosenberg, R. C.; Gray, H. B. *J. Am. Chem. Soc.* **1966**, *88*, 2874.
- (7) Characterization and Electronic Structures of Six Coordinate Trigonal-Prismatic Complexes, Stiefel, E. I.; Eisenberg, R.; Rosenberg, R. C.; Gray, H. B. *J. Am. Chem. Soc.* **1966**, *88*, 2956.
- (8) The Crystal and Molecular Structure of Dichloro(1,1,7,7-tetraethyldiethylenetriamine)-cobalt, Dori, Z.; Eisenberg, R.; Gray, H. B. *Inorg. Chem.* **1967**, *6*, 483.
- (9) Trigonal Prismatic Coordination, Gray, H. B.; Eisenberg, R.; Stiefel, E. I. *Adv. Chem. Ser.* **1967**, *62*, 641.
- (10) Trigonal Prismatic Coordination. The Molecular Structure of Tris(*cis*-1,2-diphenylethene-1,2-dithiolato)vanadium, Eisenberg, R.; Gray, H. B. *Inorg. Chem.* **1967**, *6*, 1844.
- (11) The Crystal and Molecular Structure of the High Spin Square Planar Complex Triphenyl-methylarsonium Bis((toluene-3,4-dithiolato)cobaltate, Eisenberg, R.; Dori, Z.; Gray, H. B.; Ibers, J. A. *Inorg. Chem.* **1968**, *7*, 741.
- (12) The Crystal and Molecular Structure of Tetra-*n*-butylammonium Bis(3,4,5,6-tetrachloro-benzene-1,2-dithiolato)cobaltate, Baker-Hawkes, M. J.; Dori, Z.; Eisenberg, R.; Gray, H. B. *J. Am. Chem. Soc.* **1968**, *90*, 4253.
- (13) The Crystal and Molecular Structure of the Five-Coordinate Complex Chlorotris(*o*-methylthiophenyl)phosphinenickel Perchlorate, Haugen, L.; Eisenberg, R. *Inorg. Chem.* **1969**, *8*, 1072.

- (14) The Crystal and Molecular Structure of *trans*-Diiodotetra(ethyleneimine)rhodium(III) Iodide, Lussier, R.; Edwards, J. O.; Eisenberg, R. *Inorg. Chim. Acta* **1969**, 4, 468.
- (15) The Structures of *o*-Phenanthroline Adducts of [Co-S₄]⁻ Systems, Khare, G. P.; Pierpont, C. G.; Eisenberg, R. *Chem. Commun.* **1968**, 1692.
- (16) Transition-Metal Complexes of a Mixed Selenium-Sulfur Ligand, Pierpont, C. G.; Corden, B. J.; Eisenberg, R. *Chem. Commun.* **1969**, 401.
- (17) The Crystal and Molecular Structure of the Tetraethylammonium Salt of the Diacetyl-dihydrobis(2-mercaptoanil)nickel Monoanion, Dori, Z.; Eisenberg, R.; Stiefel, E. I.; Gray, H. B. *J. Am. Chem. Soc.* **1970**, 92, 1506.
- (18) The Crystal and Molecular Structure of Tris(tetra-*n*-butyl)ammonium Octacyanomolybdate(V), Corden, B. J.; Cunningham, J. A.; Eisenberg, R. *Inorg. Chem.* **1970**, 9, 356.
- (19) The Structural Systematics of 1,1- and 1,2-Dithiolato Chelates, Eisenberg, R. *Progr. Inorg. Chem.* **1970**, 12, 295.
- (20) Dithiolene Complex Adducts. The Crystal and Molecular Structure of Tetra-*n*-propyl-ammonium Bis(maleonitriledithiolate)(*o*-phenanthroline)cobaltate, Khare, G. P.; Eisenberg, R. *Inorg. Chem.* **1970**, 9, 2211.
- (21) Dithiolene Complex Adducts. The Crystal and Molecular Structure of Tetra-*n*-butyl-ammonium Bis(toluene-3,4-dithiolato)(*o*-phenanthroline)cobaltate, Pierpont, C. G.; Eisenberg, R. *Inorg. Chem.* **1970**, 9, 2218.
- (22) The Molecular Structure of □-Diazidotetrakis(triphenylphosphine)dicopper(I), Ziolo, R. F.; Gaughan, A. P.; Dori, Z.; Pierpont, C. G.; Eisenberg, R. *J. Am. Chem. Soc.* **1970**, 92, 738.
- (23) The Crystal and Molecular Structure of *trans*-Bis(diphenyl-*o*-selenolatophenylphosphine)nickel(II), Curran, R.; Cunningham, J. A.; Eisenberg, R. *Inorg. Chem.* **1970**, 9, 2749.
- (24) A Ruthenium Complex Having Both Linear and Bent Nitrosyl Groups, Pierpont, C. G.; VanDerveer, D. G.; Durland, W.; Eisenberg, R. *J. Am. Chem. Soc.* **1970**, 92, 4760.
- (25) The Crystal and Molecular Structure of □-Diazidotetrakis(triphenylphosphine)-dicopper(I), Ziolo, R. F.; Gaughan, A. P.; Dori, Z.; Pierpont, C. G.; Eisenberg, R. *Inorg. Chem.* **1971**, 10, 1289.
- (26) Simple Reduction of the Diazonium Functional Group, Toniolo, L.; Eisenberg, R. *Chem. Commun.* **1971**, 455.
- (27) Structural Studies of Two Ruthenium(0)-nitrosyl Complexes, Pierpont, C. G.; Pucci, A.; Eisenberg, R. *J. Am. Chem. Soc.* **1971**, 93, 3050.
- (28) The Crystal and Molecular Structure of Bis(dithiotropolonato)nickel(II), Khare, G. P.; Schultz, A. J.; Eisenberg, R. *J. Am. Chem. Soc.* **1971**, 93, 3597.

- (29) Trigonal Prismatic Coordination. The Crystal and Molecular Structure of Tris(*cis*-1,2-diperfluoromethylethene-1,2-diselenato)molybdenum, Pierpont, C. G.; Eisenberg, R. *J. Chem. Soc. (A)* **1971**, 2285.
- (30) Bending Nitrosyls in Tetragonal Complexes, Pierpont, C. G.; Eisenberg, R. *J. Am. Chem. Soc.* **1971**, 93, 4905.
- (31) The Molecular Structure of Chlorodinitrosylbis(triphenylphosphine)ruthenium Hexafluoro-phosphate Benzene. A Complex Having Linear and Bent Nitrosyl Groups, Pierpont, C. G.; Eisenberg, R. *Inorg. Chem.* **1972**, 11, 1088.
- (32) The Crystal and Molecular Structure of the Catalytically Active Complex Hydridonitrosyl-tris(triphenylphosphine)ruthenium, RuH(NO)(P(C₆H₅)₃)₃, Pierpont, C. G.; Eisenberg, R. *Inorg. Chem.* **1972**, 11, 1094.
- (33) The Crystal and Molecular Structure of Diiodocarbonylferrocene-1,1'-bis(dimethyl-arsine)-nickel(II). A Nickel(II) Carbonyl Complex, Pierpont, C. G.; Eisenberg, R. *Inorg. Chem.* **1972**, 11, 828.
- (34) The Synthesis and Structure of the Novel Binuclear Iridium-Dithiolene Complex Ir₂(tdt)₃(CO)₂(P(C₆H₅)₃)₂, Khare, G. P.; Eisenberg, R. *Inorg. Chem.* **1972**, 11, 1385.
- (35) Nitrosyls and Metal-Metal Bonding in \square -Diphenylphosphido Ruthenium Clusters, Eisenberg, R.; Gaughan, Jr., A. P.; Pierpont, C. G.; Reed, J.; Schultz, A. J. *J. Am. Chem. Soc.* **1972**, 94, 6240.
- (36) The Crystal and Molecular Structure of Nitrosylbis[1,2-bis(diphenylphosphino)ethane]-ruthenium Tetraphenylborate Acetone, [Ru(NO)(diphos)₂][B(C₆H₅)₄] \square (CH₃)₂CO, Pierpont, C. G.; Eisenberg, R. *Inorg. Chem.* **1973**, 12, 199.
- (37) The Crystal and Molecular Structure of the Complex Tri- \square -methylmercaptohexacarbonyldi-iron(II) Tetrakis(*cis*-1,2-di(perfluoromethyl)ethylene-1,2-dithiolato)diiron, [Fe₂(\square -SCH₃(CO)₆][Fe₂(S₂C₂(CF₃)₂)₄], Schultz, A. J.; Eisenberg, R. *Inorg. Chem.* **1973**, 12, 518.
- (38) The Metal Complex Promoted Decomposition of the Carbene Precursor Chlorodifluoro-acetate, Schultz, A. J.; Khare, G. P.; Eisenberg, R. *J. Am. Chem. Soc.* **1973**, 95, 3434.
- (39) The Coordination of the Arylazo Group. The Molecular Structure of Trichloro(*p*-tolylazo)-bis(triphenylphosphine)ruthenium(II) Acetone, RuCl₃(*p*-N₂C₆H₄Me)(PPh₃)₂ \square (Me)₂CO, McArdle, J. V.; Schultz, A. J.; Corden, B. J.; Eisenberg, R. *Inorg. Chem.* **1973**, 12, 1676.
- (40) Chlorodinitrosylbis(triphenylphosphine)ruthenium(II) Tetrafluoroborate, Reed, J.; Pierpont, C. G.; Eisenberg, R. *Inorg. Syn.* **1976**, 16, 21.
- (41) Binuclear Nitrosyl Complexes. The Synthesis and Structure Determination of Dinitrosyl-bis(\square -diphenylphosphido)bis(tertiary phosphine)diruthenium, [Ru(\square -PPh₂)(NO)L]₂, Reed, J.; Schultz, A. J.; Pierpont, C. G.; Eisenberg, R. *Inorg. Chem.* **1973**, 12, 2949.

- (42) The Crystal and Molecular Structure of Dinitrosylbis(triphenylphosphine)ruthenium Hemibenzene, $\text{Ru}(\text{NO})_2(\text{P}(\text{C}_6\text{H}_5)_3)_2 \cdot \frac{1}{2} \text{C}_6\text{H}_6$, Gaughan, A. P.; Corden, B. J.; Eisenberg, R.; Ibers, J. A. *Inorg. Chem.* **1974**, *13*, 786.
- (43) Carbene Precursors and Metal Complexes. The Synthesis and Structure Determination of Chloro(difluoromethyl)(*o*-chlorodifluoroacetato)carbonylbis(triphenylphosphine)-iridium(III) Benzene, $\text{IrCl}(\text{CHF}_2)(\text{OCOCF}_2\text{Cl})(\text{CO})(\text{PPh}_3)_2 \cdot \text{C}_6\text{H}_6$, Schultz, A. J.; Khare, G. P.; Meyer, C. D.; Eisenberg, R. *Inorg. Chem.* **1974**, *13*, 1019.
- (44) Nitric Oxide Reduction Coupled with Carbon Monoxide Oxidation Using Soluble Metal Catalysts, Reed, J.; Eisenberg, R. *Science* **1974**, *184*, 568.
- (45) Carbene Precursors and Metal Complexes. The Synthesis and Structure of Dichloro-(difluoromethyl)carbonylbis(triphenylphosphine)iridium(III), $\text{IrCl}_2(\text{CHF}_2)(\text{CO})(\text{PPh}_3)_2$, Schultz, A. J.; McArdle, J. V.; Khare, G. P.; Eisenberg, R. *J. Organomet. Chem.* **1974**, *72*, 415.
- (46) Rhodium(I) Dithiolene Complexes. Synthesis, Structure and Dynamic Behavior, VanDerveer, D. G.; Eisenberg, R. *J. Am. Chem. Soc.* **1974**, *96*, 4994.
- (47) Sulfate Coordination. The Molecular Structure of Chlorosulfatonitrosylbis(triphenyl-phosphine)ruthenium(II), $\text{RuCl}(\text{SO}_4)(\text{NO})(\text{PPh}_3)_2$, Reed, J.; Soled, S. L.; Eisenberg, R. *Inorg. Chem.* **1974**, *13*, 3001.
- (48) The Coordination Chemistry of Nitric Oxide, Eisenberg, R.; Meyer, C. D. *Acc. Chem. Res.* **1975**, *8*, 26.
- (49) Hexakis(methylisocyanide)dipalladium(I) Cation: Preparation, Structure and Fluxional Behavior, Doonan, D. J.; Balch, A. L.; Goldberg, S. Z.; Eisenberg, R.; Miller, J. S. *J. Am. Chem. Soc.* **1975**, *97*, 1961.
- (50) The Crystal and Molecular Structure of Dichloronitrosylbis(triphenylphosphine)rhodium, $\text{RhCl}_2(\text{NO})(\text{P}(\text{C}_6\text{H}_5)_3)_2$, Goldberg, S. Z.; Kubiak, C.; Meyer, C. D.; Eisenberg, R. *Inorg. Chem.* **1975**, *14*, 1650.
- (51) The Catalyzed Reduction of Nitric Oxide by Carbon Monoxide Using Soluble Rhodium Complexes, Meyer, C. D.; Reed, J.; Eisenberg, R. in *Organotransition-Metal Chemistry*, Ishii, Y.; Tsutsui, M., Eds., Plenum Press: New York, **1975**, p. 199.
- (52) The Catalytic Reduction of Nitric Oxide by Carbon Monoxide Using Dichlorodicarbonyl-rhodium(I) Anion, Meyer, C. D.; Eisenberg, R. *J. Am. Chem. Soc.* **1976**, *98*, 1364.
- (53) The Crystal and Molecular Structure of Methylisocyanide Bis[1,2-bis(diphenylphosphino)-ethane]iridium(I) Perchlorate, $[\text{Ir}(\text{CNMe})(\text{diphos})_2](\text{ClO}_4)$, Goldberg, S. Z.; Eisenberg, R. *Inorg. Chem.* **1976**, *15*, 58.

- (54) The Molecular Structure of Hexakis(methylisocyanide)dipalladium(I) Bis(hexafluoro-phosphate) Hemi-acetone. A Palladium(I) Dimer, Goldberg, S. Z.; Eisenberg, R. *Inorg. Chem.* **1976**, *15*, 535.
- (55) Tetrakis(methylisocyanide)palladium(II) Tetrakis(7,7,8,8-tetracyano-*p*-quinodimethane), [Pd(CNMe)₄](TCNQ)₄·2MeCN: Synthesis, Structure and Physical Properties, Goldberg, S. Z.; Eisenberg, R.; Miller, J. S.; Epstein, A. J. *J. Am. Chem. Soc.* **1976**, *98*, 5173.
- (56) The Role of Water in the Rhodium(I) Catalyzed Reduction of Nitric Oxide by Carbon Monoxide. An ¹⁸O Labelling Study, Hendriksen, D. E.; Eisenberg, R. *J. Am. Chem. Soc.* **1976**, *98*, 4662.
- (57) Isosteganacin, Kende, A. S.; Liebeskind, L. S.; Kubiak, C.; Eisenberg, R. *J. Am. Chem. Soc.* **1976**, *98*, 6389.
- (58) The Synthesis, Structure and Physical Properties of the Bis(7,7,8,8-Tetracyano-*p*-quino-dimethane) Salt of the Paramagnetic Cluster Tris[di(μ-chloro)(hexamethylbenzene)-niobium], [Nb₃(μ-Cl)₆(C₆Me₆)₃]²⁺(TCNQ)₂²⁻, Goldberg, S. Z.; Spivack, B.; Stanley, G.; Eisenberg, R.; Braitsch, D.; Miller, J. S.; Abkowitz, M. *J. Am. Chem. Soc.* **1977**, *99*, 110.
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- (63) Binuclear Rhodium(I) Complexes. Molecular A-Frames, Kubiak, C. P.; Eisenberg, R. *J. Am. Chem. Soc.* **1977**, *99*, 6129.
- (64) A Comparison of Allyl and Nitrosyl Coordination in the 18-Electron Complex Allyl-nitrosylbis(triphenylphosphine)ruthenium and Its CO Adduct, Schoonover, M. W.; Eisenberg, R. *J. Am. Chem. Soc.* **1977**, *99*, 8371.
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- (69) The Binding and Activation of Carbon Monoxide, Carbon Dioxide, and Nitric Oxide, and Their Homogeneously Catalyzed Reactions, Eisenberg, R.; Hendriksen, D. E. *Adv. Catal.* **1979**, *28*, 79.
- (70) The Rhodium(I) Anion $[\text{Rh}(\text{CO})(\text{PEt}_3)\text{maleonitriledithiolate}]^-$ and Acyl Complexes Derived from Its Reaction with Alkyl Halides, Cheng, C.-H.; Eisenberg, R. *Inorg. Chem.* **1979**, *18*, 1418.
- (71) The Electrochemical Generation of $[\text{Rh}(\text{diphos})_2]^0$ and Its Role in an Electrocatalytic Reduction of Cyclohexylhalides, Sofranko, J. A.; Eisenberg, R.; Kampmeier, J. A. *J. Am. Chem. Soc.* **1979**, *101*, 1042.
- (72) Alkyl Group Migration in Rhodium Carbonyl Dithiolates and the Molecular Structure of Carbonyl(triphenylphosphine)(1-ethylthio)maleonitrile-2-(thiolato)rhodium, $\text{Rh}(\text{CO})(\text{PPh}_3)(\text{Et-mnt})$, Cheng, C.-H.; Eisenberg, R. *Inorg. Chem.* **1979**, *18*, 2438.
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 11/80 SOHIO
 11/80 Cleveland ACS Inorganic Topical Group (at Cleveland State)
 1/81 State University College of Oneonta
 2/81 University of South Carolina
 3/81 General Electric Research Center, Schenectady

11/81 Minneapolis ACS Inorganic Topical Group, University of Minnesota
11/81 3M Research Center
12/81 University of Wisconsin, Milwaukee
2/82 University of Michigan
2/82 Texas A&M University
2/82 University of Texas, Austin
3/82 Universidad de los Andes, Merida, Venezuela
3/82 State University of New York at Buffalo
10/82 Washington University
10/82 Monsanto
11/82 Rensselaer Polytechnic Institute
2/83 Caltech
2/83 UCLA
2/83 University of Arizona
4/83 Cornell University
6/83 Union Carbide
3/84 University of Ottawa
3/84 Queen's University
6/84 Bristol University
6/84 Cambridge University
10/84 Brown University
2/85 University of Wisconsin, Madison
4/85 Cleveland ACS Inorganic Topical Group Meeting
5/85 Gif-sur-Yvette
5/85 Ecole Nationale Supérieure de Chimie, Paris
5/85 Université Louis Pasteur, Strasbourg
5/85 University of Freiburg
5/85 ETH, Zurich
5/85 Institut de Recherche sur la Catalyse, Lyons
5/85 Rhone-Poulenc
5/85 Laboratoire de Chimie de Coordination, Toulouse
5/85 Université de Rennes
11/85 Columbia University
3/86 McGill University
5/86 Purdue University
6/87 University of California, Berkeley
7/87 University of Bonn
7/87 Technischen Hochschulen Aachen
1/88 MIT-Harvard Inorganic Seminar
1/88 University of Pennsylvania
1/88 West Virginia University
2/88 University of Vermont
5/88 Columbia University
6/88 Eastman Kodak Company
10/88 Rutgers University
10/88 University of Houston
10/88 Rice University
10/88 Texas A&M University
10/88 University of Texas
11/88 Geneseo State University College
11/88 University of Chicago
11/88 University of Illinois
2/89 Iowa State University
2/89 University of Iowa

3/89 Tulane University
4/89 State University of New York at Buffalo
11/89 Universite de Rennes
12/89 Queens College
10/90 Lehigh University
10/90 Wabash College
1/91 Yale University
1/91 Brookhaven National Laboratory
1/91 Michigan State University
7/91 University of Lausanne
7/91 ETH, Zurich
9/91 Columbia University
9/91 Purdue University
9/91 Indiana University
2/92 Washington University
2/92 University of Cincinnati
1/93 Cornell University
4/93 Tennessee Eastman
1/94 University of Nebraska
3/94 National Sun Yat-Sen University
3/94 Tsing-Hua University
3/94 Academia Sinica
3/94 National Taiwan University
3/94 Waseda University
3/94 Osaka University
3/94 Nagoya University
3/94 Institute for Molecular Science, Okazaki, Japan
5/94 Massachusetts Institute of Technology
5/94 University of Chicago (Closs Lecturer)
11/94 Rutgers University
3/95 Stanford University
3/95 University of California-Berkeley
4/95 Binghamton University
6/95 Los Alamos National Laboratory
2/96 University of New Mexico
4/96 Columbia University
4/96 University of Wyoming
5/96 California Institute of Technology
5/96 University of California - Irvine
10/96 Canisius College
10/96 University of Chicago
3/97 Technion, Haifa
4/97 Weizmann Institute
5/97 Hebrew University
6/97 Hebrew University
6/97 Weizmann Institute
10/97 University of Michigan
11/97 Ithaca College
11/97 Union College
3/99 University of Delaware
3/99 Caltech
3/99 University of California-San Diego
3/99 University of California-Irvine
4/99 GE Corporate Research Laboratory

9/99 Eastman Kodak Research Laboratories
10/99 University of Maine
10/99 Bowdoin College
10/99 Kenyon College
2/00 University of Akron
3/00 Weizmann Institute, Rehovot, Israel
3/00 Hebrew University, Jerusalem, Israel
11/00 University of Cincinnati
2/01 University of Washington
3/01 Queen's University
3/01 Yale University
4/01 Bucknell University
10/01 University of Kentucky
11/01 Macalester College
11/01 St. Thomas University
4/02 University of Utah
5/02 Utah State University
9/02 MIT/Harvard
11/02 University of Chicago
02/03 University of Florida
02/03 University of California, Santa Barbara
02/03 Cornell University
10/03 University of Montreal
02/04 University of North Carolina
03/04 Duke University
03/04 North Carolina State University
04/04 University of North Carolina, Charlotte
09/04 University of Buffalo
09/04 University of Minnesota (student invited speaker)
01/05 University of California-Berkeley (two lectures)
02/05 University of Nevada-Reno
03/05 Stanford University
04/05 University of California-Davis
04/05 Iowa State University
10/05 Michigan State University
10/05 Albion University
03/06 University of Florida
05/06 Universidad de Alcala, Spain
05/06 Universidad de Zaragoza
05/06 Universidad de la Rioja
05/06 Universidad de Barcelona
05/06 Universidad de Murcia
05/06 Universidad de Sevilla
10/06 Pusan National University, Korea
10/06 Korea National University
10/06 Korea Advanced Institute of Science and Technology (KAIST)
01/07 Tulane University
02/07 Louisiana State University
04/07 University of Vermont
04/07 Dartmouth College
04/07 University of Wisconsin
04/07 University of Texas, Arlington
01/08 Union College
02/08 Bowling Green State University

03/08 Universidad Nacional Autónoma de México (two lectures)
03/08 Princeton University
04/08 Tel Aviv University, Israel (Sackler lectures - two presented)
05/08 Weizmann Institute, Israel
05/08 Technion University, Israel
02/09 University of North Texas
03/09 University of Minnesota (two lectures presented)
06/09 Xiamen University, China
06/09 Fudan University, China
06/09 Jiao Tong University, China
06/09 Shanghai Institute of Organic Chemistry, China
06/09 Nanjing University, China
06/09 Wuhan University, China
06/09 Peking University, China
06/09 Tsinghua University, China
06/09 Technical Institute of Physics&Chemistry - Chinese Acad. of Sci., China
11/09 State University of New York at Geneseo
02/10 Karcher Lecturer, University of Oklahoma
03/10 Case Western Reserve University
04/10 University of New Hampshire
08/10 University of Sydney, Australia
08/10 Australia National University
03/11 Boston University
05/11 Binghamton University
09/11 Humboldt University, Berlin
09/11 University of Zurich
04/12 Georgetown University
04/12 University of Delaware
09/12 University of Victoria
09/12 University of British Columbia
09/12 Simon Fraser University
10/13 University of Texas Arlington
09/13 University of Nevada - Reno
04/14 Texas A&M University (Abraham Clearfield Lecture)
09/14 Penn State University (Russell Marker Lecturer)
10/14 Hokkaido University, Sapporo, Japan
02/15 University of Canterbury (Christchurch, NZ)
02/15 University of Otago (Dunedin, NZ)
02/15 University of Auckland (Auckland, NZ)
10/16 University of Nebraska – Omaha
03/18 Tulane University (Jonassen Lecturer)
06/18 Technical University of Denmark, Copenhagen, Denmark
09/19 Allegheny College (Lord Lecturer)