PROFESSIONAL DOSSIER

Miguel A. García-Garibay

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MIGUEL A. GARCÍA-GARIBAY
Professor

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University of California, Los Angeles
405 Hilgard Ave
Los Angeles CA 90095-1569

Education: B.Sc. 1982, University of Michoacan, México
Ph.D. 1988, University of British Columbia, Canada

Professional Positions

Dean of Physical Sciences	University of California, Los Angeles	2016-date
Distinguished Professor	University of California, Los Angeles	2018
Department Chair	University of California, Los Angeles	2012-2016
Visiting Professor	Queen's University	2014
Visiting Professor	Universidad Nacional Autonoma de Mexico	2010
Visiting Professor	University of Angers, France	2009, 2010
Diversity Advisor	Division of Physical Sciences, UCLA	2009-2012
Visiting Professor	University of Zurich, Switzerland	2008
Department Vice Chair	University of California, Los Angeles	2005-2008
Professor	University of California, Los Angeles	2001-2018
Associate Professor	University of California, Los Angeles	1998-2001
Assistant Professor	University of California, Los Angeles	1992-1998
Post-Doctoral Fellow	Columbia University	1989-1992
Post-Doctoral Fellow	University of British Columbia	1988-1989
Teaching Assistant	University of British Columbia	1985-1988
Research Assistant	University of British Columbia	1985-1988
Research Associate	University of Michoacan	1982-1984

Memberships

American Chemical Society
Division of Organic Chemistry, ACS
American Association for the Advancement of Science
Inter-American Photochemical Society
American Crystallographic Association
Society for the Advancement of Chicanos and Native Americans in Science

Professional Appointments

2017	NSF Mathematics and Physical Sciences Directorate Advisory Committee (MPSAC)
2016-2018	Co-Chair of the XVII International Union of Pure and Applied Chemistry Symposium of Photochemistry
2011-2018	National Research Council – Chemical Sciences Round Table
2009-2016	Associate Editor, Journal of the American Chemical Society
2009-2012	Diversity Adviser to the Dean of Physical Sciences, UCLA
2008-2012	Elected to the Executive Committee, Division of Organic Chemistry, American Chemical Society

Honors:

— Plenary Lecture, 53th Conference of the Sociedad Quimica de Mexico, Mexico City, 2018
— Featured plenary lecture, Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS) National Meeting, Salt Lake City, 2017
— Associate Editor of the Journal of the American Chemical Society, 2009-2016
— Appointment to the Chemical Sciences Roundtable of the National Academy of Sciences (NAS) Board on Chemical Sciences and Technology, 2012-2015 and 2015-2018
— Plenary lecture, Southeastern Regional Meeting of the American Chemical Society, Columbia SC 2016
— Plenary Lecture, 49th Conference of the Sociedad Quimica de Mexico, Merida, Mexico, 2014
— Plenary Lecture, IUPAC Meeting in Photochemistry, Bordeaux, France, 2014
— Molecular Science Frontier Lecture Professorship, Institute of Chemistry, Chinese Academy of Science, Beijing 2012
— Dow Chemical Distinguished Lecturer, UC Santa Barbara, 2010
— Trosieme Cycle Lecture Series: Basel, Geneve, Basel and Fribourgh, Switzerland, 2009
— Visiting Professor, Dept of Molecular Engineering, University of Angers, France, 2009, 2010, 2012
— Visiting Professor, Institute of Organic Chemistry, University of Zurich, Switzerland, 2008
— Class of 1960's Seminar Speaker, Williams College, 2008
— Conferencia Magistral, Congreso Nacional de La Sociedad Química de Mexico, 2005

Awards:

— ACS Cope Scholar Award, 2015
— UCLA Staff Recognition award, 2015
— UCLA Diversity and Inclusiveness Award, 2013
— Inter-American Photochemical Society Award, 2013
— NSF Creativity Award, 2009-2011
— American Competitiveness and Innovation Fellow, 2008
— AAP Faculty Appreciation Award, University of California, Los Angeles, 2008
— Fellow of the American Association for the Advancement of Science, 2007
— Herbert Newby McCoy Award, University of California, Los Angeles, 1999
— Dean's Marshal Award for the Division of Physical Sciences, Univ. of California, Los Angeles, 1997
— NSF Career Award 1996-1999
— Faculty Development Award, University of California, Los Angeles, 1995
— University Graduate Fellowship University of British Columbia 1986 to 1988
— Fellowship for Undergraduate Research Sponsored by Syntex of Mexico, 1981 to 1982

PUBLICATIONS

(A) Before UCLA

(1) Scheffer, J. R.; Garcia-Garibay, M.; Omkaram, N. "The Influence of the Molecular Crystalline Environment on Organic Photorearrangements." in *Organic Photochemistry*; Padwa, A., Ed.; Marcel Dekker, New York, **1986**, 249.

(2) Evans, S. V.; Garcia-Garibay, M.; Omkaram, N.; Scheffer, J. R.; Trotter, J.; Wireko, F. "Use of Chiral Single Crystals to Convert Achiral Reactants to Chiral Products in High Optical Yield: Application to the Di-π-Methane and Norrish Type II Photorearrangements." *J. Am. Chem. Soc.,* **1986**, *108,* 5648.

(3) Garcia-Garibay, M.; Scheffer, J. R.; Trotter, J.; Wireko, F. "Generation of Optical Activity Through Solid State Reaction of a Racemic Mixture that Crystallizes in a Chiral Space Group." *Tetrahedron Lett.,* **1987**, *28,* 4789.

(4) Garcia-Garibay, M.; Scheffer, J. R.; Trotter, J.; Wireko, J. "Triplet Energy Sensitization of a Crystalline Phase Photorearrangement." *Tetrahedron Lett.,* **1987**, *28,* 1741.

(5) Garcia-Garibay, M.; Scheffer, J. R.; Trotter, J.; Wireko, F. "Addition of Bromine Gas to Crystalline Dibenzobarrelene: An Enantioselective Carbocation Rearrangement in the Solid State." *Tetrahedron Lett.,* **1988**, *29,* 1485.

(6) Scheffer, J. R.; Trotter, J.; Garcia-Garibay, M.; Wireko, F. "Studies on the Di-π-Methane Rearrangement in the Solid State." *Mol. Cryst. Liq. Cryst. Inc. Nonlin. Opt.,* **1988**, *156,* 63.

(7) Ariel, S.; Evans, S. V.; Garcia-Garibay, M.; Harkness, B. R.; Omkaram, N.; Scheffer, J. R.; Trotter, J. "The Generation of 1,4-Biradicals in Rigid Media: Crystal Structure-Solid State Reactivity Correlations." *J. Am. Chem. Soc.,* **1988**, *110,* 5591.

(8) Garcia-Garibay, M.; Scheffer, J. R.; Trotter, J.; Wireko, F. "Intermolecular Steric Effects on Unimolecular Rearrangements in Crystalline Media." *Tetrahedron Lett.,* **1988**, *29,* 2041.

(9) Garcia-Garibay, M.; Scheffer, J. R.; Trotter, J.; Wireko, F. "Determination of the Absolute Steric Course of a Solid State Photorearrangement by Anomalous Dispersion X-Ray Crystallography." *J. Am. Chem. Soc.,* **1989**, *111,* 4985.

(10) Ariel, S.; Garcia-Garibay, M.; Scheffer, J. R.; Trotter, J. "Crystal Structure of a Cyclization Photoproduct of 1-(4-Chlorophenyl)-2-Cyclooctylethanone, and Reaction Pathway in Norrish Type II Cyclizations." *Acta Cryst.,* **1989**, *B45,* 153.

(11) Ariel, S.; Garcia-Garibay, M. A.; Scheffer, J. R.; Trotter, J. "Structure of a Cyclization Photoproduct of 1-(4-Chlorophenyl)-2-Cyclohexanone." *Acta Cryst.,* **1989**, *C45,* 1970.

(12) Chen, J.; Garcia-Garibay, M.; Scheffer. "Chiral Handle-Induced Diastereoselectivity in an Organic Photorearrangement: Solution versus Solid State Results." *Tetrahedron Lett.,* **1989**, *30,* 6125.

(13) Scheffer, J. R.; Garcia-Garibay, M. "Absolute Asymmetric Synthesis via Photochemical Reactions of Chiral Crystals." in *Photochemistry of Solid Surfaces*; Matsuura, T.; Anpo, M., Eds.; Elsevier, Amsterdam, 1989.

(14) Garcia-Garibay, M.; Scheffer, J. R.; Watson, D. "Prototropic Control of the Di-π-Methane Photorearrangement." *J. Chem. Soc., Chem. Comm.,* **1989**, 600.

(15) Garcia-Garibay, M.; Scheffer, J. R.; Trotter, J.; Wireko, F. "Crystal Structures and Solid State Photochemistry of an Unsymmetrically Substituted Dibenzobarrelene and its Two Photoproducts (Dibenzosemibullvalenes)." *Acta Cryst.,* **1990**, *B46,* 79.

(16) Turro, N. J.; Garcia-Garibay, M. A. "Thinking Topologically About Photochemistry in Restricted Spaces." in *Photochemistry in Organized and Constrained Media*; Ramamurthy, V., Ed.; VCH Publishers, New York, 1991.

(17) Ramamurthy, V.; Corbin, D. R.; Turro, N. J.; Zhang, Z.; Garcia-Garibay, M. "Modification of Photochemical Reactivity by Zeolites. A comparison between Zeolite-Solvent Slurry and Dry Solid State Photolyses." *J. Org. Chem.,* **1991**, *56,* 255.

(18) Garcia-Garibay, M.; Zhang, Z.; Turro, N. J. "Diffusion and Percolation of Radical Pairs in Zeolite Media. A Product Analysis Study." *J. Am. Chem. Soc.,* **1991**, *113,* 6212.

(19) Welsh, K. M.; Dektar, J. L.; Garcia-Garibay, M. A.; Hacker, N.; Turro, N. J. "Photo-CIDNP and Nanosecond Flash Photolysis Studies on the Photodecomposition of Triarylsulfonium Salts." *J. Org. Chem.,* **1992**, *57,* 4179.

(20) Garcia-Garibay, M. A.; Lei, X.; Turro, N. J. "Radical Scavenging in Zeolite Media." *J. Am. Chem. Soc.,* **1992**, *114,* 2749.

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(22) Winnik, F. M.; Ottaviani, M. F.; Bossmann, S. H.; Garcia-Garibay, M. A.; Turro, N. J. "Co-Non-Solvency of Poly-(N-Isopropylacrylamide) in Mixed Water-Methanol Solutions: A Look at Spin-Labeled Polymers." *Macromolecules,* **1992**, ***25***, 6007.

(23) Garces, F. O.; Rao, V. P.; Garcia-Garibay, M. A.; Turro, N. J. "A Comparison of the $^{1}H—^{13}C$ Cross Polarization and Magic Angle Spinning Dynamics of the α-, β-, and γ-Cyclodextrin Inclusion Complexes of Benzaldehyde." *J. Supramol. Chem.,* **1992**, *1,* 65.

(24) Garcia-Garibay, M. A.; Ottaviani, M. F.; Turro, N. J. "Solid State NMR and EPR Studies of Intracrystalline vs. External Surface Adsorption of Photoreactive Ketones in Pentasil Zeolites." *Mol. Crys. Liq. Crys. Inc. Nonlin. Opt.,* **1992**, *211,* 199.

(25) Winnik, F. M.; Ottaviani, M. F.; Bossmann, S. H.; Pan, W.; Garcia-Garibay, M. A.; Turro, N. J. "Co-Non-Solvency of Poly-(N-Isopropylacrylamide): A Look at Spin-Labeled Polymers in Mixtures of Water and Tetrahydrofuran." *Macromolecules,* **1993**, *26*, 4577

(26) Casswell, L.; Garcia-Garibay, M. A.; Scheffer, J. R.; Trotter, J. "Optical Activity Can Be Created from Nothing." *J. Chem. Ed.,* **1993**, *70*, 785.

PUBLICATIONS

(B) Since Appointment at UCLA

(27) Garcia-Garibay, M. A. "Reaction of Arylcarbenes with Methanol. Triplet-State Reactivity of Spin-State Equilibrium as a Moving Target?" *J. Am. Chem. Soc.,* **1993**, *115,* 7011.

(28) Ottaviani, M. F.; Garcia-Garibay, M. A.; Turro, N. J. "TEMPO Radicals as EPR Probes to Monitor the Adsorption of Different Species into X-Zeolite." *Colloids and Surfaces A: Physicochemical and Engineering Aspects,* **1993**, *72,* 321.

(29) Garcia-Garibay, M. A.; Theroff, C.; Shin, S. H.; Jernelius, J. "Solvent Effects on the Singlet-Triplet Equilibrium and Reactivity of A Ground Triplet State Arylalkyl Carbene." *Tetrahedron Lett.,* **1993**, *34 (2), 8415-18.*

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(31) Evans, S. V.; Yee, V. C.; M., Garcia-Garibay; Trotter, J. "Structure of a Mixed Crystal of α- and β-Pipitzol (1:1), $C_{15}H_{20}O_3 \cdot C_{15}H_{20}O_3$." *Acta Cryst. C.,* **1994** *C50*, 278-281.

(32) Garcia-Garibay, M. A.; Shin, S. H.; Chao, I.; Houk, K. N.; Khan, S. I. "Solid State ^{13}C CPMAS NMR and Molecular Mechanics Study of Conformational Recognition in Mixed Crystals of Two Phenylalkyl Ketones." *Chem. Mater.* **1994**, *6*, 1297-1306

(33) M. A. Garcia-Garibay, A. Gamarnik, L. Pang, W. S. Jenks. "Excited State Intramolecular Hydrogen Atom Transfer at Ultra-Low Temperatures. Evidence for Tunneling and Activated Mechanisms in 1,4-Dimethylanthrone", *J. Am. Chem. Soc.* **1994**, *116*, 12095-12096

(34) Garcia-Garibay, M. A.; A. Gamarnik; R. Bise; L. Pang; W. S. Jenks. "Primary Isotope Effects on Excited State Hydrogen Atom Transfer Reactions. Activated and Tunneling Mechanisms in an *ortho*-Methylanthrone." *J. Am. Chem. Soc.*, **1995**, *117*, 10264-10275.

(35) Choi, T.; Cizmeciyan, D.; Kahn, S. I.; Garcia-Garibay, M. A. "An Efficient Solid-to-Solid Reaction via a Steady-State Phase-Separation Mechanism." *J. Am. Chem. Soc.*, **1995**, *117*, 12893-12894.

(36) Ramamurthy, V; Garcia-Garibay, M. A. "Zeolites as Supramolecular Hosts for Photochemical Transformations." in *Comprehensive Supramolecular Chemistry*, G. Alberti and Bein, T., Eds., Elsevier, New York, **1996**, Vol. 7, Ch. 24., pp. 693-719.

(37) Garcia-Garibay, M. A.; Jenks, W. S.; Pang, L. "Heterogeneous Hydrogen and Deuterium Transfer in the Excited State of 2-Methylbenzophenone in ether-pentane-alcohol glasses at 77K." *J. Photochem. Photobiol. A.* **1996**, *96*, 51-55.

(38) Johnson, B. A.; Gamarnik, A.; Garcia-Garibay, M. A. "Deuterium Tunneling in Triplet 5,8-Dimethyl-1-tetralone by Phosphorescence Detection between 80 and 15K." Excellent Agreement between Phosphorescence and Flash Photolysis Data." *J. Phys. Chem.* **1996**, *100*, 4697-4700.

(39) McAlpine. S. R.; Garcia-Garibay, M. A. "Inside-Outside Isomerism of ß-Cyclodextrin Covalently Linked with a Naphthyl Group." *J. Am. Chem. Soc.*, **1996**, *118,* 2750-2751.

(40) Garcia-Garibay, M. A.; Constable, A. E.; Jernelius, J. ; Choi, T.; Cizmeciyan, D.; Shin, S. H. "Diffraction Spectral and Thermal Analysis of Mixed Crystalline Phases. Mechanisms of Solid-to-Solid Organic Reactions." in *Physical Supramolecular Chemistry*, NATO ASI Series, Vol 485, 1996, pp. 289-312.

(41) Shin, S.; Constable, A.; Garcia-Garibay, M. A. "Transforming a Non-Selective Carbene Rearrangement into a Highly Selective Process by Using Crystalline Media." *J. Am. Chem. Soc.*, **1996**, *118,* 7626-7627.

(42) McAlpine, S. R.; Garcia-Garibay, M. A. "Binding Studies of Adamantane Carboxylic Acid and a Naphthyl-Bound β-Cyclodextrin by Variable Temperature ^{1}H NMR." *J. Org. Chem.,* **1996**, *61*, 8307-8309.

(43) Choi, T.; Peterfy, K.; Garcia-Garibay, M. A. "Molecular Control of Solid State Reactivity by Decarbonylation of Crystalline Ketones." *J. Am. Chem. Soc.*, **1996**, *118*, 12477-12478.

(44) Cizmeciyan, D.; Sonnichsen, L; Garcia-Garibay, M. A. "Proximity, Photochemical Reactivity, and Intermolecular ^{1}H-^{13}C Cross Polarization in d_{10}-Benzophenone and Cyclohexane in the Zeolite NaX." *J. Am. Chem. Soc.* **1997**, *119*, 184-188.

(45) Keating, A. E.; Shin, S.; Houk, K. N.; Garcia-Garibay, M. A. " Combining Quantum Mechanical Reaction Pathways with Force Field Lattice Interactions to Model a Solid State Phototransformation." *J. Am. Chem. Soc.* **1997**, *119*, 1474-1475.

(46) Shin, S.; Keating, A. E.; Cizmeciyan, D.; Khan, S. I.; Garcia-Garibay, M. A. "Control of Carbene Reactivity by Crystals. A Highly Selectivity 1,2-H Shift in the Solid-to-Solid Reaction of 1-(4'-Biphenyl)-2-phenyl-diazopropane to (Z)-1-(4'-Biphenyl)-2-phenyl-propene." *J. Am. Chem. Soc.*, **1997**, *119*, 1859-1868.

(47) Motschiedler, K. R.; Toscano, J.; Platz, M. S.; Garcia-Garibay, M. A. "Arylalkylcarbenes from Triplet Arylalkyldiazoalkanes." *Tetrahedron Lett.*, **1997**, *38*, 949-952.

(48) Keating, A. E.; Garcia-Garibay, M. A.; Houk, K. N. "Origins of Stereoselective Carbene 1,2-Shifts and Cycloadditions of 1,2-Dichloroethylidene: A Theoretical Model Based on CBS-Q and B3LYP Calculations." *J. Am. Chem. Soc.* **1997**, *119*, 10805-10809.

(49) McAlpine, S. R.; Garcia-Garibay, M. A.; "Studies of Naphthyl Substituted β-Cyclodextrins. Self-Aggregation and Inclusion of External Guests." *J. Am. Chem. Soc.* **1998**, *120*, 4269-4275.

(50) Keating, A. E.; Garcia-Garibay, M. A. "Photochemical Solid-To-Solid Reactions." in *Organic and Inorganic Photochemistry*, Ramamurthy, V. and Schanze, K., Eds..; Marcel Dekker: New York, **1998**; Vol. 2; pp 195-248 (book chapter).

(51) Gamarnik, A.; Johnson, B.A.; Garcia-Garibay, M. A., "Effects of Solvents on the Photoenolization of *o*-Methylanthrone at Low Temperatures. Evidence for H-Atom Tunneling from Nonequilibrating Triplets." *J. Phys. Chem.* **1998**, *102*, 5491-5498.

(52) Peterfy, K.; Garcia-Garibay, M. A. "Generation and Reactivity of a Triplet 1,4-Biradical Conformationally Trapped in a Crystalline Cyclopentanone." *J. Am. Chem. Soc.* **1998**, *120*, 4540-4541.

(53) Johnson, B.A.; Garcia-Garibay, M. A., "Photochemistry Near Zero Kelvin. Quantum Mechanical Tunneling in the Photoenolization of Ortho-Alkyl-Arylketones." *The Spectrum*, **1998**, *11*, 1-7 (invited manuscript).

(54) Keating, A. E.; Garcia-Garibay, M. A.; Houk, K. N. "Influence of Bystander Substituents on the Rates of 1,2-H and 1,2-Ph Shifts in Singlet and Triplet Carbenes." *J. Phys. Chem.*. **1998**, *102*, 8467-8476.

(55) Koshima, H.; Khan, S.I.; Garcia-Garibay, M. A. "Chiral Crystalline Salts from Achiral Biphenylcarboxylic Acids and Tryptamine." *Tetrahedron Asymmetry*, **1998**, *9*, 1851-1854..

(56) Garcia-Garibay, M. A., "Chemical Reactivity in Organized Media." *Curr. Opinion in Solid State and Material Science*, **1988**, *3/4*, 399-406 (invited manuscript).

(57) Keating, A. E.; Shin, S.H.; Huang, F.; Garrell, R. L,; Garcia-Garibay, M. A.; "Experimental and Computational Modeling of Biphenyl Twisting in a Solid-to-Solid Carbene Reaction." *Tetrahedron Lett.*, **1999**,*40*, 261-264.

(58) Schick, G.; Levitus, M.; Kvetko, L.; Johnson, B.A.; Lamparth, I.; Lunkwitz, R.; Ma, B.; Khan, S.; Garcia-Garibay, M.A.; Rubin, Y. "Unusual Luminescence of Hexapyrrolidine Derivatives of C_{60} with T_h and Novel D_3-Symmetry." *J. Am. Chem. Soc.*, **1999**, *121*, 3246-3247.

(59) Motschiedler, K. R.; Gudmsundsdottir, A.D.; Toscano, J.; Platz, M. S.; Garcia-Garibay, M. A.; "Excited Precursor Reactivity, Fast 1,2-H Shifts and Diffusion-Controlled Methanol Insertion in 1,2-Diphenylalkylidenes." *J. Org. Chem.,* **1999**, *64*, 5139-5147.

(60) Johnson, B. A.; Garcia-Garibay, M. A., "Rate Acceleration below 20K in the H-Atom Tunneling of Triplet *ortho*-Methyltetralones." *J. Am. Chem. Soc.,* **1999**, *121*, 8114-8115.

(61) Mendez F.; Garcia-Garibay, M.A. "A Hard-Soft Acid-Base and DFT Analysis of Singlet-Triplet Gaps and the Addition of Singlet Carbenes to Alkenes." *J. Org. Chem.,* **1999**, *64*, 7061-7066.

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(64) Yang, Z.; Garcia-Garibay, M.A., "Engineering Reactions in Crystalline Solids: Preparation and Chemoselective Combination of α-Carbonyl Radical Pairs in Crystals of Dialkyl-1,3-Acetonedicarboxylates." *Organic Letters*, **2000**, *2*,1963-1965.

(65) Garcia-Garibay, M.A.; Shin, S.; Sanrame, C. "Engineering Reactions in Crystalline Solids: Prediction of Intramolecular Carbene Rearrangements." *Tetrahedron*, **2000**, *56*, 6729-6737.

(66) Levitus, M.; Garcia-Garibay, M.A. "Polarized Electronic Spectroscopy and Photophysical Properties of 9,10-Bis(Phenylethynyl)anthracene." *J. Phys. Chem. A*, **2000**, *104*, 8632-8637.

(67) Leyva, E.; Moctezuma, E.; Strouse, J.; Garcia-Garibay, M.A. "Spectrometric and 2D NMR Studies on the Complexation of Chlorophenols with Cyclodextrins." *J. Inclusion Phenomena*, **2001**, 39, 41-46.

(68) Dang, H.; Garcia-Garibay, M.A., "Palladium-Catalyzed Formation of Aceanthrylenes: A Simple Method for Peri-Cyclopentenelation of Aromatic Compounds." *J. Am. Chem. Soc*,. **2001**, *123*, 355-356.

(69) Levitus, M.; Zepeda, G.; Dang, H.; Godinez, C.; Khuong, T.-A. V.; Schmieder, K.; Garcia-Garibay, M.A.. "Steps to Demarcate the Effects of Chromophore Aggregation and Planarization in Poly(phenyleneethynylene)s Part 2. The Photophysics of 1,4-Diethynyl-2-fluorobenzene in Solution and in Crystals", *J. Org. Chem.*, **2001**, *66*, 3188-3195

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Poly(phenyleneethynylene)s. Part 1. Rotationally Interrupted Conjugation in the Excited States of 1,4-Bis(phenylethynyl)benzene", *J. Am. Chem. Soc*,. **2001**, *123*, 4259-4265.

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HIGHLIGHTS OF THE GARCIA-GARIBAY RESEARCH GROUP

"Material's rotors spin freely and quickly" *Chem. Eng. News,* January 2018, p 8.

"Physical sciences dean is featured speaker at STEM conference for minorities", UCLA Newsroom, January 9, 2018.

" 'Gyroscope' molecules form crystal that's both solid and full of motion", UCLA Newsroom, January 9, 2018.

"UCLA chemists report new insights about properties of matter at the nanoscale" UCLA Newsroom, September 16, 2016

"ACS on Campus" *Chem. Eng. News,* May 14, 2012, p. 47.

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"Rotary Club" *Chem. Eng. News,* July 2002, p 32.

"Boxed In Chemistry in Confined Spaces" *Chem. Eng. News,* August 2000, pp 40-47.

"Solid-State Reaction Yields Selective Carbene Rearrangement" *Chem. Eng. News,* August 1996, p 34.

Interviews

"Few gains for minority chemistry professors" *Chem. Eng. News,* November 6, 2017, p 18.

"Metal Organic Frameworks do the Twist" *Chemical Technology News Across RCS Publishing, 2008, 9, July 24.*

"Meet the Board: Miguel A. Garcia-Garibay" *Organic and Biomolecular Chemistry News, Sep 1, 2008.*

"Fully Enclosed Molecular Rotors" *Chem. Eng. News,* September 6, 2004, p 11.

"Singlet Oxygen Feat" *Chem. Eng. News,* September 23, 2004, p 7.

"From Crystals to Crystal Expertly" *Chem. Eng. News,* October 2003, p 8.

"Crystals Trip the Light Fantastic" *Chem. Eng. News,* March 2001, p 11.

INVITED LECTURES

1990

Nov	Dept. of Chemistry Univ. of New Orleans, "Radical Reactions in Zeolite lattices"
Nov	Dept. of Chemistry and Biochemistry, UCLA, "Radical Reactions in Zeolite lattices"
Dec	Department of Chemistry, Univ. of Illinois, "Radical Reactions in Zeolite lattices"
Dec	Dept. of Chemistry, Univ. of Cal. Irvine, "Radical Reactions in Zeolite lattices"

1991

Apr.	Langmuir Symposium, Dept. of Chem. Eng., Columbia University, "Photochemical and Photophysical Probes of porous Solids"
Apr	DuPont Industrial Seminars, Department of Chemistry, Columbia University, "Photochemistry in Restricted Spaces"
Nov	Dept. of Chemistry and Biochemistry, UCLA, "The Di-pi-Methane Rearrangement in the Solid State"

1995

Feb	Centro de Estudios Avanzados, Instituto Tecnologico de Tijuana, "Transferencia Intramolecular de Hidrogeno en Cetonas Aromaticas en el Estado Solido"
Apr	Department of Chemistry, San Diego State University, " Organic Photochemistry in the Solid State. Activated and Tunneling Mechanisms in the Intramolecular Hydrogen Atom Transfer of o-Methyl-arylalkylketones"
Apr	Department of Chemistry and Biochemistry, UCLA "Activated and Tunneling Mechanisms in the Intramolecular Hydrogen Atom Transfer of o- Methyl-Arylalkylketones"
June	Midwest Organic Solid State, Chemistry Symposium, Indiana University, "Chemical Dynamics in the Solid State. Activated and Tunneling Mechanisms in Intramolecular Hydrogen Atom Transfer Reactions"
Oct	Western Biotech., ACS West Reg. Meeting, San Diego " Organic Solid State Reactions. Theory and Experiment"
Nov	Dept. of Chemistry, Univ. of Southern California, "Reaction Control and Organic Dynamics in the Crystalline Solid State"

1996

Jan 7	NATO Workshop on Phys. Supramol. Chem. University of Miami, "Diffraction, Spectral and Thermal Analysis of Mixed Crystalline Phases"
Mar 24	ACS National Meeting, New Orleans, LA, "Rearrangements in the Crystalline Solid State"
Nov 3	US-Japan Workshop on Photoresponsive Materials, "Photochemical Generation of Reactive Intermediates in Crystalline Media"

Nov 27 Dept. of Chemistry, Los Angeles City College, "Organic Chemistry in Crystalline Solids"

1997

Jan 2 Inter American Photochemical Society, Clearwater, FL "Crystal Control of Excited States and Reactive Intermediates"

Apr 2 Dept. of Chemistry, University of Connecticut, "Reaction Control and Organic Dynamics in the Crystalline Solid State"

Apr 3 Dept. of Chemistry, Yale University, "Organic Solid State Chemistry and Quantum-Mechanical Tunneling in H-Atom Transfer Reactions"

Apr 7 Dept. of Chemistry, New York University, "Control of Organic Reactivity by Crystals: Mechanisms and Solvent free Synthesis"

Apr 9 Dept. of Chemistry, Columbia University, "Control of Organic Reactivity by Crystals: Mechanisms and Solvent free Synthesis"

Apr 22 Dept. of Chemistry, California State University, "Control of Reactivity by Crystals"

May 8 Dept. of Chemistry, University of Wisconsin at Madison "Control of Organic Reactivity by Crystals: Mechanisms and Solvent free Synthesis"

May 19 Dept. of Chemistry, University of California San Diego "Control of Organic Reactivity by Crystals: Mechanisms and Solvent free Synthesis"

June 1 Canadian Chemical Conference, Windsor Canada, "Crystal Control of Excited States and Reactive Intermediates"

June 4 Conference on Structural and Mechanistic Organic Chemistry, Athens, GA, "Crystal Control of Excited States and Reactive Intermediates"

June 29 Gordon Conference in Physical Organic Chemistry, Holderness, New Hampshire, "Reaction Control and Organic Dynamics in the Crystalline Solid State"

Jul 7 Conference on Reactive Intermediates, Tahoe, CA "Crystal Control of Excited States and Reactive Intermediates"

Sep 9 Universidad de Buenos Aires, Argentina, "Efecto de Tunel Mecanico-Cuantico en la Transferencia de Hidrogeno en Cetonas Cristalinas"

Sep 12 Universidad Nacional de Rio Cuarto, Cordoba, Argentina, "Studies on Cyclodextrin Molecular Sensors"

Sep 13 Universidad Nacional de Cordoba, Argentina, "Studies on Cyclodextrin Molecular Sensors"

Sep 17 Encuentro Latinamericano de Fotoquimica, Cordoba, Argentina "Photochemical Generation and Study of Reactive Intermediates in Crystalline Media"

Sep 23 Dept. of Chemistry, University of California, Berkeley, "Reaction Control and Organic Dynamics in the Crystalline Solid State"

Oct 6 Dept. of Chemistry, University of California, Los Angeles, "Reaction Control and Organic Dynamics in the Crystalline Solid State"

Oct 10 Dept. of Chemistry, University of North Carolina, Chapel Hill, "Reaction Control and Organic Dynamics in the Crystalline Solid State"

Oct 15 Dept. of Chemistry, California State University, Long Beach, "Control of Organic Reactivity by Crystals: Synthesis without Solvents"

Nov 2 Taniguchi Conference on Catalysis, Sanda, Japan

Nov 10 International Conference on the Reaction in Crystalline State, Matsuyama, Japan, "Towards Photochemical Solid-to-Solid Reactions"

Nov 12 5th North American Chemistry Conference (NACC), Cancun. Mexico, "Hydrogen Atom Tunneling in Crystalline Ketones: Structure-Reactivity Correlations"

Dec 2 Dept. of Chemistry, University of Maryland, Baltimore County, "Control of of Organic Reactivity by Crystals"

Dec 9 Dept. of Chemistry, Purdue University, "Generation and Control of Reactive Intermediates in Crystalline Solids"

Dec 10 Dept. of Chemistry, University of Illinois, Urbana-Champaign, "Generation and Control of Reactive Intermediates in Crystalline Solids"

Dec 12 Dept. of Chemistry, Iowa State University, "Generation and Control of Reactive Intermediates in Crystalline Solids"

1998

Jan 11 Gordon Conference on Isotopes in Biological and Chemical Sciences, Ventura, CA, "Structure-Reactivity Correlations and Quantum-Mechanical Tunneling in H-Atom Transfer Reactions"

Apr 8 Dept. of Chemistry, University of California, Irvine, "Control of Organic Reactivity by Crystals"

Apr 15 Dept. of Chemistry, University of Victoria, Canada, "Control of Organic Reactivity by Crystals"

Apr 17 Dept. of Chemistry, University of Washington, "Generation and Control of Radical Reactions by Crystals: Mechanistic Analysis and Solid-to-Solid Reactions"

May 19 Rohm and Haas, "Control of Organic Reactivity by Crystals: Mechanisms, Materials and Synthesis without Solvents"

May 21 Dept. of Chemistry, Massachusetts Institute of Technology, "Reactive Intermediates in Crystals"

July 11 International Conference on Reactive Intermediates and Reaction Mechanisms, Ascona, Switzerland, "Organic Dynamics to Solvent-Free Synthesis in Organic Crystals"

Aug 13 IUPAC Symposium on Synergism of Experimental and Theoretical Chemistry" Mexico City, "Crystal Control of Reactive Intermediates: Crystal Dynamics and Rate Theory"

Dec 10 US-Japan Workshop on Solid State Chemistry, Lake Arrowhead CA, "A Statistical Entropy Model for Photoreactions in the Solid State"

1999

Mar 4 Merck Research Pharmaceuticals, West Point, PA, "Generation and Control of Radical Reactions in Organic Crystals: Mechanistic Analysis and Solid-to-Solid Reactions"

Mar 18 Amgen Inc. R&D, Thousand Oaks, CA "Generation and Control of Radical Reactions in Solids: Mechanistic Analysis of Solid-to-Solid Reactions"

Apr 12 Dept. of Chemistry, University Nevada at Reno "From Crystal Statics to Chemical Dynamics and From Crystal Dynamics to New Materials"

July 18 Gordon Conference on Organic Photochemistry, "Photochemical Generation and Environmental Control of Radical Reactions in Organic Crystals"

July 25 International Conference on the Organic Solid State, Cambridge, England "Snapshots of Chemical Dynamics in Photoreactive Crystals"

Aug 26 Fullerenes 99 - A Workshop on Nanotubes and Fullerene Chemistry, Castern-Verduzon, France

Oct 6 American Chemical Society Regional Conference, Ontario, CA "Solids with Moving Parts"

Dec 10 US-Japan Workshop on Molecular and Supramolecular Chemistry, New Orleans, Louisiana

2000

Jan 6 Department of Chemistry, Universidad Autonoma de San Luis Potosi, Mexico "From Crystal Statics to Chemical Dynamics and From Crystal Dynamics to New Materials"

Feb 10 Department of Chemistry and Biochemistry, UCLA, McCoy Award Lecture with Prof. Yves Rubin "Fluorescent Fullerenes"

Mar 1 Department of Chemistry, University of California, Riverside "From Crystal Statics to Chemical Dynamics and From Crystal Dynamics to New Materials"

Mar 24 Department of Chemistry, University of Rochester, "From Crystal Statics to Chemical Dynamics and From Crystal Dynamics to New Materials"

Mar 28 Department of Chemistry, University at British Columbia, Canada "From Crystal Statics to Chemical Dynamics and From Crystal Dynamics to New Materials"

Mar 29 Department of Chemistry, Simon Fraser University, Canada "From Crystal Statics to Chemical Dynamics and From Crystal Dynamics to New Materials"

Mar 30 Department of Chemistry, University of Victoria, Canada "From Crystal Statics to Chemical Dynamics and From Crystal Dynamics to New Materials"

Apr 5 Department of Chemistry, University of Cincinnati, "Generation and Control of Radical Reactions in Crystals : Reaction Mechanisms and Solvent-Free Synthesis"

Apr 6 Department of Chemistry, Ohio State University "Generation and Control of Radical Reactions in Crystals : Reaction Mechanisms and Solvent-Free Synthesis"

Jun 24 Reaction Mechanisms Conference, Madison Wisconsin, "Environmental Effects on Arylalkylcarbenes: Schizophrenic Behavior in Solvents and Control by the Crystalline Solid State"

Jul 14 Pfizer Research, Groton, CT "Generation and Control of Radical Reactions in Organic Crystals: Mechanistic Analysis and Solid-to-Solid Reactions"

Jul 20 IUPAC Conference in Organic Photochemistry, Dresden Germany, “Perspectives in Solid State Photochemistry”

Aug 26 Conference on Reaction Intermediates and Unusual Molecules, Vienna, Austria, “Engineering and Predicting Carbene Rearrangements in Crystalline Solids”

Sep 28 Department of Pharmacy, University of Wisconsin, Madison, "Generation and Control of Radical Reactions in Crystals : Reaction Mechanisms and Solvent-Free Synthesis"

Nov 13 Department of Chemistry, Tulane University, “, "Generation and Control of Reactions in Crystals : Mechanisms and Solvent-Free Synthesis"

Dec 14 Pacifichem 2000, Honolulu, Hawaii, “Preparation of alpha-Carbonyl Radical Pirs in Crystalline Solids. Synthesis of alpha-Cuparenone in a Solvent-Free Crystalline Phase Reaction”

Dec 14 Pacifichem 2000, Honolulu, Hawaii, “Preparation and Reactiviyt of Oxonium Ylides in Crystals”

2001

Mar 7 California State University, Northridge, "Generation and Control of Reactions in Crystals: Mechanisms and Solvent-Free Organic Synthesis"

Apr 6 California State University, Northridge, "From Crystal Chemistry to Molecular Machines"

Apr 11 Lucent Technologies "From Crystal Statics to Chemical Dynamics and from Crystal Dynamics to Molecular Machines"

Apr 12 Department of Chemistry, Princeton University, "From Crystal Statics to Chemical Dynamics and from Crystal Dynamics to Molecular Machines"

Apr 13 Department of Chemistry, Brown University, "From Crystal Statics to Chemical Dynamics and from Crystal Dynamics to Molecular Machines"

Apr 17 Department of Chemistry, Inst. Politecnico Nacional, Mexico, "Giroscopios Moleculares"

Apr 18 Department of Chemistry, Univ. Autonoma Metropolitana, Mexico, "Preparacion y Reactividad de Carbenos e Ylidos Oxonio en Crystales Organicos"

Apr 19 Instituto de Quimica, Univ. Nacional Autonoma de Mexico, "Creacion de Compuestos Homoquirales en Cristales Organicos : De Modelos Prebioticos a Sintesis Asimetrica Moderna"

May 26 NSF RegionalWorkshop in Photochemistry of Organized Media, Cordoba, Argentina, "Photohemistry Near Zero Kelvin: The Design of Chemical Reactions With the Lowest Possible Kinetic Energy "

June 9 Midwest Organic Solid State Conference, University of Nebraska, Lincoln "Crystal Dynamics and Molecular Machines"

Sep 7 Symposium on Triplet Organic Molecules and Magnetic Materials Tsu University, Japan, "Generation of Biradicals in Crystalline Solids"

Sep 9 International Symposium on Reactive Intermediates and Unusual Molecules, Nara, Japan, "Generation of Ionic Intermediates by Intramolecular Trapping of Carbenes in Crystalline Solids"

Sep 12 International Symposium on Reactive Intermediates, Nara, Japan. "Generation of Ionic Intermediates by Intramolecular Trapping of Carbenes in Crystalline Solids"

Sep 20 Department of Chemistry, Cal. State Dominguez Hills, "Organic Synthesis in Crystalline Solids: Enzyme-Like Control in Solvent-Free Reactions"

Sep 28 SACNAS 2001 National Conference, Phoenix Arizona, Society of the Advancement of Chicanos and Native Americans in Science: "New Directions in Organic Chemistry: From Reactions in Crystals to Molecular Machines"

Oct. 5 Department of Chemistry and Biochem., Loyola Marymount University, "Organic Synthesis in Crystalline Solids: Enzyme-Like Control in Solvent-Free Reactions"

Oct 26 2001 Pittsburgh Diffraction Conference, Covington, KY, Crystal Dynamics and Molecular Machines

2002

Dec 10 Escuela Nacional de Ciencias Bilogicas, IPN, Mexico, "Reacciones en Saturno, Sintesis sin Disolventes, y Otros Retos de la Quimica Actual"

Dec 12 Universidad Autonoma Metropolitana, Iztapalapa, Mexico, "Reacciones en Saturno, Sintesis sin Disolventes, y Otros Retos de la Quimica Actual"

Mar 5 Department of Chemistry, Washington State University, "Molecular Compasses and Gyroscopes: A New Frontier in Materials Science"

Sep 5 Departamento de Quimica Analitica, Universidad de Buenos Aires, "Molecular Compasses and Gyroscopes : Steps towards Crystalline Molecular Machines"

Sep 26 XV Congreso Latinamericano de Quimica, Cancun, Mexico, “Preparation, Photophysical and Photocatalytic Studies of Cds and Cds Nanoparticles”

Sep 28 SACNAS National meeting

Nov 21 VII Encuentro Latinoamericano de Fotoquimica y Fotobiologia, Viña del Mar, Chile, “Aggregation and Planarization in arylene-ethynylenes”

Dec 17 Department of Chemistry, University of Colorado, "Molecular Compasses and Gyroscopes : Steps towards Crystalline Molecular Machines"

2003

Mar 23 Symposium on Functional π -Electronic Systems, 225th ACS National Meeting, New Orleans, LA

Apr 9 DuPont Central Research & Development, 2003 Discovery Chemistry Seminar Series. “Crystal Dynamics and Molecular Machines”

Apr 11 Department of Chemistry, Georgetown University, “Molecular Compasses and Gyroscopes. Design, Preparation and Function of Crystalline Molecular Machines”

Apr 30 Department of Chemistry, Bowling Green State University, Bowling Green, Ohio, “Photochemical Perspectives in Crystalline Solids - From Chemical Dynamics and Molecular Kinematics to the Synthesis Natural Products and the Function of Molecular Machines”

May 16 Department of Chemistry, University of Texas, San Antonio, “Crystalline Molecular Machines”

Jun 22 XIIth International Workshop on Quantum Atomic & Molecular Tunneling in Solids, University of Florida, Gainsville, “Photohemistry Near Zero Kelvin: Structure-Reactivity Correlations For Quantum-Mechanical Tunneling Reactions”

Jun 29 Physical Organic Gordon Conference, Plymouth, New Hampshire. “Molecular Compasses and Gyroscopes”

Jul 9 19th Royal Australian Chemical Institute, Organic Conference, Lorne, Australia. “Design, Preparation, and Function of Crystalline Molecular Machines”

Jul 13 16th International Conference on the Organic Solid State (ICCOSS XVI), Sydney, Australia. “Crystal Dynamics And Molecular Machines”.

Aug 17 International Conference on Reactive Intermediates and Reaction Mechanisms, 2003, Reykjavik, Iceland. “Photochemistry Near Zero Kelvin: Structure-Reactivity Correlations For Quantum-Mechanical Tunneling Reactions”

Sep 10 National Conference of the American Chemical Society, New York City, “Synthesis of Natural Products with Adjacent Quaternary Stereocenters”

Oct 17 38th Western Regional Meeting of the American Chemical Society, Lon beach, CA, “Photochemistry Near Zero Kelvin: Structure-Reactivity Correlations For Quantum-Mechanical Tunneling Reactions”

Oct 18 38th Western Regional Meeting of the American Chemical Society, Long beach, CA, “Molecular Compasses and Gyroscopes, Rotational Dynamics in the Solid State”

Nov 5 Department of Chemistry, Vanderbilt University, Molecular Compasses and Gyroscopes: The Design, Preparation, and Testing of Molecular Machines

Nov 21 Department of Chemistry, University of Texas, El Paso, Molecular Compasses and Gyroscopes: The Design, Preparation, and Function of Molecular Machines

2004

Feb 4 Department of Chemistry, Arizona State University, Molecular Compasses and Gyroscopes: The Design, Preparation, and Function of Molecular Machines

Apr 2 Department of Chemistry, Santa Clara University, Molecular Compasses and Gyroscopes: The Design, Preparation, and Function of Molecular Machines

Mar 28 227th ACS National Meeting, Anaheim, CA, March 28-April 1, 2004 Anaheim, CA “How do reaction media control chemical reactivity? Deciphering the role of entropy with the help of information theory”

May 6 Department of Chemistry, Columbia University, Molecular Compasses and Gyroscopes: The Design, Preparation, and Function of Molecular Machines”

June 26 Norma Stoddart Symposium, Department of Chemistry and Biochemistry, UCLA, “Crystalline Molecular Machines: Internal Motion, Correlated Dynamics, and Rotary Ferroelectrics”

July 17 3rd Herron Island Conference on Reactive Intermediates, QNS, Australia, “Engineering Reactions in Crystals With the Help of Reactive Intermediates: Total Syntheses of Natural Products with Adjacent Quaternary Stereogenic Centers”

Sep 16 Department of Chemistry, California State University, Fullerton, "Engineering Organic Reactions in Crystals: Total Syntheses of Natural Products with Adjacent Chiral Quaternary Centers in Solid-to-Solid Reactions”

Oct 18 Departamento de Quimica, UNAM, Mexico DF, " Total Syntheses of Natural Products with Adjacent Chiral Quaternary Centers in Solid-to-Solid Reactions”

Oct 19 Departamento de Quimica, CINVESTAV, Instit. Politecnico Nacional, Mexico DF, “Crystalline Molecular Machines”

Oct 20 Departamento de Quimica, Universidad Autonoma Metropolitana, Mexico DF, “Molecular Machines”

Oct 21 Departamento de Quimica, Escuela Nacional de Ciencia Biologicas, Mexico DF, “Crystalline Molecular Machines”

Oct 25 Departamento de Quimica, UPIBI, Instit. Politecnico Nacional, Mexico DF, "Total Syntheses of Natural Products with Adjacent Chiral Quaternary Centers in Solid-to-Solid Reactions”

Oct 28 Departamento de Quimica, UPIBI, Instit. Politecnico Nacional, Mexico DF, "Applicaciones de la Resonancia Magnetica Nuclear en Liquidos y en Solidos as Estudio de Maquinas Moleculares"

Nov 2 Department of Chemistry, University of Texas, El Paso, "Photochemical Reactions in Crystals"

2005

Mar 16 Workshop on Bioinspired Nanoscience and Molecular Machines, San Carlos de Bariloche, Patagonia, Argentina "Design and Synthesis of Molecular Gyroscopes"

April 8 Department of Chemistry, Louisiana State University, "From Molecular Information to Crystal Reactivity: Applications to the Synthesis of Natural Products with Adjacent Quaternary Stereogenic Centers"

Apr 6 Stauffer Lecture University of Southern California, Los Angeles, CA. "Molecular Compasses and Gyroscopes: The Design, Preparation, and Function of Molecular Machines"

Apr 8 Louisiana State University, Baton Rouge, LA. "From Molecular Information to Crystal Reactivity: Applications to the Synthesis of Natural Products with Adjacent Quaternary Stereogenic Centers"

May 28 2005 American Crystallographic Association Meeting, Orlando, Fl, "Effects of Rotational Symmetry on the Dynamics of Crystalline Molecular Rotators"

June 20 2nd Int'l Conference on Green and Sustainable Chemistry and 9th Annual Green Chemistry and Engineering Conference, Washington, D.C. "Green chemistry strategies using crystal-to-crystal reactions: Total syntheses of natural products with adjacent quaternary stereogenic centers"

July 10 Organic Photochemistry Gordon Conference, Bryant College, Rhode Island "Synthesis of Natural Products with Adjacent Quaternary centers"

July 31 National Science Foundation Workshop on Physical Organic Chemistry, Bodega Bay, CA.

Aug 14 11th International Symposium on Novel Aromatic Compounds (ISNA-11), St. Johns, Newfoundland, Canada "Island "Correlated Dynamics in Crystalline Solids"

Sep 13 Materials Science Institute Retreat, University of Oregon, Skamania Lodge, Stevens WA "Molecular Machines as Crystals of Reduced Dimensionality: Applications to Materials Sciences"

Sep 25 XL Congreso Mexicano de Quimica, Morelia, Mexico "Artificial Molecular Machines: From Atoms to Molecules and from Molecules to Devices" **KEY NOTE SPEAKER**

Sep 26 XL Congreso Mexicano de Quimica, Morelia, Mexico "Effects of Rotational Symmetry on the Close-Packing and Gyroscopic Dynamics of Crystalline Molecular Rotators"

Nov 8 Claremont McKenna, Pitzer & Scripps Colleges, "The Design and Testing of Artificial Molecular Machines: A New Challenge for Physical Organic Chemistry"

Dec 15-20 Pacifichem 2005, Honolulu, HA, "Photochemical reactivity within extremely rigid solids: structure-reactivity correlations for quantum-mechanical tunneling"

Dec 15-20 Pacifichem 2005, Honolulu, HA, "Green chemistry strategies using crystal-to-crystal photo[organic]synthesis"

Dec 15-20 Pacifichem 2005, Honolulu, HA, "Effects of rotational symmetry on the solid state dynamics of molecular rotators"

2006

Jan 12	Gordon Conference on Isotopes in Biological and Chemical Sciences, Ventura, CA, "Secondary Alpha-Isotope Effects in Quantum-Mechanical Tunneling in H-Atom Transfer Reactions
Apr 6	Department of Chemistry, Washington University, S. Louis, “"Crystalline Molecular Machines: Internal Motion and Correlated Dynamics in Close Packed Systems"”
Apr 24	Department of Chemistry and Biochemistry, UCLA "Crystalline Molecular Machines: Encoding Supramolecular Dynamics into Molecular Structure"
May 8	Department of Physical Sciences, Los Angeles Trade Technical College, “Molecular Machines”
Jun 11	International Conference in Organic Synthesis, Merida, Mexico, “Stereospecific Formation of Adjacent Quaternary Stereogenic Centers by Photoinduced Decarbonylation of Crystalline Ketones”
Jun 25	International Symposium of Macromolecular and Supramolecular Chemistry, “Artificial Molecular Machines: A Remarkable Challenge for Directed Self-Assembly and Function”
Sep 12	Department of Chemistry, University of Bristish Columbia, Vancouver, Canada, “Amphidynamic Materials - A New Frontier in Molecular and Crystal Engineering”
Sep 19	Department of Chemistry, University of Califonia, Davis, “Amphidynamic Materials and Molecular Machinery - A New Frontier in Molecular and Crystal Engineering”
Sep 24	XL Congreso Mexicano de Quimica, Mexico City, “Crystalline Molecular Machines: Internal Motion and Correlated Dynamics in Close-Packed Systems”

2007

Feb 2	Department of Chemistry, University of Nevada, Reno, “Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering”
Feb 16	Department of Chemistry, University of Nebraska, Lincoln, “Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering”
Mar 26	ACS National Meeting, Chicago, IL: Nanotechnology and the Environment Symposium, Division of Industrial and Engineering Chemistry, “Molecular nanocrystals: An ideal vehicle for large scale solid-to-solid photochemical reactions”
Mar 30	Department of Chemistry, SUNY, Buffalo, "Green chemistry strategies using crystal-to-crystal reactions: Total syntheses of natural products with adjacent quaternary stereogenic centers"
Apr 10	Department of Chemistry, Rutgers University, "Green chemistry strategies using crystal-to-crystal reactions: Total syntheses of natural products with adjacent quaternary stereogenic centers"
Apr 25	US-Brazil Workshop Workshop: Programa em Pos-Graduacao Ciencia dos Materiais “Amphidynamic Materials: Steps Towards Controllable Inertial Motion in Crystalline Solids”
May 26	90th Canadian Chemistry Conference, Organic Materials and Self-Assembly, Winnipeg, Canada “Amphidynamic Materials and Molecular Machinery”

Jun 6	The Young(-ish) Giants of Chemistry, Edinburgh, Scotland "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"
Jul 8	International Conference on the Chemistry of the Organic Solid State, ICCOSS XVIII Merida, Venezuela, Geen Chemistry Strategies Using Crystal-to-Crystal Reactions
Jul 21	American Crystallographic Association Meeting, Salt Lake City, UT, "Amphidynamic Materials: Steps Towards Controllable Inertial Motion in Crystalline Solids"
Jul 26	Summer Undergraduate Research Symposium, Clemson University, "Crystalline Solids as Molecular Machines: Studies on Molecular Compasses and Gyroscopes "
Sep 13	III Mexican Meeting on Mathematical and Experimental Physics "Amphidynamic Materials: Steps Towards Controllable Inertial Motion in Crystalline Solids"
Sep 21	Department of Chemistry, University of Texas, Austin
Oct 22	Department of Chemistry, University of North Carolina, Charlotte, "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"
Nov 8	Department of Chemistry, Texas A&M University, "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"
Nov 16	Department of Chemistry, University of Miami, "Green chemistry strategies using crystal-to-crystal reactions: Total syntheses of natural products with adjacent quaternary stereogenic centers"

2008

Jan 4	Interamerican Photochemical Society Meeting, St. Petersburgh, FL., "Photochemistry and Spectroscopy with Organic Molecular Nanocrystals"
Jan 28	UCLA-Kyushu Symposium "Amphidynamic Materials and Molecular Machines: A New Frontier in Molecular and Crystal Engineering"
Mar 13	California Nanosystems Institute, "Chemical Reactivity and Spectroscopy with Molecular Nanocrystals"
Mar 20	National Energy Technology Laboratory, Morgantown, WV "Stereoselective Green Chemistry Strategies Using Crystal-to-Crystal Reactions: The Advantages of Molecular Nanocrystals"
Mar 25	2008 MRS Meeting, San Francisco, CA "Amphidynamic Materials and Molecular Machines: Approaching Barrierless Motion in Crystalline Solids"
Apr 1	Institute of Organic Chemistry, Univ. of Zurich "Amphidynamic Materials and Molecular Machines: A New Frontier in Molecular and Crystal Engineering"
Apr 11	Williams College, 1960's Class Lecture, "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"
Mar 14	Department of Chemistry, Sherbrook Univ. "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"
Mar 15	Department of Chemistry, McGuill University, "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"
Mar 16	Department of Chemistry, Montreal Univ., "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"
Aug 6	Green Chemistry Gordon Conference "Crystalline Substrates, Sunlight, and Water for the Green Synthesis of Specialty Chemicals"

Sep 24 Department of Chemistry, California State University, Long Beach,

Oct 10 Int. Workshop Recent Adv. in Chem., Colima, México "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"

Oct 21 Organic Chemistry Institute, University of Zurich, "Artificial Molecular Machines -I"

Oct 23 Organic Chemistry Institute, University of Zurich, "Artificial Molecular Machines - II"

Oct 30 Organic Chemistry Institute, University of Zurich, "Artificial Molecular Machines - III"

Nov 4 Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza Università di Roma, "Amphidynamic Materials and Molecular Machines - A New Frontier in Molecular and Crystal Engineering"

Nov 24 Department of Chemistry, University of California, San Diego, "Amphidynamic Materials and Molecular Machines: A New Challenge in Molecular and Crystal Engineering"

2009

Mar 15 Argentina-US Workshop in Materials Sciences, Bariloche, Argentina, "Amphidynamic Materials and Molecular Machines"

Mar 23 237th ACS National Meeting, Salt Lake City, "Crystalline Arrays of Molecular Gyroscopes: Towards the Limit of Barrierless Rotation in Solids State Materials"

Apr 16 Department of Chemistry, North Dakota State University, "Challenges and Opportunities for Chemical Reactivity in the Solid State: From Solvent-Free Total Synthesis to Materials Science"

May 25 Department of Chemistry, University of Alberta, "Amphidynamic Materials and Molecular Machines: The Design, Fabrication and Testing of Crystalline Solids with Moving Parts"

Jun 16 XIX International Conference on the Chemistry of the Organic Solid State, Sestri Levante, Italy, "Challenges and Opportunities with Amphidynamic Materials and Crystalline Molecular Machines"

June 23 Department of Molecular Engineering, University of Angers, France, "Artificial Molecular Machinery Part I: Scope and Overview"

June 25 Department of Molecular Engineering, University of Angers, France, "Artificial Molecular Machinery Part II: Design, Construction and Characterization"

July 7 International Symposium on Reactive Intermediates and Unusual Molecules, Liblice, Czech Republic, "Photochemical Reaction Mechanisms and Kinetics with Molecular Nanocrystals"

Aug 8 2nd Future Faculty Workshop: Diverse Leaders of Tomorrow, Carnegie Mellon University, "Amphidynamic Materials and Molecular Machines - A New Frontier in Materials Science"

Aug 10 11th International Symposium on Spin and Magnetic Field Effects in Chemistry and Related Phenomena, Brook University, Canada, "Detection and Reactivity of Radical Pairs Generated by Photodecarbonylation of Nanocrystalline Ketones"

Sep 7 Department of Chemistry, Harbin University, China "Solvent-Free Synthesis of Compounds with Adjacent Stereogenic Quaternary Carbons"

Sep 8 Department of Chemistry, Harbin University, China "Green Chemistry"

Sep 10 Institute of Chemistry, Chinese Academy of Sciences, China, "tba'

Sep 28	Troisieme Cycle Lectures, Department of Chemistry, University of Basel, Switzerland "Solvent-Free Synthesis of Compounds with Adjacent Stereogenic Quaternary Carbons"
Sep 29	Troisieme Cycle Lectures, Department of Chemistry, University of Geneve, Switzerland, "Amphidynamic Materials and Crystalline Molecular Machines"
Sep 30	Troisieme Cycle Lectures, Department of Chemistry, University of Fribourgh, Switzerland, "Engineering Reactions in Crystalline Solids : From Molecular Information to Solid State Reactivity"
Oct 1	Troisieme Cycle Lectures, Department of Chemistry, University of Bern, Switzerland, "Signal Amplification by Quantum-Chain Reactions in Crystalline Solids"
Oct 2	Troisieme Cycle Lectures, Department of Chemistry, University of Fribourgh, Switzerland, "Amphidynamic Materials and Crystalline Molecular Machines"
Oct 23	Department of Chemistry, University of San Diego, "Artificial Molecular Machines"
Oct 25	California Science Teachers Association Conference, Palm Spring, "Green Chemistry: Challenges and Opportunities in the Rejuvenation of a Mature Science"
Nov 20	Posgrado en Quimica, Universidad de Guanajuato, Mexico "Artificial Molecular Machines"

2010

Jan 3	Interamerican Photochemical Society Meeting, St. Petersburgh, FL., "Photochemical Reaction Mechanisms and Kinetics with Molecular Nanocrystals"
Jun 14/17	Facultad de Quimica, UNAM, Mexico "Maquinas Moleculares Artificiales"
Jul 16	Ciamician-Paternò Heritage Meeting, Ferrara, Italy: Photosciences. A look into the future, "The Entropic Enlightenment of Organic Photochemistry"
Aug 8	International Center for Materials Research (ICMR) Summer School, UCSB, "Preparative Strategies in Solid State and Materials Chemistry"
Aug 23	International Conference on Physical Organic Chemistry-20 -Busan, South Korea, "Molecular Gyroscopes, Amphidynamic Materials, and Artificial Molecular Machines"
Sep 23/24	"ACS on Campus" Univ. of Southern California, "Basics in Scholarly Publishing"
Oct 1	SACNAS National Conference, Anaheim, CA, "Creativity Through Chemistry"
Oct 11	Faculté de Chemie, Université de Strasbourg, "Engineering Reactions in Crystalline Solids : From Molecular Information to Solid State Reactivity"
Oct 13	Institut des Sciences et Technologies Moléculaires d'Angers, Université de Angers, "Engineering Reactions in Crystalline Solids : From Molecular Information to Solid State Reactivity"
Oct 29	2010 Dow Chemical Distinguished Lecturer at UCSB
Nov 8	School of Materials Science and Engineering, Nanyang Technological University, Singapore
Nov 11	Department of Chemistry, Yonsei University, South Korea
Nov 15	Department of Basic Science, Tokyo University, Japan
Dec 15	PACIFCHEM, Symposium on Solid State Chemistry "Recent progress in the design and characterization of amphidynamic materials and crystalline molecular machines"

Dec 16 PACIFICHEM Symposium on Supramolecular Photochemistry "High diastereospecificity in the photochemical synthesis of compounds with stereogenic adjacent all-carbon quaternary carbons"

2011

Jan 7 Advances in Organic Materials – A Symposium to Honor Fred Wudl, UCSB "Amplification with a Gain by Quantum-Chain Reaction in Crystalline Solids"

Jan 31 Department of Chemistry, University of Central Florida, Orlando, Fl. "Reaction Mechanisms And Kinetics Studies With Molecular Nanocrystals: A State in Transition Between Supramolecular Entities and Bulk Solids"

Feb 20 2011 AAAS Meeting – Symposium on Self-Assembly and Molecular Machines" "Crystalline Molecular Machines"

Mar 9 Segundo Encuentro Nacional de Ciencias Puebla, Mexico "Diseño de reacciones fotoquimicas en sólidos cristalinos"

Mar 10 Segundo Encuentro Nacional de Ciencias, Puebla, Mexico "Maquinas Moleculares"

Mar 18 NSF Materials Workshop, UC Santa Barbara, "Amphidynamic Materials: Materials Properties Based on Internal Motion"

May 24 Departamento de Ciencias Quimicas, Univ. de San Luis Potosi, Mexico, "Diseño de Reacciones Fotoquimicas en Sólidos Cristalinos"

Jun 2 ACA Meeting, New Orleans, "Crystalline Molecular Machines"

Jun 16 Instituto Politecnico Nacional, Mexico, "Quantum Dots: Generacion de Patrones Nanometricos"

Jun 16/17 Instituto Politecnico Nacional, Mexico, "Maquinas Moleculares"

Jun 17 "Diseño de reacciones fotoquimicas en sólidos cristalinos"

Jul 14 Photochemistry Gordon Conference, "Amplification with a Gain by Quantum-Chain Reactions in Crystalline Solids"

Jul 25 International Symposium on Novel Aromatics, Eugene, Oregon, "Molecular Rotors Towards the Nanoscale"

Sep 29 Department of Chemistry, Queens University, "Recent Advances in the Design and Characterization of Amphidynamic Crystals and Molecular Machines"

Oct 11 Department of Chemistry, University of Georgia, "Amplification with a Gain by Quantum-Chain Reactions in Crystalline Solids"

Nov 14 VIII Argentinean National Symposium on Organic Chemistry, Cordoba, Argentina, Diseños Moleculares, Ingenieria de Materiales, y Maquinas Moleculares ARtificiales"

Dec 14 Department of Chemistry, Rice University, "Recent Advances in the Design and Characterization of Amphidynamic Crystals and Molecular Machines"

2012

Jan 14 Academia Mexicana de la Ciencia - Ciencia y Sociedad "Maquinaria Molecular"

Mar 22 Octavo Congreso de le Academia Mexicana de Quimica Organica, Puebla "Luz Solar, Agua, y Cristales Organicos: Una Receta Prometedora e Ideal para la Quimica Verde"

Mar 27	Universidad Autonoma de San Luis Potosi, "Maquinas Cristalinas Moleculares: Movimiento y Reactividad en el Estado Solido"
Mar 29	Universidad Michoacana de San Nicolas de Hidalgo, "Maquinas Cristalinas Moleculares: Movimiento y Reactividad en el Estado Solido"
Apr 9	Technical Institute of Physical Chemistry, Chinese Academy of Sciences "Recent Advances in the Design, Synthesis and Testing of Artificial Molecular Machines"
Apr 10	Peking University, Department of Chemistry "Signal Amplification with a Gain by Quantum-Chain Reactions in Crystalline Solids"
Apr 10	Peking University, Department of Chemistry "Basics of Scholarly and Scientific Publishing"
Apr 16	Shanghai Institute of Organic Chemistry, "Recent Advances in the Design, Synthesis and Testing of Artificial Molecular Machines"
May 3	Department of Chemistry, Dartmouth College, "Recent Advances in the Design, Synthesis and Testing of Artificial Molecular Machines"
Jun 11	Gordon Conference on Crystal Engineering, Waterville Valley, NH, "Reaction Mechanisms and Absolute Kinetics in Solid State Photoreactions with the Help of Nanocrystals"
Jun 19	Green Chemistry Conference, Washington, D.C. "High temperature organic fluids for solar thermal energy storage"
Jul 28	2012 American Crystallographic Association, Boston, MA "Engineering Reactions in Crystalline Solids by Taking Advantage of Reactive Intermediates"
Sep 14	Department of Chemistry, University of South Carolina, "From Molecular Design and Organic Synthesis to Amphidynamic Crystals and Artificial Molecular Machines"
Nov 15	Department of Chemistry, University of Waterloo, "Photochemical Mechanisms And Kinetics Studies with Nanocrystalline suspensions: A State in Transition Between Supramolecular Entities and Bulk Solids"
Nov 27	Department of Chemistry, University of Connecticut, "From Molecular Design and Organic Synthesis to Amphidynamic Crystals and Artificial Molecular Machines"
Nov 29	Department of Chemistry, Columbia University, "From Molecular Design and Organic Synthesis to Amphidynamic Crystals and Artificial Molecular Machines"
Dec 17	7th Singapore International Chemistry Conference, "Strategies for Photoinduced Signal Amplification with a Gain"

2013

Jan 3	22nd Meeting of the Inter-American Photochemical Society, St Petersburg, FL "Reaction Mechanisms and Absolute Kinetics in Solid State Photoreactions" – **AWARD LECTURE**
Jan 11-12	Foresight Technical Conference, Palo Alto, CA. "Amphidynamic Crystals and Artificial Molecular Machines"
Mar 5	Department of Polymer Science and Engineering, U Mass, Amherst, "Signal Amplification with a Gain by Quantum-Chain Reactions in Solids"
May 15	International Multidisciplinary Joint Meeting 2013 – Condensed Matter Physics and Nanoscience, Morelia, Mexico, "Amphidynamic Crystas, Molecular Rotors, and Molecular Machines"

May 21 Chemical Sciences Workshop on Undergraduate Chemistry Education, USA National Academy, Washington, D.C.

Jun 4 Department of Chemistry, University of Ruhr-Bochum, Germany, “Molecular rotors in amphidynamic crystals”

Jun 23-28 Gordon Research Seminar on Physical Organic Chemistry, Holderness, NH, “Molecular Machines" **MENTORSHIP LECTURE**

Jun 23-28 Gordon Research Conference on Physical Organic Chemistry, Holderness, NH, “From Molecular Structure to Function in the Crystalline Solid State: The Role of Information Entropy"

Aug 4-9 International Conference on the Chemistry of the Organic Solid State, Oxford, England, “Amphidynamic Crystals and Molecular Machines: Molecular and Extended Solids with Rotators that Approach their Limits of Inertia”

Sep 27 Department of Chemistry, New York University, “Amphidynamic Crystals and Molecular Machines: Molecular and Extended Crystals with Rotators Approaching their Inertial Limits”

Dec 10 Department of Chemistry, Universite D’Angers, France, “Amphidynamic Crystals with Molecular Rotators Approaching their Inertial Limit”

2014

Jan 24 Universidad Autonoma Metropolitana, Mexico City “Aplicaciones de la RMN en Líquidos y Sólidos Para el Estudio de Máquinas Moleculares”

Feb 15 University of Miami, Amphidynamic Crystals with Molecular Rotators Approaching their Inertial Limit

Feb 16 Florida State University, Reaction Mechanisms And Kinetics in Solid State Photoreactions

Apr 5 ACS On Campus, Universidad Nacional Autonoma de Mexico, Basics in Scholarly Publishing: Getting Started

Apr 25 Queen’s University, Canada, Reaction Mechanisms And Kinetics in Solid State Photoreactions

Jun 30 Workshop on Molecular Rotors, Motors, and Switches, Telluride Science Research Center (TSRC), “Amphidynamic Crystals”

Jul 14 XXVth IUPAC Symposium on Photochemistry, Bordeaux, France, "Reaction yield amplification by quantum-chain photochemical reactions in crystalline solids" **PLENARY LECTURE**

Jul 21 ICCC-41 International Conference on Coordination Chemistry, Singapore, “Ultrafast Rotational Dynamics in Crystalline Metal Organic Frameworks” **KEY NOTE SPEAKER**

Sep 19 49th Congress of the Mexican Chemical Society, Merida, Mexico "Engineering Reactions in Crystalline Solids: From Molecular Information to Solid State Reactivity" **PLENARY LECTURE**

Sep 23 Santa Monica College, Santa Monica, CA “An Organic Chemistry Perspective for the Design, Synthesis, and Testing of Artificial Molecular Machines”

2015

Jan 23	II Symposium on Nuclear Magnetic Resonance, UAM, Mexico City, "Applications of NMR to the Chemistry of the Solid State: Molecular Compasses, Gyroscopes and Molecular Machines" **KEY NOTE SPEAKER**
Feb 21	Howard University, Washington, D.C. "Crystalline Molecular Machines"
Feb 23	Clark Atlanta University, Atlanta, GA "Crystalline Molecular Machines"
Apr 20	Department of Materials Sciences, University of Illinois Urbana Champaign "Amphidynamic Materials and Molecular Machines"
Jun 8	Gordon Research Conference on Molecular Switches and Motors, "Correlated Dynamics in 1D Chains of Molecular Rotors"
Jul 6	ISNA16 International Symposium of Novel Aromatics, Madrid Spain, "Amphidynamic Materials and Molecular Machines"
Jul 13	ICCOSS XXII International Conference on the Chemistry of the Organic Solid State, Niigata, Japan "Amphidynamic Materials and Molecular Machines: Towards Correlated Rotation and Gearing" **PLENARY LECTURE**
Aug 18	Cope Scholar Symposium, ACS National Meeting, Boston, MA "The Secret Lives of Crystals: Remarkable Control of Chemical Reactivity and Rotational Dynamics for Molecular Machines" **AWARD LECTURE**
Sep 16	University of Cincinnati, OH "Reaction Mechanisms And Kinetics in Solid State Photoreactions:
Sep 17	University of Cincinnati, OH "Chemical Safety"
Sep 18	DuPint Manual High Magnet School, Louisville, KY "The Importance of Diversity in the Sciences"
Sep 18	University of Louisville, KY "The Secret Lives of Crystals: Control of Chemical Reactivity, Rotational Dynamics and Molecular Machines" **BROWN-WILLIAMSON LECTURE**
Sep 28	Centro de Investigaciones y Estudios Avanzados, Instituto Politecnico Nacional, Mexico, "The Secret Lives of Crystals: Control of Chemical Reactivity, Rotational Dynamics and Molecular Machines"
Oct 29	University of Minnesota, MN "Amphidynamic Materials: A Promising Structural Platform for the Development of Artificial Molecular Machines"
Nov 19	Challenges in Organic Materials and Supramolecular Chemistry (ISACS18), Bangalore, India, "Amphidynamic Materials. An Ideal Structural Platform for the Development of Smart Materials and Molecular Machines"
Dec 2	3rd Symposium on the Frontiers of Organic Chemistry, Northeast Normal University, China, "Applications of Organic Photochemistry to Organic Synthesis"
Dec 15	PACIFICHEM Conference, Honolulu, HI, "Correlated Dynamics in 1D Chains of Molecular Rotors"
Dec 16	PACIFICHEM Conference, Honolulu, HI, "Spectroscopy and Kinetics of Radical Pairs in Crystalline Ketones"

2016

Jan 16	III Symposium of NMR, Univ. Autonoma Metropolitana, Mexico, "Molecular Compasses, Gyroscopes and Molecular Machines — Dynamic Characterization by Solid State NMR"
Feb 19	Howard University, Department of Chemistry, "Engineering Reactions in Crystalline Solids: From Molecular Information to Solid State Reactivity"
Mar 15	Josef Michl Award Symposium, 251st ACS Nat'l Meeting, "Engineering Reactions in Crystalline Solids: From Molecular Information to Solid State Reactivity"
Mar 16	James Flack Norris Award Symposium, 251st ACS Nat'l Meeting, "Solid State Photochemistry and Spectroscopy with Nanocrystalline Suspensions"
Mar 23	First Middle-Eastern Materials Science Conference, NYU Abu Dhabi, "Amphidynamic Crystals and Molecular Machines"
Apr 7	26th IUPAC Symposium on Photochemistry, Osaka, Japan, "Photochemical Kinetics And Mechanisms In Solid State H-Transfer Reactions Using Laser Flash Photolysis With Nanocrystalline Suspensions"
Apr 22	University of Texas, Arlington, "The Secret Lives of Crystals: Control of Chemical Reactivity, Rotational Dynamics, and Molecular Machines"
May 24	Intera-American Photochemical Society, Santiago, Chile, "Solid State Photochemistry and Spectroscopy with Nanocrystalline Suspensions"
Jun 3	Photosynergetics Symposium, Osaka Japan, "Signal Amplification with a Gain by Quantum-Chain Photochemical Reactions in Crystalline Solids"
Jun 17	University College Dublin, "Engineering Reactions in Crystalline Solids: From Molecular Information to Solid State Reactivity"
Jun 28	36th Reaction Mechanisms Conference, St Louis, MI "Engineering Reactions in Crystalline Solids by Taking Advantage of Reactive Intermediates: From Molecular Information to Solid State Reactivity"
Sep 14	East China University of Science and Technology, Shanghai, China, "Amphidynamic Materials and Molecular Machines: Supramolecular and Extended Architectures"
Sep 16	Nanjin University, Nanjing, China, "Amphidynamic Materials and Molecular Machines: Supramolecular and Extended Architectures"
Sep 17	Southeast University, Nanjing, China "Amphidynamic Materials and Molecular Machines: Supramolecular and Extended Architectures"
Sep 18	Zhejiang University, Hangzhou, China, "Amphidynamic Materials and Molecular Machines: Supramolecular and Extended Architectures"
Sep 20	Nankai University, Tianjin, China, "Amphidynamic Materials and Molecular Machines: Supramolecular and Extended Architectures"
Sep 22	Tsinghua University, Beijing, China, "Amphidynamic Materials and Molecular Machines: Supramolecular and Extended Architectures"
Sep 27	Department of Chemistry, University of Michigan, "Reaction Mechanisms And Kinetics Studies With Molecular Nanocrystals: A State in Transition Between Supramolecular Entities and Bulk Solids"

Oct 13 Department of Chemistry, University of Victoria, BC, Canada "Control of Chemical Reactivity and Rotational Dynamics: Applications in the Construction of Molecular Machines"

Oct 24 South Eastern Regional Meeting of the American Chemical Society, Columbia, SC, 2016, "Amphidynamic Materials and Molecular Machines: Supramolecular Architectures" **PLENARY LECTURE**

Dec 6 Chemical Sciences Roundtable of the USA National Academy, Washington, D.C. "Artificial Molecular Machines"

2017

Feb 11 NSF AGEP California Alliance for Graduate Education and the Professorate, "Academic Careers Need not be Linear. There are Multiple Trajectories to your Target" **KEYNOTE ADDRESS**

Feb 25 International Symposium on Visionary Trends in Molecular Science, Tianjin University, Tianjin, China "Amphidynamic Materials as Molecular Machines. A Journey Towards Barrierless Rotation"

Feb 28 Department of Chemistry, University of Colorado, Boulder "Amphidynamic Materials and Molecular Machines"

Mar 31 Prague Molecular Rotors Workshop, Prague Czech Republic, "Multicomponent Amphidynamic Materials"

Apr 16 Department of Chemistry, King Abdul University of Science and Technology (KAUST), Saudi Arabia, "Crystalline Molecular Machines"

Apr 24 2017 National Diversity Equity Workshop, Arlington VA "URM Climate and Solutions"

Apr 28 Department of Chemistry, Marquette University, Milwaukee, WI "Amphidynamic Crystals as Molecular Machines: Extended Solids and Supramolecular Strategies"

May 2 Accounts of Chemical Research "Distinguished Scientists Session", San Francisco, CA "Crystalline Molecular Machines"

Jun 2 Conference of Emergent Macromolecular Systems Symposium, CUNY's Advanced Science Research Center, New York, "Steric and Dipolar Correlations in Amphidynamic Materials"

Jul 25 International Conference on Novel Aromatics (ISNA), "Rotational Dynamics in Crystals: Applications in the Construction of Molecular Machines "Stony Brook New York, **PLENARY LECTURE**

Jul 27 University of Texas El Paso, "Control of Chemical Reactivity and Rotational Dynamics: Applications in the Construction of Molecular Machines"

Oct 19 SACNAS National Conference, Salt Lake, Utah, **FEATURED PLENARY LECTURE**

Nov 6 Sixtieth Conference of the Sustainable Nanotechnology Organization, Los Angeles, CA. "Sunlight, Water and Nanocrystals – A Promising Recipe for the Development of Sustainable Chemical Processes" **PLENARY LECTURE**

2018

Mar 8 Symposium The Best of UCLA in Mexico, Colegio Nacional, Mexico City, "The secret lives of crystals"

May 4 Foresight Institute, Washington University Foresight workshop on Integrated Molecular Machines: From Materials to Nanosystems"

Jun 7 From Carbon-Rich Molecules To Carbon-Based Materials, Nassau, Bahamas, "Amphidynamic Materials as Molecular Machines: Dipolar Arrays And Mesoscale Architectures"

Jun 22 Instituto de Investigaciones Quimico-Biologica, Univ. Michoacana "Luz solar, agua y nanocristales - Una receta prometedora para el desarrollo de la quimica verde"

Jun 27 Workshop on Molecular Rotors, Motors, and Switches, Telluride Science Research Center (TSRC), "Crystalline molecular machines"

Jul 26 2018 National McNair Scholars Conference, UCLA, "Diversity in all Dimensions"

Oct 4 53rd Congreso Mexicano de Quimica, Mexico City, "Mesoscale Architectures for Amphidynamic Crystals and Molecular Machines" **PLENARY LECTURE**

Oct 19 University of Calgary, Department of Chemistry, "Ultrafast Rotational Dynamics in Crystalline Metal Organic Frameworks"

Nov 14 Second Middle-Eastern Materials Science Conference, NYU Abu Dhabi "Control of Chemical Reactivity and Rotational Dynamics: Applications in the Construction of Molecular Machines"

Dec 13 Encuentro de la Quimica de Los Materiales, University of Malaga, "Cristales Amphidinamicos y Maquinas Moleculares "

2019 *(Scheduled invited lectures in italics)*

Apr 2 ACS National Meeting, Orlando Fl, "Mesoscale Architectures for Amphidyna--mic Crystals and Molecular Machines"

Apr 11 Dartmouth University, Department of Chemistry, Hanover, New Hampshire, Reaction Mechanisms And Kinetics Studies With Molecular Nanocrystals: A State in Transition Between Supramolecular Entities and Bulk Solids

Jun 4 14th International Symposium of Macrocyclic and Supramolecular Chemistry (ISMSC), Leece, Italy - The Roles of Intrinsic Barriers and Crystal Fluidity in Molecular and Supramolecular Amphidynamic Crystals of Molecular Rotors

Jun 10 Gordon Conference on Molecular Motors and Switches, Holderness, NH – Gearing Dynamics in the Crystalline Solid State

Jun 30 *International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems, Greece, Reaction Mechanisms And Kinetics Studies With Molecular Nanocrystals*

Jul 12 *2nd International Symposium on Soft Crystals, Chiba Japan, Reaction Mechanisms And*

Kinetics Studies With Molecular Nanocrystals: A State in Transition Between Supramolecular Entities and Bulk Solids

Sep 16 *Polish Academy of Sciences, TBD*

Oct 7 *UNAM-UC Berkeley Symposium, Mexico City, TDB*

Nov 17 *ELAFOT Viña del Mar, Chile, TBD*

Nov 20 *Organic Chemistry Institute, Czech Academy of Sciences, TBD*

Nov 25 *Department of Chemistry, University of Erlangen Nurnberg, TBD*

COURSES TAUGHT

Chem 136	Organic Structural Methods
Chem 236	Spectroscopic Methods in Organic Chemistry
Chem 235K	Organic Chemistry and Reactivity in in Organized Media
Chem 243A/143A	Structure & Mechanisms in Organic Chemistry
Chem 243B/143B	Mechanisms & Structure in Organic Chemistry
Chem 284	Materials Creation Seminar
Chem 30B	Organic Chemistry II. Reactivity, Synthesis and Spectroscopy

COURSES CREATED

Chem 147	Careers in Chemistry Seminar

RESEARCH TRAINING AND EDUCATION

Degrees Conferred

	Beginning	Graduation	Degree
Thomas Choi	Jan 1993	Apr 1995	M. S.
Krista Motschiedler	Jan 1993	Sept 1994	M. S.
Krisztina Peterfy	Jan 1995	Nov 1996	M. S.
Jesper Jernelius	Jan 1995	Sept 1996	M. S.
Shelli McAlpine	Sept 1994	Aug. 1997	Ph. D.
Amy Keating*	Sept 1994	Jan 1998	Ph. D.
Brent Johnson	Jan 1995	May 1999	Ph. D.
Krista Motschiedler	Nov 1996	Sept 2000	Ph. D.
Laura Sonnichsen	Jan 1996	June 2001	Ph. D.
Carlos Enrique Godinez	Jan 1999	June 2001	M. S.
Tinh A. Khuong	Jan 1999	June 2001	M. S.
Dafni Amirsakis**	Jan 1998	Dec 2002	Ph. D.
Martha Ellison	Oct 2001	Jan 2003	M. S.
Hung Dang	Jan 1998	Sep 2003	Ph. D.
Zhe Yang	Jan 1998	Oct 2003	Ph. D.
Danny Ng	Jan 1998	Nov 2003	Ph. D.
Christopher Suhrada*	Sep 2001	Jan 2005	Ph.D.
Christopher Mortko	Oct 2000	Nov 2005	Ph.D.
Peter Jarowski*	Jan 2002	Jun 2006	Ph.D.
Luis M. Campos	Oct 2001	Jun 2006	Ph.D.
Carlos Enrique Godinez	Jun 2001	Sep 2006	Ph.D.
Tinh A. Kuong	Jun 2001	Sep 2006	Ph.D.
Steven Karlen	Mar 2003	Sep 2007	Ph.D.
Jose Nuñez	Oct 2001	Sep 2007	Ph.D.
Howing Leung	Oct 2005	Sep 2007	M.S.
Farnosh Family	Oct 2005	Sep 2007	M.S.
Khin Chin	Nov 2003	Sep 2008	Ph.D.
Marino Rezendiz	Nov 2003	Sep 2008	Ph.D.
Miguel A. Jimenez	Jun 2006	Sep 2008 (2013*)	Ph.D.
Gregory Kuzmanich	Sep 2006	Jun 2011	Ph.D.
Saori Shiraki	Jan 2005	Jun 2011	Ph.D.
Cortnie Vogelsberg	Sep 2006	Jun 2012	Ph.D.
Amy E. Nielsen	Jan 2012	Jun 2014	Ph.D.
Ira Staehle	Sep 2008	Jun 2014	Ph.D.

Patrick Commins	Sep 2019	Dec 2014	Ph.D.
Melissa Hugs	Sep 2008	Dec 2014	Ph.D.
Alexander Parenzan	Jan 2014	Dec 2015	M.S.
Xing Jiang	Mar 2011	Jun 2016	Ph.D.
Geeta Vadehra	Sep 2010	Dec 2016	Ph.D.
Tim Chung	Sep 2012	Jun 2017	Ph.D.
Vanessa Breslin	Mar 2013	Jun 2018	Ph.D.
Jin Park	Sep 2013	Dec 2018	Ph.D.

*Year degree was conferred

Doctoral Thesis in Progress

Student	*Starting date*
Morgan Howe	Jan 2015
Jordan Dotson	Sep 2015
Vince Hipwell	Sep 2016
Marcus Jellen	Sep 2016
Iris Xue	Sep 2016
Edris Rivera	Sep 2016
Ieva Liepuoniute	Sep 2017
Annabelle Cantu	Jan 2018
Liu Zhiyu	Jan 2018

Postdoctoral Associates

Student	*Dates*	*Ph.D*
Alla Gamarnik	1993-1996	UCLA
Deniz Cizmeciyan	1994-1996	Penn State University
Marcia Levitus	1998-2001	Univ. Buenos Aires
Carlos Sanrame	1999-2002	Univ. of Cordoba
Zaira Dominguez	2000-2002	Inst. Polyt. Nat., Mexico
Manoj Warrier	2000-2003	Tulane University
Horacio Reyes	2004-2005	Inst. Polyt. Nat., Mexico
Thahn Lam	2006-2007	UCSD
Arunkumar Natarajan	2005-2007	Tulane University
Stephanie Gould	2005-2008	Arizona State University
Arif Karim	2008-2009	University of Zurich
Brianda Barrios	2010-2011	University of California, Davis
Edgar Escalante	2010-2012	Univ. Nacional Autonoma de Mexico
Denise de Loera	2011-2013	Univ Autonoma de San Luis Potosi, Mexico
Antoine Stopin	2010-2013	Univiversite de Lyon
Braulio Molina	2011-2013	Inst. Polyt. Nat., Mexico
Guadalupe Hernandez	2012-2013	Univ. del Istmo, Oaxaca, Mexico
Anoklase Ayitou	2013-2016	North Dakota State University
Salvador Perez	2011-2016	Escuela Nac. De Cienc. Biol., IPN Mexico
Mingoo Jin	2018-2019	Hokkaido University, Japan

Visiting International Graduate Students

Diana Wertz	2002	Universidad de Buenos Aires, Argentina
Barbara Garcia	2002	Universidad de La Rioja, Spain
Maria del Mar Ortin	2003	Universidad de Murcia, Spain
Pablo Hoijemberg	2004/2005	Universidad de Buenos Aires, Argentina
Braulio Molina	2007-2008	Cinvestav, Mexico
Sabrina Simoncelli	2008	Universidad de Buenos Aires, Argentina
Aarón Torres-Huerta	2011	Universidad Autónoma del Estado de Morelos
Anahi Sánchez Chávez	2013/2014	Escuela Nacional Ciencias Biol., IPN, Mexico
Mario Valle Sanchez	2015	Universidad Michoacana, Mexico
Gong Minh Chu	2015	Universidad Complutense de Madrid, Spain
Luca Catalano	2015	Politecnico de Milano, Italy
Akifumi Takanabe	2015	Waseda University, Japan
Chau Huynh Minh	2015/2016	National Vietnam University, Vietnam
Mingoo Jin	2016 & 2018	Hokkaido University, Japan
Tim Schleiff	2018	University of Bochum, Germany

Undergraduate Researchers

Student	*Year*	*Institution*	*Program*
Ken Immerman	1992	Duke University	Visitor
SteveShin	1992-1993	Darthmout University	Visitor
Jesper Jernelius*	1992-1993	UCLA	CAMP
Tiet Van Lam	1992	UCLA	Chem. 199
Craig Theroff	1993	UCLA	SRP
Saurabh Patel	1993	UCLA	SRP
Payam Taghizadeh	1993	UCLA	Chem. 199
Lilis Pang	1993	UCLA	Chem. 199
Chae Chul-Ho	1993-1994	UCLA	Chem. 199
Ryan Bise	1994-1995	UCLA	Chem. 199
Joseph Rodriguez	1994	UCLA	CAMP fellow
Raymond Yakura	1994	UC Berkeley	Visitor
Christine Loo	1994-1995	UCLA	SRP
Blanca G. Cervantes	1995	UCLA	SRP
Tin M. Le	1995	UCLA	SRP
Sonja Krane	1995	UCLA	Chem 199
Gilbert Catig	1995	UCLA	199
Armen John	1995	L.A. Valley Com. College	REU NSF
Evan David	1995	UCLA	SRP
Christopher Cho	1996	UCLA	Summer
Mirreille Gagosian	1996-1998	UCLA	SRP
Eunha Cho	1997	UCLA	SRP
Ali Sepher	1997-2000	UCLA	SRP/Chem 199
Jon Loren	1997-1998	Cal State Domiguez Hills	Visitor
Marlene Abrego	1998	Com. College	Bridge
Luis Campos	1999-2000	Cal State Dominguez Hills	CAMP Fellow
Nicole Musser	2000	UCLA	SRP
Angelo Umali	2000	UCLA	SRP
Jung Min Yeo	2000	UCLA	SRP
Mike Lo	2001-2003	UCLA (Chem. Engin.)	CAMP Fellow

Kimberly Gordy	2001-2003	UCLA	Chem 199/Pfizer
Rebecca Ruiz	2002	UCLA	SRP
Heather Yonutas	2002	Mount St. Mary College	Collaboration
Marino Resendiz	2002	Univ. Utah	Camp Fellow
Yeimi Garcia	2004	Seton Hall University	Camp Fellow
Khurram Saleem	2004	UCLA	Summer/SRP
David Ang	2005-2006	UCLA	Chem 196
Jeniffer Taing	2005-2006	UCLA	Chem 196
Alex Buitrago Q	2005-2008	UCLA	Care fellow
Richard B. Rodriguez	2006-2008	UCLA	CNSI fellow
Melissa Padilla	2007-2008	UCLA	Care fellow
Kerrian Fuller	2007-2008	UCLA	Care fellow
Huong Lai Lang	2007-2008	UCLA	MARC
Geeta Vedhera	2008	Johns Hopkins Univ.	NSF-REU
Jeffrey Buenaflor	2008	UCLA	UC-PEERS
Luis Alicea	2008	Columbia Univ.	NSF-AGEP
Blanca Moreno	2008-2010	UCLA	MARC
Alyssa Abrego	2009-2010	UCLA	Care fellow
Colleen Tan	2009-2011	UCLA	SRP
Aimee Caraveo	2010-2012	UCLA	Care fellow
Narega Nazarian	2011-2013	UCLA	Luce Scholar
Adena Issaian	2012-2013	UCLA	Care fellow
Kirsten Flynn	2014	Monmouth University	Amgen Scholar
Nicole A. Barbour	2015-2018	UCLA	Grnd Challeng.
Roberto Chavez	2016	Santa Monica College	SMC/UCLA
Alberto Carranza	2016	Middlebury College	Posse Fund
Ronnie Garcia	2016-2018	UCLA	UC-PEERS
Hannah Eckvahl	2019	UCLA	SRP

Visiting International Undergraduate Students

Geraldine Nicod	1995	Ecole Nat. Sup., France
Gulin Erdogan	2003	Bogazici Univ,Turkey
Marcel Veerman	2004	Karlsruhe University, Germany
Sabrina Simoncelli	2009	Universidad de Buenos Aires, Argentina
Xizhen Lian	2012	CSST Nankai University
Leilei Xiao	2013	CSST Nanjing University
Bing Zhang	2014	CSST Jilin University
Yang Xue	2015	CSST Jilin University
Lucas M. Neumann	2016	Federal University of Santa Maria, Brazil

Member of Doctoral Committees

Student	*UCLA Department*	*Date*
Darón I. Freedberg	Chemistry	1992
Christopher Stephen Siedem	Chemistry	1992
Mathias Selke	Chemistry	1992
Jamey Locke Anderson	Chemistry	1992
Xiaojun Zhang	Chemistry	1992
Steven Nathan Kaganove	Chemistry	1992

Chimin Sheu	Chemistry	1993
May Lam Yuen Yu	Biochemistry	1993
Temer Ahmadi	Chemistry	1993
Ling Lin	Chemistry	1993
Kirsten Pauline Eurenius	Chemistry	1993
Daniel Sutherlin	Chemistry	1993
T. Choi	Chemistry	1994
Christopher Nichols	Chemistry	1994
Tom Dinh	Chemistry	1994
Hi Young Yoo	Chemistry	1994
Massimo Noro	Chemistry	1995
Amy Constable	Chemistry	1995
Frank Huang	Chemistry	1995
Shelli McAlpine	Chemistry	1995
Krista Motshiedler	Chemistry	1995
Diana Wertz	Chemistry	1995
Peter S. Nico	Chemistry	1996
Steve Shin	Chemistry	1996
Susan L. Haldemann	Chemistry	1996
Ana S. Acosta	Chemistry	1996
Peter S. Nico	Chemistry	1996
Brent Johnson	Chemistry	1996
Michael H. Huang	Chemistry	1996
Christopher J. Piersol	Chemistry	1996
Stephen J. Kramer	Material Science	1996
Martin Diaz	Chemistry	1997
David Klein	Chemistry	1997
Ferran Prat	Chemistry	1997
Jason Thomas	Chemistry	1997
Amelia Lapeña	Chemistry	1997
Krisztina Peterfy	Chemistry	1997
Robert Stockow	Chemistry	1998
Joseph Pontillo	Chemistry	1998
Laura B. Sonnichsen	Chemistry	1998
David Fulton	Chemistry	1998
Stuart Cantrill	Chemistry	1998
Veronica Egan	Chemistry	1998
Hans Lee	Chemistry	1999
Zhe Yang	Chemistry	1999
Rebecca A. Eikey	Chemistry	1999
Joachin Arias	Chemistry	1999
Laura Sonnichsen	Chemistry	1999
Adam Gross	Chemistry	1999
Dorothy Nguyen	Chemistry	1999
Danny Ng	Chemistry	2000
Hung Dang	Chemistry	2000
Dafni Amirsakis	Chemistry	2000
Scott M. Heimlich	Education	2000
Li Lao	Chemistry	2000
Aradhana Acharya	Chemistry	2000
Ilyas Washington	Chemistry	2001
Yunfeng Hu	Chemistry	2001
Vincent Cocula	Chemistry	2001
Colleen Cecille Trevithick	Chemistry	2001

Tinh-Alfredo Villareal Kuong	Chemistry	2002
Kelli Schmieder	Chemistry	2002
Jeffrey Grell	Chemistry	2002
Carlos Godinez	Chemistry	2002
Jianjung Wang	Chemical Engineering	2002
Chuautemoc Arellanes	Chemistry	2002
Maryam Azimi	Chemistry	2003
Qichung Zhang	Chemistry	2003
Armando Durazo	Chemistry	2003
Molly Cavanagh	Chemistry	2003
Coleen Trevithick	Chemistry	2003
Joseph Norton	Chemistry	2003
Luis Campos	Chemistry	2003
Paul Sierocki	Chemistry	2003
Jose Nuñez	Chemistry	2003
Fan Zhang	Physics	2003
Thoi Nguyen	Chemistry	2003
Susie Yi Huang	Chemistry	2004
Steve Karlen	Chemistry	2004
David Ho	Chemistry	2004
Peter Jarowski	Chemistry	2004
Sabrina Benchaar	Biochemistry	2004
Nicola Y Edwards	Chemistry	2005
Diana Azurdia	Biochemistry	2005
Colin Carver	Chemistry	2005
Miguel A. Jimenez	Chemistry	2005
Sarah Angelos	Chemistry	2005
Marino Resendiz	Chemistry	2006
Christopher M. Kolodziej	Chemistry	2006
Khin K. Chin	Chemistry	2006
Howing Leung	Chemistry	2006
Saori Shiraki	Chemistry	2006
Joseph Hunt	Chemistry	2006
Qiaowei Li	Chemistry	2006
Monty Liong	Chemistry	2007
Eunwoo Choi	Chemistry	2007
Stephanie Wolahan	Chemistry	2007
Erin Murphy	Chemistry	2007
Wenyu Zhang	Chemistry	2007
Diana Azurdia	Biochemistry	2007
Lai Xu	Chemistry	2007
Alex Tucker-Schwartz	Chemistry	2008
Marcelle Dibrell	Chemistry	2008
Gregory Kuzmanich	Chemistry	2008
Erin M. Broderick	Chemistry	2008
Zachariy O'Brien	Chemistry	2009
Cortnie Volgelsberg	Chemistry	2009
Daniel J. King	Chemistry	2009
Courtney R. Thomas	Chemistry	2009
Mauricio Comas Garcia	Chemistry	2009
Anh Phan	Chemistry	2009
William Morris	Chemistry	2009
Argyris Kahros	Chemistry	2009
Benjamin Boal	Chemistry	2009

Rachel Harper	Chemistry	2010
Robyn Hodgkins	Chemistry	2010
Thomas Farrel	Chemistry	2010
Tania Guardado	Chemistry	2010
Biljana Rolih	Chemistry	2010
Melissa Hughs	Chemistry	2010
Amy E Nielsen	Chemistry	2010
Ira Staehle	Chemistry	2010
Ivy-Juyao Dong	Chemistry	2011
Nicholas Matsumoto	Chemistry	2011
Elizabeth Noey	Chemistry	2011
Fang Liu	Chemistry	2011
Patrick Cummins	Chemistry	2011
Geeta Vadera	Chemistry	2012
Jiang Xing	Chemistry	2012
Blanton Martin	Chemistry	2013
Tejas Shah	Chemistry	2013
Raymond Gipson	Chemistry/Pharmacology	2013
Louis Tse	Mechanical Engineering	2014
Tim Chung	Chemistry	2014
Vanessa Breslin	Chemistry	2014
Jesus Moreno	Chemistry	2014
Jin Park	Chemistry	2015
Elias Picazo	Chemistry	2015
Louis Tse	Mechanical Eng.	2016
Morgan Howe	Chemistry	2016
Emily Cosco	Chemistry	2017
Jordan Dotson	Chemistry	2017
Marcus Jellen	Chemistry	2018
Vincent Hipwell	Chemistry	2018
Hanna Friedman	Chemistry	2018
Harrison Mills	Chemistry	2018
Edris Rivera	Chemistry	2018
Trevor Chang	Chemistry	2018

Member of Master's Committees

Student	*UCLA Department*	*Date*
Krista Motschiedler	Chemistry	1994
Thomas Choi	Chemistry	1995
Jesper Jernelius	Chemistry	1996
Krisztina Peterfy	Chemistry	1996
Ilyas Washington	Chemistry	2000
Carlos Enrique Godinez	Chemistry	2000
Tinh A. Khuong	Chemistry	2000
Paula Indrawati Gunawan	Chemistry	2000
Patrick Sang-Tae Lee	Chemistry	2000
Sterling Chaffins	Chemistry	2000
Corrie Kuniyushi	Chemistry	2002
Martha Ellison	Chemistry	2002
Michael Page	Chemistry	2003
Chao K. Tsai	Chemistry	2006

Khin K. Chin	Chemistry	2006
Joseph Hunt	Chemistry	2006
Qiaowei Li	Chemistry	2006
Howing Leung	Chemistry	2007
Miguel Jimenez	Chemistry	2008
Farnosh Family	Chemistry	2009
Alexander Parenzan	Chemistry	2015
Annabelle Cantu	Chemistry	2019

VISITING PROFESSORS HOSTED

Prof. Elisa Leyva	Univ. San Luis Potosi, Mexico	June-Aug 1995
Prof. Hideko Koshima	Ehime University, Japan	Sept 1997-Jan 1998
Prof. Francisco Mendes	Univ. Aut. Metrop., Mexico	Jan-May 1998
Prof. Edgar Moctezuma	Univ. San Luis Potosi, Mexico	Aug. 1998-July 1999
Prof. Elisa Leyva	Univ. San Luis Potosi, Mexico	Aug. 1998-July 1999
Prof. Gerardo Zepeda	Inst. Polyt. Nacional, Mexico	July 1999-July 2000
Prof. Rosa Santillan	Centro de Investig. IPN, Mexico	Aug. 2002-July 2003
Prof. Norberto Farfan	Centro de Investig. IPN, Mexico	Aug. 2002-July 2003
Prof. Tina Choe	Loyola Marymount University	June 2002-May 2003
Prof. Robert Glasser	Ben Gurion Univ., Negev, Israel	Mar 2008-June 2008
Prof. Yang Li	Beijing Institute of Technology	July 2009-Dec 2009
Prof. Wujiong Xia	Harbin Institute of Technology	July 2011-Jan 2012
Prof. Eduardo Zamora	Univ. Aut. Metrop., Mexico	Sep 2011-Jun 2012
Prof. Hai-Bao Duan	Nanjing Xiaozhuang Univ., China	Jan 2015-Jan 2016

RESEARCH GRANTS

Funding Organization	Amount	Period	Title
The Petroleum Research Fund	22, 000	1992-94	The Norrish Type-II Reaction of Ditopic Aromatic Ketones.
The National Science Foundation	254, 000	1994-97	Carbene Reactivity in Pure and Mixed Molecular Crystals
Committee on Research of the Academic Senate	3,100	1994	Tunning Chemical Reactivity in the Solid State: Type I Biradicals
Committee on Research of the Academic Senate	1,994	1995	Tunning Chemical Reactivity in the Solid State: Type I Biradicals
NSF Supercomputing Center Advanced Computing Resources	280 S.U.*	1995-1996	Carbene Reactivity in Molecular Crystals
The Petroleum Research Fund	50,000	1996-1997	Generation and Reactivity of Biradicals in the Solid State.
The National Science Foundation	225, 000	1996-2001	Solid State Chemistry of Organic Reactive Intermediates
NSF Supercomputing Center Advanced Computing Resources	1,069 S.U.*	1996-1996	DFT Studies of Aromatic Carbenes
The Petroleum Research Fund	2,000	1997-1998	Supramolecular Structures: Characterization and Physical Aspects
The National Science Foundation	286,000	1997-2000	"Ground State and Photochemical Reactivity of Triplet Carbenes in the Crystalline Solid State"
NSF Supercomputing Center	5,310 S.U.*	1997-1998	Computational Studies of Carbenes and Excited State Ketones Using ab-initio and DFT Theories to Understand Reactivity and in the Organic Solid State.
The National Science Foundation	12, 000	1998-1999	"US-Japan Workshop on Selective Organic Photoreactions in the Solid State"
The National Science Foundation	156, 700	1999-2000	"Acquisition of Solid-State Nuclear Magnetic Resonance Instrumentation"
The National Science Foundation	482, 000	2000-2003	“Organic Dynamics in Crystalline Solids: Chemistry Near Zero K”
The National Science Foundation	369, 576	2000-2003	“Novel Electrooptic Materials Based on Dipolar Dielectrics: Molecular

			Compasses and Gyroscopes”
Office of Naval Research**	110, 000 (Tot: 423,041)	2001-2003	“User-Defined Patterning at the Molecular Scale”
The National Science Foundation***	156, 700	2001-2002	" Acquisition of a Phase-Modulated Fluorimeter for Materials Research and Education"
The National Science Foundation	29, 000	2002-2003	“Studies on the Synthesis of Prostaglandins by Solid State Decarbonylation Reactions”
UC-Mexus	66,000	2002-2003#	“Sintesis de Productos Naturales por Reacciones de la Decarbonilacion en el Estado Solido
UC-Mexus	66,000	2002-2003##	“Sintesis de Productos Naturales por Reacciones de la Decarbonilacion en el Estado Solido”
The National Science Foundation	29, 000	2002-2003	“Studies on the Synthesis of Prostaglandins by Solid State Decarbonylation Reactions”
The National Science Foundation	508,000	2003-2006	“From Solid State Reaction Mechanisms to Green Chemistry”
The National Science Foundation	462,000	2003-2006	“Electrooptic Materials Based on Molecular Compasses and Gyroscopes
UC-Mexus	66,000	2005-2006###	“Sintesis and Solid State Characterization of molecular gyroscopes”
The Petroleum Research Fund	3,200	2005-2006	International Conference on the Chemistry of the Organic Solid State
The National Science Foundation	527,500	2006-2009	“Chemical Dynamics and Green Chemistry Strategies with Solid-to Solid Reactions”
The National Science Foundation	300,000	2006-2009	“Electrooptic Materials Based on Molecular Compasses and Gyroscopes: Effects of Symmetry, Conjugation, and Correlated Dipola Rotation”
The National Science Foundation	62,000	2007-2009	“Workshop in Physical Organic Chemistry”
The National Science Foundation	7,000	2007-2008	“Planning visit for a UCLA-University of Buenos Aires–University of Campinas collaboration.

The National Science Foundation	40,000	2008-2009	NSF American Competitiveness Fellowship Award
Environmental Protection Agency	10,000	2008-2009	Eco-Friendly Solid State Photodecarbonylation for the Synthesis of Biologically Active Natural Products
The National Science Foundation (Creativity extension)	280,000	2009-2011	"Electrooptic Materials Based on Molecular Compasses and Gyroscopes: Effects of Symmetry, Conjugation, and Correlated Dipola Rotation"
The National Science Foundation	880, 000	2009-2013	"Chemical Dynamics and Green Chemistry Strategies with Solid-to Solid Reactions"
Committee on Research of the Academic Senate	5,000	2010-2011	Towards Protein-Like Molecular Objects
The National Science Foundation	465,000	2011-2014	"Amphidynamic Crystalline Materials Based on Inertial Rotors and Dipolar Arrays"
The National Science Foundation	667,692	2011-2014	"Green Chemistry, Absolute Kinetics, and Signal Amplification with Molecular Nanocrystals
The National Science Foundation	465,000	2011-2014	"Amphidynamic Crystalline Materials Based on Inertial Rotors and Dipolar Arrays"
The National Science Foundation	505,000	2013-2016	"Green Chemistry, Absolute Kinetics, and Signal Amplification with Molecular Nanocrystals. A New Age for Solid State Photochemistry
The National Science Foundation	475,000	2014-2017	"Design, Synthesis, Crystallization and Materials Properties of Rotary Dipolar Arrays
American Chemical Society	40,000	2015	Arthur C. Cope Award
The National Science Foundation	546,000	2016-2019	"Molecular Information and Crystal Control in Solid State Photochemical Reactivity"
UC Historically Black Colleges and Universities Initiative	203,732	2016-2019	"UCLA-Spelman College-Howard University-Clark Atlanta University-Spelman College Summer Research and Graduate Admissions Pathways"

The National Science Foundation	988,082****	2017-2020	"MRI: Acquisition of a Solid-State NMR Spectrometer for Chemistry Research Education and Training"
The National Science Foundation	476,000	2017-2020	"Molecular Rotors and Materials Properties of Rotary Dipolar Arrays"
The National Science Foundation	560,000	2019-2021	"Molecular Information and Crystal Control in Solid State Photochemistry. Radical Pair Dynamics, Synthetic Applications and Triplet Quantum Chains"

*Service Units
**With Prof. Harold Monbouquette of Chemical Engineering at UCLA.
***With Profs. B. Schwartz, F. Wudl and J. Zink.
****With Profs. L. Bouchard, R. Kaner, A. Spokoyny and J. Zink
With Prof. R. L. Santillan, Cinvestav, Mexico.
With Prof. N. Farfan, Cinvestav, Mexico
With Dr. Horacio Reyes, Cinvestav, Mexico

ACTIVITIES IN SCHOLARLY AND PROFESSIONAL SOCIETIES

Member, Organizing Committee	Meeting of the Inter American Photochemical Society (IAPS) Iguazu Brazil, 1996
Member, Organizing Committee	5th North American Chemistry Conference (NACC) Cancun Mexico, 1997
Member, Organizing Committee	Symposium on Molecular Photochemistry ACS National Meeting, Boston, Sep 1998
Member, Organizing Committee	Reaction Mechanisms Conference Asilomar California, Jun 28-July 3, 1998
Member, Organizing Committee	International Symposium of Reactive Intermediates Reykjavik, Iceland, 2003 August 17-22 2003,
Member, Organizing Committee	Conference of the Interamerican Photochemical Society, Salvador, Brazil, June, 2006
Member, Organizing Committee	XIVth Quantum Atomic and Molecular Tunneling in Solids and Other Condended Phases Workshop, University of Houston, October 28 - November 1, 2007
Organizer	US-Japan Workshop on Solid State Organic Chemistry Lake Arrowhead, UCLA, Dec 6-Dec 10, 1998
Organizer	Symposium on Molecular Architectures ACS Regional Meeting, Oct 1999
Organizer	IUPAC Symposium on Solid State Photochemistry Dresden Germany, July 22-27, 2000
Organizer	XVII International Conference on the Chemistry of the Organic Solid State, UCLA, July 24-29, 2005
Organizer	NSF Workshop on Physical Organic Chemistry Lake Arrowhead, CA, Oct 27-31, 2006
Organizer	Symposium in Honor of Prof. Fred Wudl, UCLA, Jan. 6 2007
Organizer	NSF Workshop on Physical Organic Chemistry Lake, Champlain, VT, Sep 16-20, 2007
Organizer	NSF Workshop on Physical Organic Chemistry Lake Tahoe, CA, Sep 14-18, 2008
Co-Organizer (w Prof. V. Ramamurthy)	Symposium on Molecular Photochemistry ACS National Meeting, Boston, Sep 1998
Co-Organizer (w Prof. F. Toda)	Symposium on Solid State Chemistry Pacifichem 2000, Honolulu, Dec 14-19, 2000
Co-Organizer (w Prof. P. Aramendia)	Conference of the Interamerican Photochemical Society Cordoba, Argentina, July, 2001

Co-Organizer (w Profs. J. Michl and J. Gladyz)	Symposium on Axial Rotation in Organic and Organometallic Molecules: from Ethane through Propellers and Gyroscopes to Motors. ACS National Meeting, Washington, DC, Aug. 28, 2005
Co-Organizer (w Profs. F. Toda and R. Bishop)	Symposium on Organic Solid State Chemistry: Structure, Synthesis and Reactivity, Pacifichem 2005, Honolulu, Hawaii
Co-Organizer (w Prof. F. Wudl UC Santa Barbara, June 2005.	Summer School on Stereochemical Aspects of Materials Sciences
Co-Organizer (w Profs. R. Kuroda and R. Bishop)	Symposium on Organic Solid State Chemistry: Structure, Synthesis and Reactivity, Pacifichem 2010, Honolulu, Hawaii
Co-Organizer (w Prof. Dr. Bruce Maryanoff)	Symposium on Self Assembly and Molecular Machines AAAS Annual meeting. Wahington, D.C. Feb 17 - Feb 21, 2011
Co-Organizer (w Prof. Pat Thiel and Drs. Emilio Bunel and Marc Cardillo)	Workshop on Undergraduate Chemistry Education sponsored by the Chemical Sciences Roundtabel of the NAS, Washington, D.C. May 21 - May 23, 2013
Co-Organizer (w Prof. Pat Thiel Drs. Vernon Anderson and Bruce Garret)	Workshop on Mesoscale Chemistry sponsored by the Chemical Sciences Roundtable of the NAS, Washington, D.C. May 21 - October, 2014
Co-Organized (w Prof. A. Briseño, M. Ward and Lian Yu)	Symposium on Crystal Engineering Design, New Materials and Applications, MSR October, 2015 MRS Meeting
Co-Organizer (w Prof. Susan Quinn)	27th IUPAC International Symposium on Photochemistry, Dublin Ireland, July 8-13, 2017
Member	2000 Tolman Award and Medal Committee Southern California Division of the American Chemical Society
Member	2017 Tolman Award and Medal Committee Southern California Division of the American Chemical Society
Member	2019 Selection Committee American Chemical Society National Awards Program

SERVICES TO SCHOLARLY PUBLICATIONS

Associate Editor
Journal of the American Chemical Society, 2009-2016.

Topics editor
Crystal Growth & Design. 2010-2013

Advisory Board Member
Journal of Organic Chemistry, 2002-2005; 2005-2009; 2009-2013; 2013-2016
Journal of the American Chemical Society, 2003-2006 and 2007-2008
Journal of the Mexican Chemical Society, 2005-2013
Organic and Biomolecular Chemistry, 2008-2010

Crystal Growth & Design. 2013-date
Accounts of Chemical Research, 2017-2020

Guest Editor

Journal of Physical Chemistry, Special Issue on Molecular Photochemistry, "Photochemists' Festschrift" (**1998**, *102*, No. 28,)

Tetrahedron, Symposium in Print on: "Molecular Assembly and Reactivity of Organic Crystals and Related Structures" (**2000**, *56*, No 36)

Molecular Crystals Liquid Crystals, Proceedings of the XVII International Conference on the Chemistry of the Organic Solid State, ICCOSS, (**2006**, *456*)

Reviewing and Publishing Recommendations
Science (Washington)
Nature
Proceedings of the National Academy of the USA
The Journal of the American Chemical Society
Angewandte Chemie
Journal of Organic Chemistry
Chemical Reviews
Tetrahedron Letters
Tetrahedron
Journal of Photochemistry and Photobiology
Accounts of Chemical Research
Journal of the Chemical Society, Chemical Communications
Journal of the Chemical Society, Perkins Transactions
Chemical Physics Letters
Journal of Physical Chemistry
Journal of Physical Organic Chemistry
Journal of the Chemical Society, Perkins I
Molecular Crystals and Liquid Crystals
Organic Letters
Organometallic Chemistry
Crystal Growth & Design
Inorganic Chemistry
Photochemical & Photobiological Sciences
Topics in Current Chemistry
Advanced Materials
Langmuir
HAZMAT
Chemical Communications
Dalton Transactions
Organic and Biomolecular Chemistry
Nature Chemistry
Nature Materials

CONSULTING ACTIVITIES
REVIEWING AND FUNDING RECOMMENDATIONS

The Petroleum Research Fund

The National Science Foundation
The International Foundation for Science (Sweden)
Research Opportunities for Undergraduates (NSF)
Environment Protection Agency/National Science Foundation
The National Research Council of Canada
Consejo Nacional de Ciencia y Tecnologia of Mexico
Research Corporation
Netherlands Organization for Scientific Research (NWO), Council for [Chemical Sciences (CW).
The National Research Council of Canada
Research Corporation
Israel Science Foundation
UC-MEXUS
NSF Committee of Visitors, MPS, Division of Chemistry, 2007

ADVISORY BOARDS

Advisory Board Member
—Journal of Organic Chemistry, 2002-2005, 2005-2006, 2007-2009, [2009-2012, 2013-2016
—Journal of the American Chemical Society, 2003-2006, 2007-2008
—Journal of the Mexican Chemical Society, 2005-2012
—Organic and Biomolecular Chemistry, 2008-2009
—Accounts of Chemical Research, 2017-2020
—Puerto Rico Council of Higher Education Accreditation of a Doctorate Program in Applied Chemistry, University of Puerto Rico Mayaguez
—SCORE External Scientific Advisory Committee
MBRS Grant Cycle 2002/2003, University of Texas, San Antonio
—SCORE External Scientific Advisory Committee
MBRS Grant Cycle 2004/2005, Cal. State Univ. Dominguez Hills
— Center of Photochemical Sciences, Bowling Green State University, 2004-2007
— UCLA MCTP IGERT program, 2007-2012
— NSF Science and Technology Center on Materials and Devices for Information Technology Research, Univ. of Washington, 2008-2010
— Governing Board of the Reaction Mechanisms Conference, 2006-2012
— Advisory Committee Mathematics and Physical Sciences Directorate, 2017-2018
— ACS National Awards Advisory Board, 2018-date

INDUSTRIAL CONSULTING

Merck Pharmaceutical (2000-2002)
Amgen (2001)
Transform Pharmaceutical (2001)
Alkermes (2012-2013)
World Energy TLL (2013-2015)

SERVICE TO UCLA and UC

Physical Science Innovation Committee Division of Physical Sciences	1992
Shop Committee	1993

Department of Chemistry and Biochemistry	
Laboratory Teaching and Organization Committee Department of Chemistry and Biochemistry	1993
General Chemistry for Life Science Committee Department of Chemistry and Biochemistry	1994-1998
Member, Faculty Advisory Committee, CARE/MARC programs, UCLA	1995-date
Department Liaison, AAPS, UCLA	1995-2005
Freshman Advising	1992-1998
Chair, Org. Freshman Committee	1998-1999
Organic Undergraduate Advisor	1998
Organic Graduate Advisor	1998-2005
Regional Director, UCLA CAMP Program	1998-2003
Chancellor's Ad Hoc Committee on Academic Personnel-I	1999-2000
Judge, CAMP/NSF Symposium	April 24, 1999
Judge, Scholar's Day	May 17, 1999
Chancellor's Ad Hoc Committee on Academic Personnel-II	2000
Interim Departmental Graduate Advisor	Jan-Jun 2000
Department Elected Staffing Committee	2002-2005
Coordinator, P&G OCDC (now OCDS)	Sept 2005-date
Vice-Provost J. Smith's CARE Faculty Committee	Nov 2005-2008
AAP Faculty Advisory Committee	2004-2005
AAP Faculty Committee	2005-2016
Department of Chemistry, Vice-Chair for Education	2005-2008
STEM Faculty Advisory Committee	2007-2017
Department of Chemistry Development Committee	2006-2016
Diversity adviser to the Dean of Physical Sciences	2009-2012
Faculty mentor to freshman Regents Scholars	2009-2013
Department Elected Staffing Committee (ESC)	2012 (6 Mo)

Department Chair	2012-2016
Pathways to Commencement Task Force	2013
Convening Chair, Advisory Committee for the Implementation of UCLA Academic Recruit	2013-2014
Search Committee for the UCLA Vice Chancellor for Equity Diversity and Inclusion (VCEDI)	2014-2015
Chair of the IMSD Faculty Advisor Board	2014-2016
Faculty Advisory Committee, NSF-AGEP California Alliance	2014-date
Physical Sciences Undergraduate Education Committee	2014-2016
UCLA Dean of Physical Sciences	2016-2021
Chair of UCLA Librarian V. Steel Advisory Review Committee	2018