Ivan Aprahamian

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Current Position

2019	Professor of Chemistry, Department of Chemistry, Dartmouth College, Hanover NH

Education

2005	PhD in Organic Chemistry under the supervision of Professors Mordecai Rabinovitz and Tuvia Sheradsky, The Hebrew University of Jerusalem, Jerusalem, Israel. Title: *π-Conjugated Polycyclic Anions: Bowls, Baskets and Buckyballs*
2000	MSc in Organic Chemistry (within the direct PhD program), under the supervision of Professor Mordecai Rabinovitz, The Hebrew University of Jerusalem, Jerusalem, Israel
1998	BSc in Chemistry (*Magna Cum Laude*), The Hebrew University of Jerusalem, Jerusalem, Israel

Professional Experience

2022-2025	Chair of the Chemistry Department
2025	Cotrell Scholars Collaborative's Academic Leadership Training Workshop (John Hopkins University, Baltimore, MD)
2014-2019	Associate Professor of Chemistry, Department of Chemistry, Dartmouth College, Hanover NH
2008-2014	Assistant Professor of Chemistry, Department of Chemistry, Dartmouth College, Hanover NH
2005-2008	Postdoctoral research in the laboratories of Sir Fraser Stoddart (2016 Noble Laureate), Department of Chemistry and Biochemistry, UCLA
2006	Teaching fellow at the Department of Chemistry and Biochemistry, UCLA
2003	Visiting research assistant in the laboratories of Professor Martin Saunders, Department of Chemistry, Yale University, New Haven CT
2002	Minerva school for "Computational Quantum Chemistry", Schloß Blankensee, Germany
1999-2005	Teaching assistant at The Hebrew University of Jerusalem, Jerusalem, Israel
1996-1998	Undergraduate research in the laboratories of Professor Itamar Willner, The Hebrew University of Jerusalem, Jerusalem, Israel

Awards and Honors

2019	Susan and Gib Myers 1964 Faculty Fellowship

2018	Fellow of the Royal Society of Chemistry
2017	Humboldt Research Fellowship
2016	Liebig-College Visiting Research Professor (Germany)
2016	Cram Lehn Pedersen Prize in Supramolecular Chemistry
2015	Visiting Scholar at NYU Abu Dhabi (United Arab Emirates)
2014	Linda B. and Kendrick R. Wilson III 1969 Fellowship
2014	Visiting Professor at Aoyama Gakuin University (Japan)
2013	ACS Young Academic Investigators Award Symposium
2013	Journal of Physical Organic Chemistry Early Excellence Profilee
2013	NSF CAREER Award
2013	Dartmouth Junior Faculty Fellowship
2008	Burke Research Initiation Award
2003	Horowitz Scholarship for Outstanding PhD Students
2003	Danny and Clara Klein Scholarship for PhD Students in Chemistry

PROFESSIONAL ACTIVITIES AND AFFILIATIONS

Departmental and College Service

Curriculum Committee (2025-)
Department Chair (2022-2025)
Chair of Budget, Facilities & Planning Committee (2022-)
Member & Chair (Spring 2023; Spring 2024) of the Committee on Priorities (2021-2024)
Member of the Science Division Council (2022-)
Member of the Committee of Chairs (2022-)
Chair of the Seminar Committee (2020-2022)
Chair of Public Relations and Awards Committee (2020-2022)
Member of the Organic Chemistry Search Committee (2020)
Member of the Committee on Standards (2019-2021)
Member of the Physical Chemistry Search Committee (2019)
Member and Chair of the Graduate Student Enrollment Committee (2009-2020)
Member of the Organic Chemistry Search Committee (2010-2012)
Member of the Graduate Student Advisory Committee (2012)
Departmental Meeting Scribe (2009-2013)
Coordinator and lead PI on two NSF MRI grant applications (2010, 2011)

Conferences

- Co-Organizer of the Pacifichem Smart Photoresponsive Molecular Systems Symposium (2021)
- Co-Chair of the nanoGe Conference on Chemical Systems (2021)
- Chair of the Gordon Research Conference on Molecular Switches and Machines (2019)
- Co-Organizer of Frontiers in Chemistry Armenia, Conference (2018)
- Vice-Chair of the Gordon Research Conference on molecular switches and machines (2017)
- Chair of the Telluride Workshop on Molecular Switches, Motors and Rotors (2016)

Advisory Board

- Member of the Advisory Board of the journals: *Chem. Soc. Rev.*, *ChemSystemsChem*, and *Chem*

- Member of the Advisory Board of the National Supramolecular Chemistry Conference for North America
- Member of the Editorial Board of *Responsive Materials*
- External Advisory Board of the Materials Research Science and Engineering Center at Austin, TX
- Chair of the Chemistry Task Force Committee of the Armenian Society of Fellows

Reviewing

Reviewer for the following journals: *J. Am. Chem. Soc., Org. Lett., Inorg. Chem., Organomettalics, J. Org. Chem., J. Mater. Chem., Nano. Lett., ACS Nano, Angew. Chem. Int. Ed., Adv. Mater., Adv. Funct. Mater., Chem., Org. Biomol. Chem., Chem. Commun., Chem. Sci., Chem. Soc. Rev., RSC Advances, Analyst, Chem, Nature Commun., Nature Chem., Nature Nanotechnology, Nature, and Science.*

Grant reviewer for: Department of Energy, American Chemical Society Petroleum Research Fund, Sloan Foundation, Research Corporation for Science Advancement, National Science Foundation, Research Corporation for Science Advancement, Israel Science Foundation, Portuguese Foundation for Science and Technology, Netherlands Organization for Scientific Research, Croatian Science Foundation, National Science Center of Poland, German Research Foundation, the Italian Ministry for Education, University and Research, Natural Sciences and Engineering Research Council of Canada, and the European Research Council.

Community Service and Outreach

● Piloted a lecture capture technology (Camtasia Relay®) at Dartmouth College
● Established an ACS SEED project at Dartmouth College (only one in NH)
● Developed a demonstration using plastic bottle caps to explain self-assembly to a general audience, and currently working with local high schools, museums and science centers to further disseminate the concept
● Participated in the USA Science & Engineering Festival (National Mall, DC, October 2010 and 2014)
● Involved in outreach activities in the upper valley (Montshire Museum, VINS, etc) and on campus (Graduate Women in Science and Engineering's (GWISE) annual Science Day, Dartmouth Science Day, ManyMentors, etc.)
● Participant in the EE Just program at Dartmouth
● Mentor of several junior colleagues at Dartmouth and beyond
● Mentor for the Women in Supramolecular Chemistry Network
● Member of the Molecular Machine IUPAC task force

Association Memberships

Member, American Chemical Society (2005-)
Member, ACS Division of Organic Chemistry (2008-)
Member, Xi Sigma (2010-)
Member, Armenian Society of Fellows (2022-)

COURSES TAUGHT

Dartmouth College

- Chem 51
  Undergraduate: Organic Chemistry (1st term of a 2-term sequence)
- Chem 57
  Undergraduate: Honors Organic Chemistry (1st term of a 2-term sequence)
- Chem 58
  Undergraduate: Honors Organic Chemistry (2nd term of a 2-term sequence)
- Chem 151/93
  Undergraduate and Graduate: Physical Organic Chemistry
- Chem 158
  Undergraduate and Graduate: Introduction to Supramolecular Chemistry
- Chem 262
  Graduate: Research Colloquium in Chemistry/Synthetic Organic Chemistry
- Chem 261
  Graduate: Research Colloquium in Materials Chemistry

CURRENT FUNDING

- Dartmouth Scholarly Innovation and Advancement Award: *Visible and Near-Infrared Light Responsive Photoactuators*, PI, $50,000, May 2024 - June 2026
- NSF MSN (2304983): *Hydrazone-Based Feedback Loops*, PI, $520,267, July 2023 - June 2026
- NSF DMR (2510040): *Phototuning the Properties of Liquid Crystals*, PI, $596,121, June 2025 - May 2028

PREVIOUS FUNDING

2023-2025	ACS PRF (66249-ND4)
2021-2025	NSF (DMR-2104464)
2019–2021	Dartmouth Scholarly Innovation and Advancement Award
2019	US Air Force (Gordon Conference Support: FA9550-19-1-0292)
2019	US Army Research Office (Gordon Conference Support: W911NF-19-10171)
2018–2023	NSF MSN (CHE-1807425)
2015-2018	US Army Research Office (W911NF-15-1-0587)
2015-2019	NSF (DMR-1506170)
2013–2018	NSF Career Award (MSN: CHE-1253385)
2012-2014	ACS PRF (51842-DNI4)
2010-2014/21	ACS Seed Funding
2007–2010	Burke Research Initiation Award

LIST OF PUBLICATIONS
Independent Research

[98] B. Balamut, K. Hanke, **I. Aprahamian,*** Azobenzene/Triptycene–Based Cholesteric Liquid Crystal Dopants**,** *Angew. Chem. Int. Ed.* **2025**, 64, e20563

Highlighted as a Hot Topic by *Advanced Optical Materials*

[97] D. Sosnin, S. A. A. Abedi, M. Izadyar, Y. Ünal, X. Liu, **I. Aprahamian**,* Hetero-Hydrazone Photoswitches, *Angew. Chem. Int. Ed.* **2025**, *64*, e202515136

Highlighted as a HOT paper

[96] Q. Qi, H. Fu, L. Peng, S. Patra, X. Liu, **I. Aprahamian**,* Solvent-dependent reactivity of azo-BF_2 switches, *Chem. Sci.* **2025**, *16,* 17214-17220

[95] H. Wang, I. Bala, R. A. Wiscons, **I. Aprahamian**,* Color Tuning in Ferroelectric Nematic Liquid Crystals using Triptycene/Hydrazone Chiral Photoswitches, *Adv. Mater.* **2025**, e09125

[94] D. Komáromy, A. N. Bismillah, V. A. Puranik, H. Fu, A. S. Y. Wong, **I. Aprahamian**,* Coupling synthetic negative feedback loops, *Chem* **2025**, *In Press*. DOI: 10.1016/j.chempr.2025.10269

[93] M. Taddei, B. Shao, B. S. Lickey, Q. Qi, M. D. Liptak,* **I. Aprahamian**,* M. Di Donato,* Substituent effect on the excited state dynamics of bistable photochromic hydrazones, *Phys. Chem. Chem. Phys.* **2025**, *27*, 17910–17921.

[92] D. Sosnin, **I. Aprahamian,*** Alkyne Hydrazones for Raman Scattering Spectroscopy, *Chem. Commun.* **2025**, *61*, 10119 - 10121

[91] A. Ryabchun, Y. Florida, Q. Li, R. Plamont, N. Katsonis,* **I. Aprahamian**,* Photo-Controlled Dynamics of Cholesteric Polymer Coatings via Hydrazone Crosslinking, *Angew. Chem. Int. Ed.* **2025**, e202507358.

Highlighted as a HOT paper

[90] B. Balamut, **I. Aprahamian**,* Molecular Steganography Using Multistate Photoswitchable Hydrazones, *J. Am. Chem. Soc.* **2025**, *147*, 19444–19449.

[89] Q. Qi, Y. Liu, V. Puranik, S. Patra, Z. Svindrych, X. Gong, Z. She, Y. Zhang,* **I. Aprahamian**,* Photoswitchable Fluorescent Hydrazone for Super-Resolution Cell Membrane Imaging, *J. Am. Chem. Soc.* **2025**, *147*, 16404–16411.

[88] D. Sosnin, M. Izadyar, S. A. A. Abedi, X. Liu, **I. Aprahamian**,* "Clicked" Hydrazone Photoswitches, *J. Am. Chem. Soc.* **2025**, 147, 14930–14935.

[87] I. Bala, J. T. Plank, B. Balamut, D. Henry, A. R. Lippert, **I. Aprahamian,*** Multistage and Multicolor Liquid Crystal Reflections using a Chiral Triptycene Photoswitchable Dopant, *Nature Chem.* **2024**, *16*, 2084–2090

Highlighted in Dartmouth News, *Springer Nature*, CNN Brasil, Enerzine, Technology Networks, Mirage News, EurekAlert!, Phys.Org, Optica

[86] B. Balamut, R. Hughes, **I. Aprahamian,*** Tuning the Properties of Hydrazone/Isosorbide-Based Switchable Chiral Dopants, *J. Am. Chem. Soc.* **2024**, *146*, 24561–24569

[85] Q. Qi, J. T. Plank, A. R. Lippert,* **I. Aprahamian,*** A photoswitchable handheld volumetric 3D display, *Chem* **2024**, *10*, 3575–3581

Highlighted in Dartmouth News, ChemistryWorld, InterestingEngineering, AZoOptics, , WileyIndustryNews, WonderfulEngineering, NewAtlas, ScienceDaily, Bioengineer, PhyOrg, TechnologyNetworks, TechAcute, Device

Featured on the front cover of the December 2024 issue of *Chem*

[84] B. Shao, H. Fu, **I. Aprahamian,*** A Molecular Anion Pump, *Science* **2024**, 385, 544–549

Highlighted in Dartmouth News, MSN, SienMag, ChemEurope, Smart Water Magazine, Mirage News, PhyOrg, EurekaAlert, Bioengineer, ScienceNet, *Supramolecular Chemistry*, *Chem*, *CJSC*

[83] Q. Qi, S. Huang, X. Liu,* **I. Aprahamian,*** 1,2-BF_2 Shift and Photoisomerization Induced Multichromatic Response, J. *Am. Chem. Soc.* **2024**,*146*, 6471–6475

[82] S. Zhang, Y. An, X.-M. Chen, **I. Aprahamian**,* Q. Li,* Mechanically Interlocked Luminescent Molecules, *Responsive Materials* **2023**, *1,* e2023002

[81] G. C. Thaggard, K. C. Park, J. Lim, B. K. P. M. Kankanamalage, J. Haimerl, G. R. Wilson, M. K. McBride, K. L. Forrester, E. R. Adelson, V. S. Arnold, S. T. Wetthasinghe, V. A. Rassolov, M. D. Smith, D. Sosnin, **I. Aprahamian**, M. Karmakar, S. K. Bag, A. Thakur, M. Zhang, B. Z. Tang, J. A. Castaño, M. N. Chaur, M. M. Lerch, R. A. Fischer, J. Aizenberg, R. Herges, J.-M. Lehn, N. B. Shustova,* Breaking the Photoswitch Speed Limit, *Nat. Comm.* **2023**, *14*, 7556

[80] Q. Qiu, Q. Qi, J. Usuba, K. Lee, **I. Aprahamian**,* G. G. D. Han,* Visible Light Activated Energy Storage in Solid-State Azo-BF_2 Switches, *Chem. Sci.* **2023**, 14, 11359–11364

Selected as a Most popular 2023 energy & environmental chemistry articles, 2023 Chemical Science HOT Article Collection and 2023 ChemSci Pick of the Week Collection

[79] H. Fu, S. Pramanik, **I. Aprahamian**,* Metal and Proton Relay-Controlled Hierarchical Multistep Switching Cascade, *J. Am Chem. Soc.* **2023**, 145, 19554–19560

[78] **I. Aprahamian**,* S. M. Goldup,* Non-equilibrium Steady States in Catalysis, Molecular Motors, and Supramolecular Materials: Why Networks and Language Matter, *J. Am Chem. Soc.* **2023**, *145*, 14169–14183

[77] A. N. Bismillah**, I. Aprahamian***, Boron difluoride hydrazone (BODIHY) complexes: A new class of fluorescent molecular rotors, *J. Phys. Org. Chem.* **2023**, e4485

Selected as the Front Cover of the June 2023 issue. Among the top 10 most-cited and top 10% of most-viewed papers published by the journal in 2023.

[76] G. C. Thaggard, G. A. Leith, D. Sosnin, C. R. Martin, K. C. Park, M. K. McBride, J. Lim, B. J. Yarbrough, B. K. P. M. Kankanamalage, G. R. Wilson, A. R. Hill, M. D. Smith, S. Garashchuk, A. B. Greytak, **I. Aprahamian**,* N. B. Shustova,* Confinement-Driven Photophysics in Hydrazone-Based Hierarchical Materials, *Angew. Chem. Int. Ed.* **2023**, e202211776

Designated as *Very Important Paper*

[75] Q. Qiu, S. Yang, M. A. Gerkman, H. Fu, **I. Aprahamian**,* G. G. D. Han,* Photon Energy Storage in Strained Cyclic Hydrazones: Emerging Molecular Solar Thermal Energy Storage Compounds, *J. Am. Chem. Soc.* **2022**, *144*, 12627–12631

[74] L. -Q. Zheng, S. Yang, S. Krähenbühl, V. V. Rybkin, J. Lan, **I. Aprahamian,*** R. Zenobi,* Effect of the alkyl linker length on the photoisomerization of hydrazone switches on metal surfaces, *Mater. Today Chem.* **2022**, *24*, 100797

Published as part of a special issue dedicated to the 80th birthday of Prof. Fraser Stoddart

[73] S. Yang, J. D. Harris, A. Lambai, L. L. Jeliazkov, G. Mohanty, H. Zeng, A. Priimagi, **I. Aprahamian,*** Multistage reversible T_g photomodulation and hardening of hydrazone-containing polymers, *J. Am. Chem. Soc.* **2021**, *143*, 16348–16353

[72] R. Liang, J. Samanta, B. Shao, M. Zhang, R. J. Staples, A. D. Chen, M. Tang, Y. Wu, **I. Aprahamian**,* C. Ke,* A Heteromeric carboxylic-acid-based single crystalline crosslinked organic framework, *Angew. Chem. Int. Ed.* **2021**, *60*, 23176–23181

Designated as *Very Important Paper* and highlighted in X-Mol

[71] S. Yang, D. Larsen, M. Pellegrini, S. Meier, D. F. Mierke,* S. R. Beeren,* **I. Aprahamian***, Dynamic enzymatic synthesis of γ-cyclodextrin using a photoremovable hydrazone template, *Chem* **2021**, *7*, 2190–2200

Highlighted in C&EN, COSMOS, Dartmouth News, NRC and ChemistryWorld

[70] A. N. Bismillah**, I. Aprahamian***, Fundamental studies to emerging applications of pyrrole-BF2 (BOPHY) fluorophores, *Chem. Soc. Rev.* **2021**, 50, 5631–5649

[69] B. Shao, **I. Aprahamian***, Hydrazones as New Molecular Tools, *Chem* **2020**, *6*, 2162–2173

[68] **I. Aprahamian***, The Future of Molecular Machines, *ACS Cent. Sci.* **2020**, *6*, 347–358

[67] X. Guo, B. Shao, S. Zhou*, **I. Aprahamian***, Z. Chen*, Visualizing intracellular particles and precise control of drug release using an emissive hydrazone photochrome *Chem. Sci.* **2020**, 11, 3016–3021

[66] B. Shao, **I. Aprahamian***, Planarization-induced activation wavelength red-shift and thermal half-life acceleration in hydrazone photoswitches *ChemistryOpen* **2020**, *9*, 191–194

Invited contribution to a special issue dedicated to Prof Jean-Marie Lehn's 80th birthday

[65] L.-Q. Zheng, S. Yang, J. Lan, L. Gyr, G. Goubert, H. Qian, I. Aprahamian, R. Zenobi, Solution phase and surface photoisomerization of a hydrazone switch with long thermal half-life *J. Am. Chem. Soc.* **2019**, *141*, 17637–17645

[64] Iagatti, A.; Baihao Shao, B.; Credi, A.; Ventura*, B.; **Aprahamian, I.***; Di Donato, M., Ultrafast processes triggered by one- and two-photon excitation of a photochromic and luminescent hydrazone, *Beilstein J. Org. Chem.* **2019**, *15*, 2438–2446

Invited contribution to special issue on Molecular Switches

[63] B. Shao, N. Stankewitz, J. A. Morris, M. D. Liptak, **I. Aprahamian***, White-light emission from a structurally simple hydrazone *ChemCommun* **2019**, *55*, 9551-9554

[62] B. Shao, **I. Aprahamian***, pH-Induced Fluorescence and Thermal Relaxation Rate Modulation in a Hydrazone Photoswitch *ChemPhotoChem* **2019**, *3,* 361–364

Invited contribution to special issue on Photoresponsive Molecular Switches and Machines (Co-Edited by the PI)

[61] B. Shao, H. Qian, Q. Li, **I. Aprahamian***, Structure Property Analysis of the Solution and Solid-State Properties of Bistable Photochromic Hydrazones *J. Am. Chem. Soc.* **2019**, *141,* 8364−8371

[60] A. Ryabchun, Q. Li, F. Lancia, **I. Aprahamian***, N. Katsonis*, Shape-Persistent Actuators from Hydrazone Photoswitches *J. Am. Chem. Soc.* **2019**, *141,* 1196–1200

[59] M. J. Moran, M. Magrini, D. Walba, **I. Aprahamian***, Driving a Liquid Crystal Phase Transition using a Photochromic Hydrazone *J. Am. Chem. Soc.* **2018**, *140*, 13623–13627

[58] B. Shao, M. Baroncini, H. Qian, L. Bussotti, M. Di Donato, A. Credi*, **I. Aprahamian***, Solution and Solid-State Emission Toggling of a Photochromic Hydrazone *J. Am. Chem. Soc.* **2018**, *140*, 12323–12327

Highlighted in ScienceDaily, PhysOrg, C&EN and other news outlets.

[57] Q. Li, H. Qian, B. Shao, R. P. Hughes, **I. Aprahamian***, Building Strain with Large Macrocycles and using it to Tune the Thermal Half-Lives of Hydrazone Photochromes, *J. Am. Chem. Soc.* **2018**, *140*, 11829–11835

Featured in *JACS* Spotlights

[56] J. D, Harris, M. J. Moran, **I. Aprahamian***, New Molecular Switch Architectures, *PNAS* **2018**, *115*, 9414–9422

Contribution to a special feature on "Artificial Molecular Machines"

[55] H. Qian, S. Pramanik, **I. Aprahamian***, Photochromic Hydrazone Switches with Extremely Long Thermal Half-Lives, *J. Am. Chem. Soc.* **2017**, *139*, 9140–9143

[54] **I. Aprahamian***, Hydrazone Switches and Things in Between, *ChemCommun* **2017**, *53*, 6674–6684

Highlighted as front cover

[53] H. Qian, Shao, B., **I. Aprahamian***, Visible-Light Fluorescence Photomodulation in Azo-BF_2 Switches, *Tetrahedron* **2017**, *73*, 4901–4904

Invited contribution to the Tetrahedron Symposium-in-Print dedicated to Prof. Ben Feringa

[52] V. Carboni, X. Su, H. Qian, **I. Aprahamian***, A. Credi*, Blue-Light-Emitting Triazolopyridinium and Triazoloquinolinium Salts, *ChemPhotoChem* **2017**, *1*, 222–229

[51] H. Qian, Y.-Y. Wang, D.-S. Guo, **I. Aprahamian***, Controlling the Isomerization Rate of an Azo-BF_2 Switch Using Aggregation, *J. Am. Chem. Soc.* **2017**, *139*, 1037–1040

[50] H. Qian, M. E. Cousins, E. H. Horak, A. Wakefield, M. D. Liptak, **I. Aprahamian***, Suppression of Kasha's Rule as a Mechanism for Fluorescent Molecular Rotors and Aggregation Induced Emission, *Nature Chem.* **2017**, 9, 83–87.

Highlighted in ScienceDaily and PhysOrg and many other news outlets.

[49] S. Pramanik, **I. Aprahamian***, Hydrazone Switch-Based Negative Feedback Loop, *J. Am. Chem. Soc.* **2016**, *138*, 15142–15145.

[48] **I. Aprahamian***, Molecules Bearing Robotic Arms, *Nature Chem.* **2016**, 8, 97–99 (News and Views).

[47] H. Qian, **I. Aprahamian***, An Emissive and pH Switchable Hydrazone-Based Hydrogel, *Chem. Commun*. **2015**, *51*, 11158–11161

Highlighted as a front cover

[46] J. T. Foy, D. Ray, **I. Aprahamian***, Regulating Signal Enhancement with Coordination-Coupled Deprotonation of a Hydrazone Switch, *Chem. Sci.* **2015**, *6*, 209–213

[45] L. Tatum, J. T. Foy, **I. Aprahamian***, Waste Management of Chemically Activated Switches: Using a Photoacid to Eliminate Accumulation of Side Products, *J. Am. Chem. Soc.* **2014**, *136*, 17438–17441

Featured in *JACS* Spotlights and highlighted in LaserFocusWorld, ScienceDaily and PhysOrg. Also highlighted as front cover of LaserFocusWorld

[44] Y. Yang, R. P. Hughes, **I. Aprahamian***, Near-Infrared Light Activated Azo-BF_2 Switches, *J. Am. Chem. Soc.* **2014,** *136*, 13190–13193

[43] M. L. Croteau, X. Su, D. E. Wilcox,* **I. Aprahamian***, Metal Coordination and Isomerization of a Hydrazone Switch, *ChemPlusChem* **2014**, *79*, 1214–1224

Invited contribution to the Early Career Series.

[42] L. Tatum, X. Su, **I. Aprahamian***, Simple Hydrazone Building Blocks for Complicated Functional Materials, *Acc. Chem. Res.* **2014**, *47*, 2141–2149 (Open Access)

Invited contribution to the special issue on Responsive Host Guest Systems.

Pre-Tenure

[41] X. Su, **I. Aprahamian***, Hydrazone-Based Switches, Metallo-Assemblies and Sensors, *Chem. Soc. Rev.* **2014**, *43*, 1963–1981

Invited contribution to the special issue on “Supramolecular and Dynamic Covalent Reactivity”.

[40] X. Su, **I. Aprahamian***, Zinc(II)-Regulation of Hydrazone Switch Isomerization Kinetics, *Org. Lett.* **2013**, *15*, 5952–5955

[39] X. Su, S. Voskian, R. P. Hughes, **I. Aprahamian***, Manipulating Liquid Crystal Properties Using a pH Activated Hydrazone Switch, *Angew. Chem. Int. Ed.* **2013**, *52,* 10734–10739.

Highlighted in Chemistry & Engineering News (**2013**, *91* (35), 43), Medical News Today, Wiley-VCH Hot Topics, Chemistry Views, Liquid Crystals Today, and as a frontispiece.

[38] T. F. Robbins, H. Qian, X. Su, R. P. Hughes, **I. Aprahamian***, Cyanide Detection Using a Triazolopyridinium Salt, *Org. Lett.* **2013**, *15*, 2386–2389.

[37] X. Su, M. Liptak, **I. Aprahamian***, Water Soluble Triazolopyridinium Salts as Tunable Blue Light Emitters, *Chem. Commun.* **2013**, *49*, 4160–4162.

Invited contribution to the 2013 ChemComm Emerging Investigator Issue.

[36] Y. Yang, R. P. Hughes, **I. Aprahamian***, Visible Light Switching of a BF_2-Coordinated Azo Compound, *J. Am. Chem. Soc.* **2012**, *134*, 15221–15224.

Highlighted in Chemistry & Engineering News (**2012**, *90* (*38*), 26).

[35] X. Su, M. Lõkov, A. Kütt, I. Leito*, **I. Aprahamian***, Unusual *para*-Substituent Effects on the Intramolecular Hydrogen-Bond in Hydrazone-Based Switches, *Chem. Commun.* **2012**, *48*, 10490–10492.

Invited contribution to the special issue on Aromaticity.

[34] D. Ray, J. T. Foy, R. P. Hughes, **I. Aprahamian***, A Switching Cascade of Hydrazone-Based Rotary Switches through Coordination-Coupled Proton Relays, *Nature Chem.* **2012**, *4*,757-762.

Highlighted in the News and Views section of *Nature Chemistry* (**2012**, *4*, 695-696).

[33] X. Su, T. Lessing, **I. Aprahamian***, The Importance of the Rotor in Hydrazone-Based Molecular Switches, *Beilstein J. Org. Chem.* **2012**, *8*, 872–876.

Invited contribution to the Molecular Switches and Cages thematic series.

[32] J. T. Foy, E. B. Wilkes, **I. Aprahamian***, Self-Assembly of Benzyl Cyclopentadienyl Lithium, *CrystEngComm* **2012**, *14*, 6126–6128.

Invited contribution to the New Talent: Americas special issue

[31] Y. Yang, X. Su, C. Carroll, **I. Aprahamian***, Aggregation Induced Emission in BF_2-Hydrazone (BODIHY) Complexes, *Chem. Sci.* **2012**, *3*, 610–613.

One of the top 10 most accessed papers in November 2011
Highlighted by ACS Noteworthy Chemistry (January 23, 2012)

[30] S. M. Landge, K. Tkatchouk, D. Benitez, D. A. Lanfranchi. M. Elhabiri, W. A. Goddard III, I. Aprahamian*, Isomerization Mechanism in Hydrazone-Based Rotary Switches: Lateral Shift, Rotation, or Tautomerization?, *J. Am. Chem. Soc.* **2011**, *133*, 9812–9823.

[29] X. Su, T. F. Robbins, **I. Aprahamian***, Switching through Coordination-Coupled Proton Transfer, *Angew. Chem. Int. Ed.* **2011**, *50,* 1841–1844.

[28] X. Su, **I. Aprahamian***, Switching Around Two Axles: Controlling the Configuration and Conformation of a Hydrazone-Based Switch, *Org. Lett.* **2011**, *13*, 30–33.

[27] S. M. Landge, **I. Aprahamian***, pH Activated Configurational Rotary Switch: Controlling the *E*/Z Isomerization in Hydrazones, *J. Am. Chem. Soc.* **2009**, *131*, 18269–18271.

Post-doctoral Research

[26] T. Yasuda, K. Tanabe, K. K. Coti, **I. Aprahamian**, J. F. Stoddart, T. Kato, "A Redox-Switchable [2]Rotaxane in a Liquid-Crystalline State", *Chem. Commun.* **2010**, 1224–1226.

Selected as a Hot Article
Highlighted in NPG Asia Materials

[25] A. Trabolsi, A. C. Fahrenbach, S. K. Dey, A. I. Share, D. C. Friedman, S. Basu, T. B. Gasa, N. M. Khashab, S. Saha, **I. Aprahamian**, H. A. Khatib, A. H. Flood, J. F. Stoddart, "A Tristable [2]Pseudo[2]Rotaxane", *Chem. Commun.* **2010**, 871–873.

[24] Y.-L Zhao, W. R. Dichtel, A. H. Trabolsi, S. Saha, **I. Aprahamian**, J. F. Stoddart, "A Redox-Switchable α-Cyclodextrin-Based [2]Rotaxane", *J. Am. Chem. Soc.* **2008**, *130*, 11294–11296.

[23] W. R. Dichtel, O. Š. Miljanić, W. Zhang, J. M. Spruell, K. Patel, **I. Aprahamian**, J. R. Heath, J. F. Stoddart, "Kinetic and Thermodynamic Approaches for the Efficient Formation of Mechanical Bonds", *Acc. Chem. Res.* **2008**, 41, 1750–1761.

[22] Y.-L Zhao, **I. Aprahamian**, A. H. Trabolsi, N. Erina, J. F. Stoddart, "Organogel Formation by a Cholesterol-Stoppered Bistable [2]Rotaxane and Its Dumbbell Precursor", *J. Am. Chem. Soc.* **2008**, *130*, 6348–6350.

[21] **I. Aprahamian**, J.-C. Olsen, A. H. Trabolsi, J. F. Stoddart, "Tetrathiafulvalene Radical Cation Dimerization in a Bistable Tripodal [4]Rotaxane", *Chemistry – A European Journal* **2008**, 14, 3889–3895.

[20] A. Coskun, S. Saha, **I. Aprahamian**, J. F. Stoddart, "A Reverse Donor-Acceptor Bistable [2]Catenane", *Org. Lett*. **2008**, *10*, 3187–3190.

[19] O. Š. Miljanić, W. R. Dichtel, **I. Aprahamian**, R. D. Rohde, H. D. Agnew, J. R. Heath, J. F. Stoddart, "Rotaxanes and Catenanes by Click Chemistry", *QSAR Comb. Sci.* **2007**, *27*, 1165–1174. (Invited Review)

[18] **I. Aprahamian**, O. Š. Miljanić, W. R. Dichtel, K. Isoda, T. Yasuda, T. Kato, J. F. Stoddart, "Clicked Interlocked Molecules", *Bull. Chem. Soc. Jpn.* **2007**, *80*, 1856–1869. (Invited Review – Back Cover)

[17] S. Kang, **I. Aprahamian**, J. F. Stoddart, "Pirouetting in Chiral [2]Catenanes", *Israel J. Chem.* **2007**, *47*, 253–262.

[16] **I. Aprahamian**, T. Yasuda, T. Ikeda, S. Saha, W. R. Dichtel, K. Isoda, T. Kato, J. F. Stoddart, "A Liquid Crystalline Bistable [2]Rotaxane", *Angew. Chem. Int. Ed.* **2007**, *46*, 4675–4679.

[15] T. Ikeda, **I. Aprahamian**, J. F. Stoddart, "The Blue-Colored Donor-Acceptor [2]Rotaxane", *Org. Lett*. **2007**, *9*, 1481–1484.

[14] **I. Aprahamian**, W. R. Dichtel, T. Ikeda, J. R. Heath, J. F. Stoddart, "A Clicked Bistable [2]Rotaxane", *Org. Lett*. **2007**, *9*, 1287–1290.

[13] T. Ikeda, S. Saha, **I. Aprahamian**, K. C.-F. Leung, A. Williams, W.-Q. Deng, A. H. Flood, W. A. Goddard III, J. F. Stoddart, "Toward Electrochemically-

Controllable Tristable Three-Station [2]Catenanes", *Chem. Asian J.* **2007**, *2*, 76–93.

[12] S. Nygaard, K. C.-F. Leung, **I. Aprahamian**, T. Ikeda, S. Saha, B. W. Laursen, S.-Y. Kim, S. W. Hansen, P. C. Stein, A. H. Flood, J. F. Stoddart, J. O. Jeppesen, "Functionally Rigid Bistable [2]Rotaxanes", *J. Am. Chem. Soc.* **2007**, *129*, 960–970.

Graduate Research

[11] R. J. Vermeil, D. O. Miller, L. N. Dawe, **I. Aprahamian**, T. Sheradsky, M. Rabinovitz, G. J. Bodwell, "Mixed [2.2]Cyclophanes of Pyrene and Benzene" *Aust. J. Chem.* **2010**, *63*, 1703–1716.

[10] **I. Aprahamian**, H. A. Wegner, T. Sternfeld, K. Rauch, A. de Meijere, T. Sheradsky, L. T. Scott, M. Rabinovitz, "Anions and Polyanions of Oligoindenopyrenes: Modes of Electron Delocalization and Dimerization", *Chem. Asian J.* **2006**, *1*, 678–685.

[9] A. de Meijere, B. Stulgies, K. Albrecht, K. Rauch, H. A. Wegner, H. Hopf, L. T. Scott, L. Eshdat, **I. Aprahamian**, M. Rabinovitz, "New Interesting Molecular Topologies by Way of Modern Cross-Coupling Reactions", *Pure Appl. Chem.* **2006**, *78*, 813–830.

[8] **I. Aprahamian**, D. V. Preda, M. Bancu, A. P. Belanger, T. Sheradsky, L. T. Scott, M. Rabinovitz, "Reduction of Bowl-Shaped Hydrocarbons: Dianions and Tetraanions of Annelated Corannulenes", *J. Org. Chem.* **2006**, *71*, 290–298.

[7] **I. Aprahamian**, D. Eisenberg, R. E. Hoffman, T. Sternfeld, Y. Matsuo, E. A. Jackson, E. Nakamura, L. T. Scott, T. Sheradsky, M. Rabinovitz, "Ball-and-Socket Stacking of Supercharged Geodesic Polyarenes: Bonding by Interstitial Lithium Ions", *J. Am. Chem. Soc.* **2005**, *127*, 9581–9587.

[6] **I. Aprahamian**, G. J. Bodwell, J. J. Fleming, G. P. Manning, M. R. Mannion, B. L. Merner, T. Sheradsky, R. J. Vermeij, M. Rabinovitz, "Reduction of Strained Polycycles: How Much Strain Can a Pyrene Anion Take?", *J. Am. Chem. Soc.* **2004**, *126*, 6765–6775.

[5] N. Treitel, R. Shenhar, **I. Aprahamian**, T. Sheradsky, M. Rabinovitz, "Calculations of PAH anions: When Are Diffuse Functions Necessary?" *Phys. Chem. Chem. Phys.* **2004**, *6*, 1113–1121.

[4] **I. Aprahamian**, G. J. Bodwell, J. J. Fleming, G. P. Manning, M. R. Mannion, T. Sheradsky, R. J. Vermeij, M. Rabinovitz, "Reductive Dimerization of Tethered Pyrenes: Implications For the Reduction of Polycyclic Aromatic Hydrocarbons", *Angew. Chem. Int. Ed.* **2003**, *42*, 2547–2550.

This paper was designated a "VIP".

[3] **I. Aprahamian**, G. J. Bodwell, J. J. Fleming, G. P. Manning, M. R. Mannion, T. Sheradsky, R. J. Vermeij, M. Rabinovitz, "The Great Escape" from Antiaromaticity: Reduction of Strained Pyrenes", *J. Am. Chem. Soc.* **2003**, *125*, 1720–1721.

Selected as an "Editors' Choice" by *Science*. See *Science*, **2003**, *299*, 979–981.

[2] **I. Aprahamian**, R. E. Hoffman, T. Sheradsky, D. V. Preda, M. Bancu, L. T. Scott, M. Rabinovitz, "A Four-Step Alternating Reductive Dimerization/Bond-Cleavage of Indenocorannulene", *Angew. Chem. Int. Ed.* **2002**, *41*, 1712–1715.

[1] T. Sternfeld, R. E. Hoffman, **I. Aprahamian**, M. Rabinovitz, "Fullerene Anions: Unusual Charge Distribution in C_{70}^{6-}", *Angew. Chem. Int. Ed.* **2001**, *40*, 455–457.

Book Chapter(s):

[2] B. Shao, **I. Aprahamian**, "Arylhydrazones" In Molecular Photoswitches : Chemistry, Properties, and Applications; Z. L. Pianowski, Ed; Wile-VCH GmbH; Weinheim (Germany), **2022**, 114–131.

[1] **I. Aprahamian**, M. Rabinovitz, "Polycyclic and Fullerene Lithium Carbanions" In *The Chemistry of Organolithium Compounds (Vol II)*; Z. Rappoport, I. Marek, Eds; John Wiley & Sons Ltd.; Chichester (UK), **2006**, 477–524.

Patents (Independent Research)

[1] X. Su, **I. Aprahamian**, Triazolium and Tetrazolium Derivatives as Organic Light Emitters
[2] Y. Yang, R. P. Hughes, **I. Aprahamian**, Molecular Switches Based on *cis/trans* Isomerization of BF_2-Cordinated Azo Compounds
[3] H. Qian, S. Pramanik, **I. Aprahamian**, Photochromic Hydrazone Switches.
[4] S., Yang, J. Harris, L. Jeliazkov, **I. Aprahamian** T_G Manipulation via *Z/E* Hydrazone Photoswitching. Patent Application Number 17/017,222

Invited Lectures

[147] Department of Chemistry, University of Rochester, October 10, **2025**, Rochester, NY
[146] ***Keynote Lecture:*** New Trends in Chemistry Conference, September 24, **2025**, National Academy of Sciences, Yerevan, Armenia
[145] Photoexciting Molecules Conference, November 11, **2025**, ISTA, Vienna, Austria
[144] ***Keynote Lecture:*** SPIE Optics+Photonics, August 4, **2025**, San Diego, CA
[143] Physical Organic Chemistry GRC, June 25, **2025,** Holderness, NH
[142] ISMSC, May 28, **2025**, Kyoto, Japan
[141] Department of Chemistry, Pittsburgh University, April 22, **2025**, Pittsburgh, PA
[140] Advancement in Ion Separation, ACS Meeting, March 24, **2025**, San Diego, CA
[139] Beilstein Organic Chemistry Symposium, October 9, **2024**, Limburg, Germany
[138] XIII International Symposium on Nano & Supramolecular Chemistry, October 6, **2024**, Sardinia, Italy
[137] Telluride Workshop on Molecular Rotors, Motors and Switches, August 12, **2024**, Telluride, CO
[136] Scientific Technological Center of Organic and Pharmaceutical Chemistry of NAS Republic of Armenia, July 2, **2024**, Yerevan, Armenia
[135] Systems Chemistry GRC, June 17, **2024**, Portland, ME
[134] MASC Meeting, December 19, **2023**, Birmingham, UK

[133] 4th International Conference on Photoalignment and Photopatterning in Soft Materials, December 15, **2023**, St Petersburg, FL
[132] International Symposium on Photochromism, November 7, **2023**, Nara, Japan
[131] Molecular Rotors Workshop, IOCB Prague, November 2, **2023**, Prague, Czech Republic
[130] Department of Chemistry, East China University of Science and Technology, July 27, **2023**, Shanghai, China
[129] Department of Chemistry, Fudan University, July 26, **2023**, Shanghai, China
[128] Department of Chemistry, Nanjing University, July 24, **2023**, Nanjing, China
[127] International Advanced Materials Symposium, July 23, **2023**, Nanjing, China
[126] Artificial Molecular Switches and Motors Gordon Research Conference, June 20, **2023**, Colby-Sawyer College, New London, NH
[126] ACS NERM, June 15, **2023**, Northeastern University, Boston, MA
[125] Artificial Molecular Switches and Motors Gordon Research Conference, June 20, **2023**, Colby-Sawyer College, New London, NH
[124] Department of Chemistry, University of South Florida, April 26, **2023**, Tampa, FL
[123] Telluride Workshop on Molecular Rotors, Motors and Switches, July 13, **2022**, Telluride, CO
[122] Department of Chemistry, Northwestern University, March 30, **2022**, Evanston, IL
[121] Department of Chemistry, University of Montreal, March 23, **2022**, Montreal, Canada
[120] Department of Chemistry, McGill University, March 22, **2022**, Montreal, Canada
[119] Pacifichem, Smart Energy-Related Materials in the Age of Globalization, December 19, **2021**.
[118] Pacifichem, Smart Photoresponsive Molecular Systems Symposium, December 17, **2021**.
[117] Pacifichem, Aggregation-Induced Emission Symposium, December 17, **2021**.
[116] MRS, December 2, **2020**.
[115] Department of Chemistry, KASUT, October 4, **2020**.
[114] 2nd Frontiers in Photochemistry Conference, February 22, **2020,** Nassau, Bahamas
[113] Molecular Rotors Workshop, IOCB Prague, November 22, **2019**, Prague, Czech Republic
[112] Department of Chemistry, EPFL, October 31, **2019**, Lausanne, Switzerland
[111] Department of Chemistry, University of Fribourg, October 30, **2019**, Fribourg, Switzerland
[110] Department of Chemistry, University of Zurich, October 28, **2019**, Zurich, Switzerland
[109] Department of Chemistry, University of Copenhagen, October 11, **2019**, Copenhagen, Denmark
[108] 18th international Symposium on Novel Aromatic Compounds, July 24, **2019**, Sapporo, Japan
[107] 14th International Symposium on Macrocyclic and Supramolecular Chemistry, June 2 **2019**, Lecce, Italy
[106] DuPont, May 2, **2019**, Marlborough, MA
[105] ACS Graduate Student Symposium on Artificial Molecular Machines, April 2, **2019**, Orlando, FL

[104] Department of Chemistry, Chalmers University of Technology, February 20, **2019**, Gothenburg, Sweden
[103] 10th Singapore International Chemistry Conference, December 17, **2018**, Singapore, Singapore
[102] 6th Thailand International Nanotechnology Conference, December 13, **2018**, Bangkok, Thailand
[101] Department of Chemistry, Humboldt University, November 21, **2018**, Berlin, Germany
[100] Institute of Organic Chemistry, Polish Academy of Sciences, November 16, **2018**, Warsaw, Poland
[99] Department of Chemistry, University of Munich, November 9, **2018**, Munich, Germany
[98] Department of Chemistry, University of Würzburg, November 8, **2018**, Würzburg, Germany
[97] Department of Chemistry, University of Heidelberg, November 7, **2018**, Heidelberg, Germany
[96] Department of Chemistry, University of Ulm, November 6, **2018**, Ulm, Germany
[95] Systems Chemistry Gordon Research Conference, July 29, **2018**, Newry, ME
[94] Telluride Workshop on Molecular Rotors, Motors and Switches, June 26, **2018**, Telluride, CO
[93] European Materials Research Society Meeting, June 20, **2018**, Strasbourg, France
[92] Department of Chemistry, University of Belgrade, June 18, **2018**, Belgrade, Serbia
[91] 101st Canadian Chemistry Conference, May 28, 2018, Edmonton, Canada
[90] Department of Chemistry, Bard College, March 12, **2018**, Annandale-On-Hudson, NY
[89] Department of Chemistry, University of Windsor, Sep 29, **2017**, Windsor, Canada
[88] ChinaNano Conference, August 30, **2017**, Beijing, China
[87] Photochemistry Gordon Research Conference, Bates College, July 24, **2017**, Lewiston, ME
[86] Post-ISMSC Symposium, University of Southampton, July 7, **2017**, Southampton, UK
[85] Golden Age for Chemistry, University of Nottingham, June 25, **2017**, Nottingham, UK
[84] Department of Chemistry, University of Kiel, May 26, **2017**, Kiel, Germany
[83] Department of Chemistry, University of Twente, May 9, **2017**, Enschede, Netherlands
[82] Department of Chemistry, University of Groningen, May 8, **2017**, Groningen, Netherland
[81] Institut de Science et d'Ingénierie Supramoléculaires (ISIS), April 27, **2017**, Strasbourg, France
[80] Max Planck Institute for Polymer Research, April 26, **2017**, Mainz, Germany
[79] Department of Chemistry, University of Bologna, February 28, **2017**, Bologna, Italy
[78] ISOF, CNR, February 14, **2017**, Bologna, Italy
[77] Department of Chemistry, Weizmann Institute, January 11, **2017**, Rehovot, Israel

[76] Department of Chemistry, Hunter College, November 11, **2016**, New York, NY
[75] SUNY ASRC, November 10, **2016**, New York, NY
[74] 8th International Symposium on Photochromism (ISOP 2016), November 6, **2016**, Shanghai, China
[73] National Centre for Nanoscience and Technology, Nov 2, **2016**, Beijing, China
[72] Department of Chemistry, Tsinghua University, Nov 1, **2016**, Beijing, China
[71] Department of Chemistry, Peking University, Oct 31, **2016**, Beijing, China
[70] Department of Chemistry, Soochow University, Oct 28, **2016**, Suzhou, China
[69] Department of Chemistry, UCSB, Oct 12, **2016**, Santa Barbara, CA
[68] Institute of Chemistry, The Hebrew University of Jerusalem, Sep 6, **2016**, Jerusalem, Israel
[67] Institute of Organic Chemistry, Justus-Liebig University Giessen, Aug 30, **2016**, Giessen, Germany
[66] IBS Symposium on Supramolecular Chemistry, July 16, **2016**, Pohang, Korea
[65] 11th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC 2016), July 10, **2016**, Seoul, Korea
[64] Department of Chemistry, Seoul National University, July 9, **2016**, Seoul, Korea
[63] Department of Chemistry, Ewha Womens University, July 7, **2016**, Seoul, Korea
[62] Department of Chemistry, Korea Advanced Institute of Science and Technology (KAIST), July 5, **2016**, Daejeon, Korea
[61] Department of Chemistry, University of Miami, March 18, **2016**, Coral Gables, FL
[60] Department of Chemistry, St Michael's College, Feb 5, **2016**, Burlington, VT
[59] Department of Chemistry, Clarkson University, Sep 11, **2015**, Potsdam, NY
[58] Artificial Molecular Switches and Motors Gordon Research Conference, June 6, **2015**, College, Easton, MA
[57] Department of Chemistry, UT Dallas, Feb 13, **2015**, Dallas, TX
[56] Department of Chemistry, Bowling Green State University, Dec 3, **2014**, Bowling Green, OH
[55] Department of Chemistry, University of New York, Abu Dhabi, Nov 5, **2014**, Abu Dhabi, UAE
[54] Beilstein Symposium on Molecular Switches, Yachthotel Chiemsee, September 24, **2014**, Germany
[53] Department of Chemistry, University of Manchester, August 21, **2014**, Manchester, UK
[52] Targeting and Triggering Basic Research Workshop and Review, August 19, **2014**, University of Cambridge, UK
[51] Telluride Workshop on Molecular Rotors, Motors and Switches, June 29, **2014**, Telluride, CO
[50] Department of Chemistry, University of Pittsburgh, March 22, **2014**, Pittsburgh, PA
[49] Department of Chemistry and Biotechnology, The University of Tokyo, February 28**, 2014**, Japan
[48] Department of Chemistry, Keio University, February 26, **2014**, Japan
[47] Department of Chemistry and Material Science, Tokyo Institute of Technology, February 26, **2014**, Japan
[46] International Symposium on Photochromism, Aoyama Gakuin University, February 24, **2014**, Japan
[45] Department of Chemistry, Ben-Gurion University, October 1, **2013**, Israel

[44] Young Academic Investigators Award Symposium, 246th ACS National Meeting & Exposition, September 8, **2013**, Indianapolis, IN
[43] Department of Chemistry, The Hong Kong Baptist University, August 7, **2013**, Hong Kong
[42] Department of Chemistry, The Chinese University of Hong Kong, August 6, **2013**, Hong Kong
[41] Department of Chemistry, National University of Singapore, June 26, **2013**, Singapore
[40] Division of Chemistry and Biological Chemistry, Nanyang Technological University, July 24, **2013**, Singapore
[39] Physical Organic Chemistry Gordon Conference, June 25, **2013**, Holderness, NH
[38] Department of Chemistry, Northwestern University, May 23, **2013**, Evanston, IL
[37] Department of Chemistry, Columbia University, May 9, **2013**, New York, NY
[36] Department of Chemistry and Biochemistry, UCLA, April 25, **2013**, Los Angeles, CA
[35] Department of Chemistry and Biochemistry, UCSD, April 22, **2013**, San Diego, CA
[34] Department of Chemistry, University of Oregon, April 19, **2013**, Eugene, OR
[33] Department of Chemistry, University of Washington, April 17, **2013**, Seattle, WA
[32] Department of Chemistry, University of Reno, April 16, **2013**, Reno, NV
[31] Department of Chemistry, University of Illinois at Urbana-Champagne, April 4, **2013**, Urbana, IL
[30] Department of Chemistry, Ohio State University, April 2, **2013**, Columbus, OH
[29] Department of Chemistry, Wesleyan University, March 29, **2013**, Middletown, CT
[28] Department of Chemistry, Texas A&M University, March 21, **2013**, College Station, TX
[27] Department of Chemistry, Rice University, March 20, **2013**, Houston, TX
[26] Department of Chemistry, University of Houston, March 19, **2013**, Houston, TX
[25] Department of Chemistry and Biochemistry, University of Notre Dame, March 7, **2013**, Notre Dame, IN
[24] Department of Chemistry, Indiana University, March 5, **2013**, Bloomington, IN
[23] Department of Chemistry, Tulane University, February 25, **2013**, New Orleans, LA
[22] Department of Chemistry and Biochemistry, University of Texas at Austin, February 22, **2013**, Austin, TX
[21] Department of Chemistry, University of Maryland, February 7, **2013**, College Park, MD
[20] Department of Chemistry, Johns Hopkins University, February 6, **2013**, Biltmore, MD
[19] Department of Chemistry, Massachusetts Institute of Technology, January 29 **2013**, Boston, MA
[18] Department of Chemistry, University of Kentucky, January 25 **2013**, Lexington, KY
[17] Division of Materials Science and Engineering, Boston University, December 7 **2012**, Boston, MA
[16] Department of Chemistry, UMass Amherst, November 15 **2012**, Amherst, MA
[15] Department of Chemistry, Boston College, November 6 **2012**, Boston, MA

[14] Department of Chemistry, University of Perugia, June 15 **2012**, Perugia, Italy
[13] 4th International Conference on Smart Materials, Structures and Systems (CIMTEC 2012), June 14 **2012**, Montecatini Terme, Italy
[12] Department of Chemistry, University of Bologna, June 12 **2012**, Bologna, Italy
[11] Department of Chemistry, Northwestern University, May 26 **2012**, Evanston, IL (CCIS Memorial Weekend Symposium)
[10] Department of Chemistry, University of Ohio, April 16 **2012**, Athens, OH
[9] Department of Chemistry, Worcester Polytechnic Institute, April 4 29 **2012**, Worcester, MA
[8] Department of Chemistry, University of Vermont, March 29 **2012**, Burlington, VT
[7] Department of Chemistry, Brandeis University, March 12 **2012**, Waltham, MA
[6] Department of Chemistry, University of New Hampshire, March 6 **2012**, Durham, NH
[5] **Keynote Lecture**, Banff Symposium on Organic Chemistry, November 11 **2011**, Banff, Canada
[4] Department of Chemistry, Nankai University, September 6 **2011**, Tianjin, China
[3] Department of Chemistry, Florida State University, November 4 **2010**, Tallahassee, FL
[2] Department of Chemistry, SUNY Geneseo, October 1 **2010**, Geneseo, NY
[1] Department of Chemistry, Northwestern University, May 30 **2010**, Evanston, IL (CCIS Memorial Weekend Symposium)

Contributed Lectures

Independent Research

[11] I. Aprahamian, Y. Yang, R. P. Hughes, International Symposium on Photochromism **2013**, September 23, 2013, Berlin, Germany
[10] I. Aprahamian, X. Su, S. Voskian, 244th National American Chemical Society Meeting, September 9, **2013**, Indianapolis, IN
[9] I. Aprahamian, F. T. Foy, D. Ray, 8th International Symposium on Macrocyclic and Supramolecular Chemistry, July 7, 2013, Arlington, VA
[8] I. Aprahamian, Y. Yang, 244th National American Chemical Society Meeting, August 22, **2012**, Philadelphia, PA
[7] I. Aprahamian, X. Su, T. F. Robbins, 244th National American Chemical Society Meeting, August 22, **2012**, Philadelphia, PA
[6] I. Aprahamian, X. Su, S. M. Landge, ISACS-6, September 4, **2011**, Beijing, China
[5] I. Aprahamian, X. Su, S. M. Landge, ISNA-14, July 25, **2011**, Eugene, OR
[4] I. Aprahamian, X. Su, S. M. Landge, Pacifichem **2010**, December 15, 2010, Honolulu, HI
[3] I. Aprahamian, X. Su, 240th National American Chemical Society Meeting, August 25, **2010**, Boston, MA
[2] I. Aprahamian, S. M. Landge, X. Su, 2010 Reaction Mechanisms Conference, June 25 **2010**, University of Massachusetts Amherst, MA (*selected out of 80 posters for a short talk*)
[1] I. Aprahamian, 239th National American Chemical Society Meeting, March 21 **2010**, San Francisco, CA