CURRICULUM VITAE

LATHA VENKATARAMAN

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EDUCATION

Ph.D. Physics, Harvard University	1999
M.S. Physics, Harvard University	1997
B.S. Physics, Massachusetts Institute of Technology	1993

Doctoral Thesis: Electronic Properties of One-Dimensional Conductors 1999
Advisor: Prof. Charles M. Lieber

Undergraduate Thesis: Phonon modes of Carbon Nanotubes 1993
Advisor: Mildred S. Dresselhaus

PROFESSIONAL APPOINTMENTS

Columbia University:

Lawrence Gussman Professor of Applied Physics	July 2019
Vice Provost for Faculty Affairs	January 2019
Professor of Applied Physics	July 2016
Professor of Chemistry	July 2016
Associate Professor of Applied Physics (with tenure)	July 2012
Associate Professor of Applied Physics	July 2011
Assistant Professor of Applied Physics	July 2007
Research Scientist, Department of Physics and	September 2003

Center for Electron Transport in Molecular Nanostructures, Columbia University

Vytran Corporation:

Research Scientist November 1999

AWARDS AND PATENTS

Single-Molecule Diodes with High On/Off Ratios Through Environmental Control	2016
Fellow, American Physical Society	2015
Alfred P. Sloan Research Fellowship	2011
Kim Award for Faculty Involvement, Columbia University	2010
Packard Fellowship in Science and Engineering	2008
NSF Career	2008
Professional Schools Research Fellowship Award, Columbia University	2007
Method of Splicing Specialty Fibers with Low Loss, Vytran Corporation	2004

White Prize for Excellence in Teaching, Harvard University 1999
Applied Physics Fellowship, Harvard University 1993

TEACHING

Spring: Applied Electromagnetism – for Junior Applied Physics Majors
Fall: Quantum Physics of Matter – for Seniors and 1st year Graduate Students

LIST OF PUBLICATIONS

Sponsored Students/Post-docs are underlined, corresponding authors have *

[1] C. Gutiérrez-Cerón, R. Oñate, J. Zagal, A. Pizarro, J. F. Silva, C. Castro-Castillo, M. C. Rezende, M. Flores, D. Cortés- Arriagada, A. Toro-Labbé, L. Campos, L. Venkataraman, I. Ponce*, *Molecular conductance versus inductive effects of axial ligands on the electrocatalytic activity of self-assembled iron phthalocyanines: The oxygen reduction reaction,* **Electrochimica Acta**, Volume 327, 134996 (2019)

[2] Y. Zang, Q. Zou*, T. Fu, F. Ng, B. Fowler, J. Yang, H. Li, M. L. Steigerwald*, C. Nuckolls*, **L. Venkataraman***, *Directing Isomerization Reactions of Cumulenes with Electric Fields*, **Nature Communications**, Volume 10, 4482 (2019).

[3] T. Fu, S. Smith, M. Camarasa-Gómez, X. Yu, J. Xue, C. Nuckolls*, F. Evers*, L. **Venkataraman***, S. Wei*, *Enhanced Coupling Through π-Stacking in Imidazole-Based Molecular Junctions,* **Chemical Science**, Accepted (2019)

[4] M. Garner, H. Li, M. Neupane, Q. Zou, T. Liu, T. Su, Z. Shangguan, D. Paley, F. Ng, S. Xiao, C. Nuckolls*, **L. Venkataraman***, G. Solomon*, *Permethylation Introduces Destructive Quantum Interference in Saturated Silanes*, JACS, 141,39, 15471-15476 (2019)

[5] M. L. Ball, B. Zhang, T. Fu, A. M. Schattman, D. W. Paley, F. Ng, **L. Venkataraman***, C. Nuckolls*, M. L. Steigerwald*, *The Importance of Intramolecular Conductivity in Three Dimensional Molecular Solids*, Chemical Science, 10, 9339–9344 (2019).

[6] Y. Zang, I. Stone, M. S. Inkpen, F. Ng, T. H. Lambert, C. Nuckolls, M. L. Steigerwald, X. Roy*, **L. Venkataraman***, *In situ coupling of single molecules driven by Au-catalyzed electrooxidation*, Angewandte Chemie, Vol. 58, p. 16008-16012 (2019).

[7] L. Patera, S. Sokolov, J. Low, L. Campos, **L. Venkataraman***, J. Repp*, *Resolving the unpaired-electron orbital distribution in a stable organic radical by Kondo resonance mapping*, Angewandte Chemie, Vol. 58, p. 11063-11067 (2019).

[8] J. Low, G. Kladnik, L. Patera, S. Sokolov, G. Lovat, E. Kumarasamy, J. Repp, L. Campos*, D. Cvetko*, A. Morgante*, **L. Venkataraman***, *The Environment-Dependent Behavior of the Blatter Radical at the Metal Molecule Interface*, **Nano Letters**, 19 (4), p. 2543–2548 (2019).

[9] E-D. Fung, D. Gelbwaser-Klimovsky, J. Taylor, J. Low, J. Xia, I. Davydenko, L. Campos, S. Marder, U. Peskin*, **L. Venkataraman***, *Breaking Down Resonance: Non-Linear Transport and the Breakdown of Coherent Tunneling Models in Single Molecule Junctions*, **Nano Letters**, 19 (4), p. 2555–2561 (2019).

[10] M. S. Inkpen*, Z.-F. Liu, H. Li, L. Campos, J. B. Neaton, **L. Venkataraman***, *Non-chemisorbed gold-sulfur binding prevails in self-assembled monolayers,* **Nature Chemistry**, 11, p. 351–358 (2019). Featured in Nature Review Materials as a Research Highlight.

[11] G. Lovat, E. Doud, D. Lu, G. Kladnik, M.S. Inkpen, M.L. Steigerwald, D. Cvetko, M. S. Hybertsen, A. Morgante*, X. Roy*, **L. Venkataraman***, *Electronic Structure and Geometry of N-Heterocyclic Carbenes on Au(111),* **Chemical Science**, 10, p930 – 935 (2019).

[12] H. Li, M. H. Garner, Z. Shangguan, Y. Chen, Q. Zheng, T. Su, M. Neupane, T. Liu, M. Steigerwald, F. Ng, C. Nuckolls, S. Xiao*, G. Solomon*, **L. Venkataraman***, *Large Variations in Single Molecule Conductance of Cyclic and Bicyclic Silanes*, **JACS** 140 (44), pp 15080–15088 (2018)

[13] Y. Zang, S. Ray, E-D. Fung, A. Borges, M. H. Garner, M. L. Steigerwald, G.C. Solomon*, S. Patil*, **L. Venkataraman***, *Resonant Transport in Single-Diketopyrrolopyrrole Junctions,* **JACS** 140 (41), pp 13167–13170 (2018).

[14] S. Gunasekaran, D. Hernangómez-Pérez, I. Davydenko, S. Marder*, F. Evers*, **L. Venkataraman***, *Near Length-Independent Conductance of Polymethine Molecular Wires*, **Nano Letters**, 18 (10), pp 6387–6391(2018)

[15] E. Doud, M. S. Inkpen, G. Lovat, E. Montes, D.W. Paley, M.L. Steigerwald, H. Vázquez*, **L. Venkataraman***, X. Roy*, *In Situ Formation of N-Heterocyclic Carbene-Bound Single-Molecule Junctions*, **JACS** 140 (28), 8944–8949 (2018).

[16] M. H. Garner, H Li, Y. Chen, T. A. Su, Z. Shangguan, D. W. Paley, T. Liu, F. Ng, H Li, S. Xiao*, C. Nuckolls*, **L. Venkataraman***, G. C. Solomon*, *Comprehensive suppression of single-molecule conductance using destructive σ-interference,* **Nature**, 558, 415–419 (2018).

[17] A. Ravikumar, G. Kladnik, M. Müller, A. Cossaro, G. Bavdek, L. L. Patera, D. Sánchez-Portal, **L. Venkataraman**, A. Morgante, G. P. Brivio, D. Cvetko, G. Fratesi*, *Tuning ultrafast electron injection dynamics at organic-graphene/metal interfaces*, **Nanoscale** 10, 8014-8022, (2018).

[18] A. Magyarkuti, O. Adak, A. Halbritter*, **L. Venkataraman***, *Electronic and Mechanical Characteristics of Stacked Dimer Molecular Junctions*, **Nanoscale** 10, 8014-8022 (2018)

[19] J. Brisendine, S. Refaely-Abramson, Z. F. Liu, J. Cui, F. Ng, J. B. Neaton*, R. Koder*, **L. Venkataraman*,** *Probing Charge Transport through Peptide Bonds,* **J. Phys. Chem. Lett.**, 9, 763–767 (2018).

[20] G. Lovat, B. Choi, D.W. Paley, M.L. Steigerwald, L. **Venkataraman***, X. Roy*, *Room-temperature current blockade in atomically defined single-cluster junctions*, **Nature Nanotechnology**, 12, 1050–1054, (2017)

[21] X. Yin, Y. Zang, L. Zhu, J. Z. Low, Z.F. Liu, J. Cui, J. B. Neaton*, **L. Venkataraman***, L. M. Campos*, *A Reversible Single-Molecule Switch based on Activated Antiaromaticity*, **Science Advances**, 3,10, eaao2615 (2017)

[22] Y. Zang, A. Pinkard, Z-F. Liu, J.B. Neaton, M. L. Steigerwald, X. Roy*, **L. Venkataraman*,** *Electronically transparent Au-N bonds for molecular junctions*, **JACS**, 139 (42), pp 14845–14848 (2017).

[23] H. Li, T. A. Su, M. Camarasa-Gómez, D. Hernangómez-Pérez, S. E. Henn, V. Pokorný, C. D. Caniglia, M.S. Inkpen, R. Korytár, M. L. Steigerwald*, C. Nuckolls*, F. Evers*, **L. Venkataraman***, *Silver Makes Better Electrical Contacts to Thiol Terminated Silanes than Gold,* **Angewandte Chemie**, 56, (45) p14145–14148 (2017).

[24] H. Li, M. Garner, T. Su, A. Jensen, M. Inkpen, M.L. Steigerwald, **L. Venkataraman***, G. Solomon*, C. Nuckolls*, *Extreme Conductance Suppression in Molecular Siloxanes*, **JACS**, 139 (30), pp 10212–10215 (2017)

[25] A. Borges, J. Xia, S-H. Liu, **L. Venkataraman***, G. Solomon*, *The role of through-space interactions in modulating constructive and destructive interference effects in benzene,* **Nano Letters**, 17 (7), pp 4436–4442 (2017).

[26] Y. Tsuji, T. Stuyver, S. Gunasekaran, L. Venkataraman, *The Influence of Linkers on Quantum Interference: A Linker Theorem*, **J. Phys. Chem. C,** 121 (27), pp 14451–14462. (2017)

[27] M. Inkpen*, Y. Leroux, P. Hapiot, L. Campos, **L. Venkataraman***, *Reversible On-Surface Wiring of Resistive Circuits*, **Chemical Science**, 8, 4340-4346 (2017).

[28] T. Su, H. Li, R. Klausen, N. Kim, M. Neupane, J. Leighton*, M. L. Steigerwald*, L. Venkataraman*, C. Nuckolls*, *Silane and Germane Molecular Electronics*, **Acc. Chem. Res.**, 50 (4), p 1088–1095 (2017).

[29] J. Low, B. Capozzi, J. Cui, S. Wei, **L. Venkataraman***, L. Campos*, *Tuning the polarity of charge carriers using electron deficient thiophenes,* **Chemical Science**, 8, 3254-3259 (2017).

[30] F. Evers and **L. Venkataraman**, *Preface: Special Topic on Frontiers in Molecular Scale Electronics*, **J. Chem. Phys**. 146, 092101 (2017).

[31] M. Kamenetska, J.R. Widawsky, M. Dell'Angela, M. Frei, **L. Venkataraman***, *Temperature Dependent Tunneling Conductance of Single Molecule Junctions,* **J. Chem. Phys.** 146, 092311 (2017).

[32] E-D. Fung, O. Adak, G. Lovat, D. Scarabelli, **L. Venkataraman***, *Too Hot for Photon-Assisted Transport: Hot-Electrons Dominate Conductance Enhancement in Illuminated Single-Molecule Junctions*, **Nano Letters**, 17, 1255−1261 (2017).

[33] H. Li, N. Kim, T. Su, M. L. Steigerwald, C. Nuckolls*, P. Darancet*, J. Leighton*, **L. Venkataraman***, Mechanism for Si—Si Bond Rupture in Single Molecule Junctions, **JACS**, 138 (49), pp 16159–16164 (2016).

[34] A. Borges, E. Fung, F. Ng, **L. Venkataraman***, G. C. Solomon*, Probing the Conductance of the σ-System of Bipyridine Using Destructive Interference, **J. Phys. Chem. Letters**, 7, pp 4825–4829 (2016).

[35] N. T. Kim, H. Li, **L. Venkataraman***, J. L. Leighton*, High-Conductance Pathways in Ring-Strained Disilanes by Way of Direct σ-Si-Si to Au Coordination, **JACS**, 138 (36), pp 11505–11508 (2016).

[36] M. Koepf, C. Koenigsmann, W. Ding, A. Batra, C.F.A. Negre, **L. Venkataraman***, G. W. Brudvig*, V.S. Batista*, C. A. Schmuttenmaer*, R.H. Crabtree*, *Controlling the Rectification Properties of Molecular Junctions through Molecule−Electrode Coupling*, **Nanoscale**, 8, p 16357-16362 (2016).

[37] D. Cvetko*, G. Fratesi*, G. Kladnik, A. Cossaro, G. P. Brivio, **L. Venkataraman***, A. Morgante, *Energy Level Alignment and Ultrafast Charge Injection at Metal-Organic Interfaces,* **PCCP**, 18, 22140-22145 (2016).

[38] C. Koenigsmann, W. Ding, M. Koepf, A. Batra, **L. Venkataraman***, C. F. A. Negre*, G. W. Brudvig*, R. H. Crabtree*, V. S. Batista*, C. A. Schmuttenmaer*, *Structure-Function Relationships in Single-Molecule Rectification by N-phenylbenzamide Derivatives*, **New Journal of Chemistry**, 40, 7373-7378 (2016).

[39] T. Su, H. Li, R. Klausen, J. R. Widawsky, A. Batra, M. L. Steigerwald, **L. Venkataraman***, C. Nuckolls*, *Tuning Conductance in π–σ–π Single–Molecule Wires*, **JACS,** 138 (24), p 7791–7795 (2016).

[40] H. Li, M. Garner, Z. Shangguan, Q. Zheng, T. Su, M. Neupane, P. Li, A. Velian, M. L. Steigerwald, S. Xiao*, C. Nuckolls*, G. Solomon*, **L. Venkataraman***, *Conformations of Cyclopentasilane Stereoisomers Control Molecular Junction Conductance*, **Chemical Science**, 7, p 5657-5662 (2016).

[41] B. Capozzi, J. Low, J. Xia, Z-F. Liu, J.B. Neaton*, L. Campos*, **L. Venkataraman***, *Mapping the Transmission Function of Single-Molecule Junctions*, **Nano Letters**, 16 (6), p 3949–3954 (2016).

[42] M. Hybertsen* and **L. Venkataraman***, *Structure-Property Relationships in Atomic-Scale Junctions: Histograms and Beyond*, **Accounts of Chemical Research**, 49 (3), 452–460 (2016).

[43] T. Su, M. Neupane, M. L. Steigerwald*, **L. Venkataraman***, C. Nuckolls*, *Chemical principles of single-molecule electronics*, **Nature Material Reviews,** 1 (3) 1 (2016).

[44] B. Choi, B. Capozzi, S. Ahn, A. Turkiewicz, G. Lovat, C. Nuckolls, M. L. Steigerwald, **L. Venkataraman***, X. Roy*, *Solvent-Dependent Conductance Decay Constants in Single Cluster Junctions*, **Chemical Science**, 7, 2701–2705 (2016).

[45] O. Adak, G. Kladnik, G. Bavdek, A. Cossaro, A. Morgante*, D. Cvetko*, **L. Venkataraman***, *Ultrafast Bidirectional Charge Transport and Electron Decoherence At Molecule/Surfaces Interfaces: A Comparison of Gold, Graphene and Graphene Nanoribbon Surfaces,* **Nano Letters**, 15, 8316−8321 (2015).

[46] W. Ding, M. Koepf, C. Koenigsmann, A. Batra, **L. Venkataraman***, C. F. A. Negre*, G. W. Brudvig*, R. H. Crabtree*, C. A. Schmuttenmaer*, V. S. Batista*, *Computational Design of Intrinsic Molecular Rectifiers based on Asymmetric Functionalization of N-phenylbenzamide,* **JCTC,** 11, 5888−5896 (2015).

[47] M. Strange, G. Solomon, **L. Venkataraman***, L. M. Campos*, *Reply to "Comment on 'Breakdown of Interference Rules in Azulene, a Nonalternant Hydrocarbon'",* **Nano Letters,** 15 (11), 7177–7178 (2015).

[48] T. Su, H. Li, V. Zhang, M. Neupane, A. Batra, R. S. Klaussen, B. Kumar, M. L. Steigerwald*, **L. Venkataraman***, C. Nuckolls*, Single-Molecule Conductance in Atomically Precise Germanium Wires, **JACS,** 137 (38), 12400−12405 (2015).

[49] M. Kotiuga, P. Darancet, C. Arroyo, **L. Venkataraman**, J. B. Neaton*, *Adsorption-Induced Solvent-Based Electrostatic Gating of Charge Transport through Molecular Junctions*, **Nano Letters**, 15 (7), 4498–4503 (2015).

[50] B. Capozzi, J. Xia, O. Adak, E. Dell, Z. Liu, J.C. Taylor, J. B. Neaton*, L. Campos* and **L. Venkataraman***, *Single-Molecule Diodes with High Rectification Ratios through Environmental Control*, **Nature Nanotechnology**, 10, 522-527 (2015).

[51] O. Adak, R. Korytar, A. Y. Joe, F. Evers*, **L. Venkataraman***, Impact of Electrode Density of States on Transport through Pyridine-Linked Single Molecule Junctions, **Nano Letters**, 15 (6), 3716–3722 (2015).

[52] O. Adak, E. Rosenthal, J. Meisner, E. F. Andrade, A. Pasupathy, C. Nuckolls, M. S. Hybertsen*, **L. Venkataraman***, *Flicker Noise as a Probe of Electronic Interaction at Metal-Single Molecule Interfaces*, **Nano Letters**, 15 (6), 4143–4149 (2015).

[53] H. Li, T. Su, M. L. Steigerwald, C. Nuckolls*, **L. Venkataraman***, *Electric Field Breakdown in Single Molecule Junctions*, **JACS**, 137 (15), 5028–5033, (2015).

[54] T. Su, H. Li, M. L. Steigerwald, **L. Venkataraman***, C. Nuckolls*, *Stereoelectronic Switching in Single-Molecule Junctions*, **Nature Chemistry**, 7, 215–220 (2015).

[55] E.J. Dell, B. Capozzi, J. Xia, **L. Venkataraman***, L. M. Campos*, *Molecular Length Dictates the Nature of Charge Carriers in Single-Molecule Junctions*, **Nature Chemistry**, 7, 209–214 (2015).

[56] D. M Guldi, H. Nishihara, **L. Venkataraman**, *Molecular Wires*, **Chemical Society Reviews**, 44, 842-844 (2015).

[57] G. Balducci, M. Romeo, M. Stener, G. Fronzoni, D. Cvetko, A. Cossaro, G. Kladnik, **L. Venkataraman**, A. Morgante, *Computational Study of Amino Mediated Molecular Interaction Evidenced in N1s NEXAFS: 1,4-Diaminobenzene on Au (111)*, **J. Phys. Chem. C.**, 119, 1988-1995, (2015).

[58] A. Batra, J.S. Meisner, P. Darancet, Q. Chen, M.L. Steigerwald, C. Nuckolls, **L. Venkataraman***, *FD 174: Molecular Diodes Enabled by Quantum Interference*, **Faraday Discussions**, 174, 79-89 (2014)

[59] A. Batra, D. Cvetko, G. Kladnik, O. Adak, C. Cardoso, A. Ferretti, D. Prezzi, E. Molinari, A. Morgante*, **L. Venkataraman***, *Probing the Mechanism for Graphene Nanoribbon Formation on Gold Surfaces through X-ray Spectroscopy*, **Chem. Sci.** vol. 5, p 4419-4423 (2014).

[60] A. Batra, G. Kladnik, N. Gorjizadeh, J. Meisner, M.L. Steigerwald, C. Nuckolls, S.Y. Quek*, D. Cvetko, A. Morgante*, **L. Venkataraman***, *Trimethyltin Mediated Covalent Gold-Carbon Bond Formation*, **JACS**, 136, 12556–12559 (2014).

[61] Z. F. Liu, S. Wei, H. Yoon, O. Adak, I. Ponce, Y. Jiang, W.-D. Jang, L.M. Campos, **L. Venkataraman***, J.B. Neaton*, *The Effect of Transition Metal Coordination on Single-Molecule Junction Conductance of Porphyrins*, **Nano Letters**, 14, 5365–5370 (2014).

[62] B. Capozzi, E.J. Dell, T.C. Berkelbach, D.R. Reichman, **L. Venkataraman***, L.M. Campos*, *Length-Dependent Conductance of Oligothiophenes*, **JACS**, 136, 10486 (2014).

[63] T. Kim, Z.F. Liu, C. Lee, J.B. Neaton, **L. Venkataraman***, *Charge Transport and Rectification in Molecular Junctions Formed with Carbon-Based Electrodes*, **Proc. Natl. Acad. Sci.**, 111, 10928-10932 (2014).

[64] S.V. Aradhya, A. Nielsen, M.S. Hybertsen, **L. Venkataraman***, *Quantitative Bond Energetics in Atomic-Scale Junctions*, **ACS Nano** 8, 7522–7530 (2014).

[65] J. Xia, B. Capozzi, S. Wei, M. Strange, A. Batra, J. Moreno, R. Amir, E. Amir, G. Solomon, **L. Venkataraman***, L. Campos*, *Breakdown of Interference Rules in Azulene, a Non-Alternant Hydrocarbon*, **Nano Letters** 14, 2941–2945 (2014).

[66] B. Capozzi, Q. Chen, P. Darancet, M. Buzzeo, J.B. Neaton, C. Nuckolls, **L. Venkataraman***, *Tunable Charge Transport in Single-Molecule Junctions via Electrolytic Gating*, **Nano Letters**, 14, 1400–1404 (2014).

[67] R. Klausen, J. Widawsky, T. Su, H. Li, M.L. Steigerwald*, **L. Venkataraman***, C. Nuckolls*, *Evaluating Atomic Components in Molecular Circuits*, **Chemical Science**, 5, 1561-1564 (2014).

[68] T. Kim, P. Darancet, J.R. Widawsky, M. Kotiuga, S.Y. Quek, J.B. Neaton*, **L. Venkataraman***, *Determination of Energy Level Alignment and Coupling Strength in 4,4'-Bipyridine Single-Molecule Junctions*, **Nano Letters**, 14, 794-798 (2014).

[69] W. Chen, H. Li, J. R. Widawsky, C. Appayee, **L. Venkataraman***, R. Breslow* *Aromaticity Decreases Single-Molecule Junction Conductance,* **JACS**, 136, 918-920 (2014).

[70] G. Géranton, C. Seiler, A. Bagrets, **L. Venkataraman**, F. Evers, *Transport properties of individual C60-molecules*, **J. Chem. Phys.**, vol 139, 234701 (2013).

[71] A. Batra, P. Darancet, Q. Chen, J. Meisner, J. Widawsky, J.B. Neaton*, C. Nuckolls*, L. **Venkataraman***, *Tuning Rectification in Single-Molecular Diodes*, **Nano Letters**, 13, 6233 (2013).

[72] T. Su, J. Widawsky, H. Li, R. Klausen, J. Leighton*, M. Steigerwald*, **L. Venkataraman***, C. Nuckolls*, *Silicon Ring Strain Creates High-Conductance Pathways in Single-Molecule Circuits*, **JACS**, 135, 18331 (2013).

[73] E.J. Dell, B. Capozzi, K.H. DuBay, T.C. Berkelbach, J.R. Moreno, D.R. Reichman, **L. Venkataraman***, L.M. Campos*, *Impact of Molecular Symmetry on Single-Molecule Conductance*, **JACS**, vol. 135, p 11724-11727, (2013).

[74] G. Kladnik, D. Cvetko, A. Batra, M. Dell'Angela, A. Cossaro, M. Kamenetska, **L. Venkataraman***, A. Morgante*, *Ultrafast Charge Transfer Through Non-Covalent Au-N Interactions in Molecular Systems*, **J. Phys. Chem. C.**, vol 117, p 16477 (2013).

[75] T. Kim, H. Vázquez, M.S. Hybertsen* and **L. Venkataraman***, *'Conductance of Molecular Junctions Formed with Silver Electrodes'*, **Nano Letters**, 13, 3358-3364 (2013).

[76] S. V. Aradhya and **L. Venkataraman***, '*Single-Molecule Junctions Beyond Electronic Transport*', Invited Review, **Nature Nanotechnology** 8, 399–410 (2013).

[77] J. R. Widawsky, W. Chen, H. Vazquez, T. Kim, R. Breslow, M. S. Hybertsen, **L. Venkataraman***, '*Length-Dependent Thermopower of Highly Conducting Au-C Bonded Single Molecule Junctions', **Nano Letters**,* 13, 2889–2894 (2013).

[78] S. Aradhya, M. Frei, A. Halbritter, **L. Venkataraman*,** *'Correlating Structure, Conductance and Mechanics of Silver Atomic-Scale Contacts*', **ACS Nano**, 7, 3706–3712, (2013).

[79] J.S. Meisner, S. Ahn, S.V. Aradhya, M. Krikorian, R. Parameswaran, M.L. Steigerwald, **L. Venkataraman***, and C. Nuckolls* '*The Importance of Direct Metal-π Coupling in Electronic Transport Through Conjugated Single-molecule Junctions*', **J. Am. Chem. Soc.**, 134, 20440−20445, (2012).

[80] P. Darancet, J.R. Widawsky, H.J. Choi, **L. Venkataraman***, J.B. Neaton* '*Quantitative Current-Voltage Characteristics in Molecular Junctions from First Principles*', **Nano Letters**, 12, 6250−6254, (2012).

[81] X. Roy, C. L. Schenck, S. Ahn, R. A. Lalancette, **L. Venkataraman***, C. Nuckolls*, and M. L. Steigerwald*, '*Quantum Soldering of Individual Quantum Dots*', **Angew. Chem. Int. Ed**., 51: 12473–12476 (2012).

[82] H. Vazquez, R. Skouta, S. Schneebeli, M. Kamenetska, R. Breslow*, **L. Venkataraman***, M.S. Hybertsen*, '*Probing the Conductance Superposition Law in Single Molecule Circuits with Parallel Paths*', **Nature Nanotechnology**, 7, 663-667, (2012).

[83] A. Batra, G. Kladnik, H. Vázquez, J.S. Meisner, L. Floreano, C. Nuckolls, D. Cvetko, A. Morgante*, **L. Venkataraman***, '*Quantifying Through-Space Charge Transfer Dynamics in π-Coupled Molecular Systems*', **Nature Communications**, 3, 1086, (2012).

[84] S. V. Aradhya, M. Frei, M.S. Hybertsen*, **L. Venkataraman***, '*Van der Waals Interactions in Metal-Organic Interfaces at the Single-Molecule Level*', **Nature Materials**, 11, 872-876, (2012).

[85] S. Ahn, S. V. Aradhya, R. S. Klausen, B. Capozzi, X. Roy, M. L. Steigerwald, C. Nuckolls*, **L. Venkataraman***, '*Electronic Transport and Mechanical Stability of Carboxyl Linked Single-Molecule Junctions*', **PCCP**, 14, 13841–13845, (2012).

[86] P. Makk, D. Tomaszewski, J. Martinek, Z. Balogh, S. Csonka, M. Wawrzyniak, M. Frei, **L. Venkataraman***, and A. Halbritter*, "Correlation Analysis of Atomic and Single-Molecule Junction Conductance", **ACS Nano** 6 (4) 3411–3423 (2012).

[87] R. S. Klausen, J. R. Widawsky, M. L. Steigerwald, **L. Venkataraman***, and C. Nuckolls*, "Conductive Molecular Silicon", **J. Am. Chem. Soc.** 134, 4541-4544 (2012).

[88] S. V. Aradhya, J. S. Meisner, M. Krikorian, S. Ahn, R. Parameswaran, M. L. Steigerwald, C. Nuckolls*, and **L. Venkataraman***, "Dissecting Contact Mechanics from Quantum Interference in Single-Molecule Junctions of Stilbene Derivatives", **Nano Letters** 12, 1643-1647 (2012).

[89] M. Frei, S. V. Aradhya, M. S. Hybertsen*, and **L. Venkataraman***, "Linker Dependent Bond Rupture Force Measurements in Single-Molecule Junctions", **J. Am. Chem. Soc.** 134, 4003-4006 (2012).

[90] J. R. Widawsky, P. Darancet, J. B. Neaton, **L. Venkataraman***, 'Simultaneous Determination of Conductance and Thermopower of Single Molecule Junctions', **Nano Letters** 12, 354−358, (2012)

[91] W. Chen, J. R. Widawsky, H. Vázquez, S. T. Schneebeli, M. S. Hybertsen*, R. Breslow*, **L. Venkataraman***, 'Highly Conducting π-Conjugated Molecular Junctions Covalently Bonded to Gold Electrodes', J. Am. Chem. Soc. 133,17160-17163 (2011)

[92] M. Kamenetska, M. Dell'Angela, J.R. Widawsky, G. Kladnik, A. Verdini, A. Cossaro, D. Cvetko, A. Morgante, **L. Venkataraman***, 'Structure and Energy Level Alignment of Tetramethyl Benzenediamine on Au(111)', **J. Phys. Chem. C.** 111, 12625-12630, (2011).

[93] B.M. Boardman, J.R. Widawsky, Y.S. Park, **L. Venkataraman***, M.L. Steigerwald and C. Nuckolls, 'Conductance of Single-Cobalt Chalcogenide Cluster Junctions', **J. Am. Chem. Soc.** 133, 8455–8457, (2011).

[94] Z-L Cheng, R. Skouta, H. Vazquez, J. R. Widawsky, S. Schneebeli, W. Chen, M.S. Hybertsen*, R.Breslow*, **L.Venkataraman***, 'In situ Formation of Highly Conducting, Covalent Au-C Contacts for Single Molecule Transport', **Nature Nanotechnology,** 6, 353-357, (2011).

[95] V. Fatemi, M. Kamenetska, J. B. Neaton*, **L. Venkataraman***, 'Environmental Control of Molecular Scale Transport', **Nano Letters**, 11, 1988-1992, (2011).

[96] J. S. Meisner, M. Kamenetska, M. Krikorian, D. F. Sedbrook, M.L. Steigerwald, **L. Venkataraman***, C. Nuckolls*, 'A Single-molecule Potentiometer', **Nano Letters** 11, 1575-1579 (2011).

[97] M. Frei, S. V. Aradhya, M. Koentopp, M. S. Hybertsen*, **L. Venkataraman***, 'Bond Rupture Force Measurements in Single Molecule Junctions', **Nano Letters**, 11, 1575-1579 (2011).

[98] S. Schneebeli, M. Kamenetska, Z. Cheng, R. Skouta, R.A. Friesner, **L. Venkataraman***, R. Breslow*, 'Single molecule conductance through multiple π-π stacked benzene rings determined with direct electrode to benzene ring connections', **J. Am. Chem. Soc.**, 133, 2136–2139 (2011) (Cover)

[99] S. Schneebeli, M. Kamenetska, F. Foss, H. Vazquez, R. Skouta, M. S. Hybertsen*, **L. Venkataraman***, R. Breslow*, 'Electrical Properties of Biphenylenes', **Organic Letters** *12*, 4114-4117, (2010).

[100] R. Parameswaran, J. R. Widawsky, H. Vázquez, Y. S. Park, B.M. Boardman, C. Nuckolls, M.L. Steigerwald, M.S. Hybertsen*, **L. Venkataraman***, 'Conductance of Single Molecule Junctions with Diphenylphosphine Linkers', **J. Phys. Chem. Lett.**, *1*, 2114-2119 (2010).

[101] M. Dell'Angela, G. Kladnik, A. Cossaro, A. Verdini, M. Kamenetska, I. Tamblyn, S.Y. Quek, J.B. Neaton*, D. Cvetko, A. Morgante*, **L. Venkataraman***, 'Relating Energy Level Alignment and Amine-Linked Molecular Junction Conductance', **Nano Letters**, *10*, 2470-2474 (2010).

[102] M. Kamenetska, Su Ying Quek, A. C. Whalley, M. L. Steigerwald, H.J. Choi, Steven G. Louie, C. Nuckolls, M.S. Hybertsen, J. B. Neaton*, **L. Venkataraman***, 'Conductance and Geometry of Pyridine-Linked Single Molecule Junctions', **J. Am. Chem. Soc.**, *132*, 6817–6821 (2010).

[103] J. R. Widawsky, M. Kamenetska, J. Klare, C. Nuckolls, M.L. Steigerwald, M.S. Hybertsen , **L. Venkataraman***, 'Electronic Transport Across Single Molecular Wire Junctions: Voltage Dependence of Conductance', **Nanotechnology**, vol 20, 434009 (2009).

[104] Y. S. Park, J. R. Widawsky, M. Kamenetska, M. L. Steigerwald, M.S. Hybertsen, C. Nuckolls, **L. Venkataraman***, 'Frustrated Rotations in Single Molecule Junction', **JACS** 2009, 131, 10820-10821.

[105] M. Kamenetska, M. Koentopp, A. C. Whalley, Y. S. Park, M. L. Steigerwald, C. Nuckolls, M.S. Hybertsen*, **L. Venkataraman***, 'Formation and Evolution of Single Molecule Junctions' **Phys. Rev. Lett.**, 102, 126803 (2009).

[106] S. Y. Quek, M. Kamenetska, M.L. Steigerwald, H. J. Choi, S. G. Louie, M.S. Hybertsen, J.B. Neaton*, **L. Venkataraman***, 'Mechanically-Controlled Binary Conductance Switching of a Single-Molecule Junction', **Nature Nanotechnology**, vol. **4**, 230 (2009)

[107] **L. Venkataraman***, 'Benzene provides the missing link in molecular junctions', Invited Physics **Viewpoint**, 2008, 1, 5.

[108] M. S. Hybertsen*, **L. Venkataraman***, J. E. Klare, A. C. Whalley, M. L. Steigerwald and C. Nuckolls, Amine-linked single-molecule circuits: systematic trends across molecular families ', Invited Review, **J. Phys.: Condensed Matter** 20 (2008) 374115.

[109] **L. Venkataraman***, "Molecular Junctions: Seeing is Believing", **Nature Nanotechnology**, 2008, 3, 187-188.

[110] Y. S. Park, A. C. Whalley, M. Kamenetska, M.L. Steigerwald, M. S. Hybertsen, C. Nuckolls, **L. Venkataraman***, 'Contact Chemistry and Single Molecule Conductance: A Comparison of Phosphines, Methyl Thiols and Amines', **JACS** 2007, 129, 15768-15769.

[111] D. Millar, **L. Venkataraman** and L. H. Doerrer*, 'Efficacy of Au-Au Contacts for Molecular Conductance Measurement', **J. Phys. Chem. C.**, 2007, 111, 17635-17639.

[112] S. Y. Quek, **L. Venkataraman**, C. H. Choi, S. G. Louie, M. S. Hybertsen, J. B. Neaton*, 'Amine-Gold Linked Single-Molecule Circuits: Experiment and Theory', **Nano Letters**, Vol 7, p 3477-3482, 2007.

[113] J. R. Quinn, Frank W. Foss Jr., **L. Venkataraman*** and Ronald Breslow*, 'Oxidation Potentials Correlate with Conductivities of Aromatic Molecular Wires' **JACS** 2007, 129, 12376-12377.

[114] J. R. Quinn, F. Foss, **L. Venkataraman***, M. S. Hybertsen, R. Breslow, 'Single-Molecule Junction Conductance through Diaminoacene', **JACS** 2007, 129, (21), 6714-6715.

[115] **L. Venkataraman***, Y. S. Park, A. C. Whalley, C. Nuckolls, M. S. Hybertsen, and M. L. Steigerwald, 'Electronics and Chemistry: Varying Single Molecule Junction Conductance with Chemical Substituent', **Nano Letters**, Vol 7, p502-506, 2007.

[116] **L. Venkataraman***, J.E. Klare, C. Nuckolls, M.S. Hybertsen* and M. L. Steigerwald, 'Dependence of Single Molecule Junction Conductance on Molecular Conformation', **Nature**, vol. 442, p904-907, 2006.

[117] **L. Venkataraman***, J.E. Klare, I.W. Tam, C. Nuckolls, M.S Hybertsen and M. Steigerwald, 'Single-Molecule Circuits with Well-Defined Molecular Conductance', **Nano Letters**, vol. 6, pp. 458-462, 2006.

[118] **L. Venkataraman***, Yeon Suk Hong, and P. Kim, 'Electron Transport in a Multi-Channel One-Dimensional Conductor: Molybdenum Selenide Nanowires' **Phys. Rev. Lett.** 96, 076601 (2006).

[119] J. Ulrich, D. Esrail, W. Pontius, **L. Venkataraman***, D. Millar, and L. H. Doerrer, 'Variability of Conductance in Molecular Junctions', **J. Phys. Chem B**, vol 110, p 2462-2466, 2006.

Pre-Columbia Publications:

[120] L. Venkataraman, C. M. Lieber, 'Molybdenum Selenide Molecular Wires as One Dimensional Conductors', Phys. Rev. Lett. 83, 5334-5337 (1999).

[121] F. Silvera, J. Bonalde, T. M. Brill, K. Penanen, L. Venkataraman, 'Experiments Designed to Achieve BEC in Spin-Polarized Hydrogen', Condensed Matter Theories, Vol. 12, edited by J. W. Clark and P. V. Panat (Nova Science Publishers, NY, 1997.)

[122] M. F. Chang, L. Venkataraman, I. F. Silvera, 'Monte Carlo Simulation of Energy Dissipation of Recombining Hydrogen in a Maze', J. Low Temp. Phys., 101, 739, 1995.

[123] R. A. Jishi, L. Venkataraman, M.S. Dresselhaus, G. Dresselhaus, 'Symmetry Properties of Chiral Carbon Nanotubules', Phys. Rev. B 51, 11176, 1995.

[124] R. A. Jishi, L. Venkataraman, M.S. Dresselhaus, G. Dresselhaus, 'Phonon Modes in Carbon Nanotubules', Chem. Phys. Lett., 209, 77, 1993

INVITED PRESENTATIONS

1. Physics Colloquium, ICTS Bangalore, December 2019
2. Indian Institute of Science Physics Seminar, Bangalore, December 2019
3. Invited talk, 9th International Conference on Low-Dimensional Devices, Chile, December 2019
4. Closs Memorial Lecture, University of Chicago, November 2019
5. Physics Colloquium, City College, New York, September 2019
6. Chemistry Seminar, Cornell University, May 2019
7. Physics Colloquium, Emory University, April 2019
8. International Conference on Complex & Functional Materials, Kolkata, India, December 2018.
9. Molecular Engineering Seminar, U. Washington, Seattle, November 2018

10. Plenary Talk, ECMOS2018, Spain, October 2018.
11. Chemistry Colloquium, Binghamton University, September 2018
12. Chemistry Colloquium, University of Southern California, April 2018.
13. ACS March Meeting, Workshop organizer, New Orleans, March 2018.
14. Quantum Nanoscience Department Seminar, TU Delft, March 2018.
15. Villars Wilson Meloche Lectureship, University of Wisconsin, Madison, February 2018.
16. Binational Japanese-German Workshop Single-Molecule Science and Technology, Konstanz, December 2017.
17. Quantum Conductance Workshop, City University of New York, November 2017
18. Keynote speaker, FisMat 2017, Trieste, Italy, October 2017
19. Quantum Transport in Nanoscale Molecular Systems, Telluride, Conference Organizer, July 2017
20. Xiamen University PCOSS Lecture, July 2017
21. Wuhan University of Technology, Invited Seminar, July 2017
22. Institute of Chemistry, Chinese Academy of Sciences, Molecular Science Lecture, July 2017
23. Center for Nanoscale Materials User Meeting, Argonne National Labs, Plenary Speaker, May 2017
24. UCSD Chemistry Seminar, May 2017.
25. Eastern Regional Photosynthesis Conference, Keynote Speaker, Woodshole, MA, April 2017.
26. Many paths to interference: a journey between quantum dots and single molecule junctions, Dresden, Germany, April 2017.
27. George Washington University Chemistry Seminar, March 2017.
28. Frontiers in Physical Chemistry Symposium, Caltech, February 2017.
29. Indian Institute of Science Chemistry Seminar, January 2017.
30. MRS Redox Activity on the Molecular Level Fundamental Studies and Applications Symposium, November 2016.
31. Semiconductor Research Corporation GRC Technology Transfer e-Workshop, November 2016.
32. Physical Chemistry Seminar, University of Rochester, New York, November 2016
33. Physical Chemistry Seminar, Colorado University, Boulder, October 2016
34. Workshop on Dynamical Systems, Milan September 2016
35. Conductivity & Magnetism in Molecular Materials Gordon Conference, Mount Holyoke, MA, August 2016
36. Chemistry Seminar, Ben Gurion University, Israel, July 2016
37. Chemistry Colloquium, Weizmann Institute, Israel, July 2016
38. COPE Seminar at Georgia Tech, April 2016.
39. University of California, Berkeley, Physical Chemistry Seminar, April 2016.
40. 10^{th} Anniversary Celebration of the Molecular Foundry at Berkeley, Invited Talk, March 2016.
41. ACS March Meeting, Invited Talk, San Diego, March 2016.
42. ICTS Public Lecture, TIFR Bangalore, January 2016.
43. NSF Colloquium at TIFR, Mumbai, January 2016.
44. ISACS18: Challenges in Organic Materials and Supramolecular Chemistry, Plenary Talk, Bangalore, India, November 2015.

45. Colloquium, Center for Nanoscale Materials, Argonne National Labs, November 2015
46. ESPMI-VIII, Invited Talk, Tuscon, Arizona, October 2015.
47. Regensberg, Invited Talk, Germany, September 2015.
48. International Conference on Charge Transfer and Transport at the Nanoscale, Invited Talk, Santiago de Compostela, Spain. September 2015.
49. Quantum Transport in Nanoscale Molecular Systems, Telluride, Conference Organizer, July 2015.
50. Quantum Interference in Molecular Junctions, Workshop, Copenhagen, July 2015.
51. Tata Institute of Fundamental Research, Seminar, June 2015
52. The Batsheva de Rothschild Seminar on Molecular Electronics 2015, Israel, Invited Talk, June 2015.
53. University College London, Invited talk, "Theory meets experiment: molecular nanoscience and applications", June 2015.
54. Chemistry Department Seminar, "Chemistry and Physics of Single-Molecule Circuits", University of British Columbia, March 2015.
55. American Physical Society March Meeting, "Conductance and Thermopower in Thiophene and Oxidized Thiophene Single-Molecule Junctions", Invited Talk, March 2015.
56. Chemistry Department Colloquium, "Chemistry and Physics of Single-Molecule Circuits", Columbia University, February 2015.
57. Laboratory of Surface Modification seminar, "Chemistry and Physics of Single-Molecule Circuits", Rutgers University, January 2015.
58. International Workshop "Controlled Charge and Heat Transport at the Molecular Scale", Invited Talk, Konstanz, Germany.
59. Molecular Machines and Devices: Beilstein Nanotechnology Symposium, Invited Talk, September 2014.
60. From Carbon-Rich Molecules to Carbon-Based Materials Conference, Morocco, Invited Talk, September 2014 (declined).
61. Faraday Discussions: Organics, Photonics & Electronics, Glasgow, Invited Talk, September 2014.
62. Seminar at the Jawaharlal Nehru Centre for Advanced Scientific Research in Bangalore, India, August 2014.
63. ICN+T 2014, Vail Colorado, Invited Talk, July 2014. "Chemistry and Physics at the Single Molecule Level".
64. Workshop: Surfaces, Interfaces and Functionalization Processes in Organic Compounds and Applications, Trieste, Italy, Invited Talk, June 2014. "Chemistry and Physics at the Single Molecule Level".
65. Electronic Processes in Organic Materials Gordon Conference, Invited Talk, May 2014. "Controlling Electron Transport in Single-Molecule Junctions".
66. Polymer/Materials Seminar, University of North Carolina, Chapel Hill, February 2014. "Chemistry and Physics at the Single Molecule Level".
67. Tokyo Institute of Technology, Seminar, Tokyo, Japan. November 2013. "Mechanics of Single-Molecule Junctions".
68. International School and Symposium on Molecular Materials, Tokyo, Japan, November 2013. "Structure and Electronics of Single Molecule Circuits".
69. Modeling Single-Molecule Junctions: Novel Spectroscopies and Control, Berlin October 2013, "Mechanics of Single-Molecule Junctions".

70. NANOTECHNOLOGY AND SUSTAINABILITY: New Research in Italy and the United States, October 2013, “Probing van der Waals Forces at the Single-Molecule Level”
71. Packard Fellows Meeting, Denver, Colorado, September 2013 “Probing Electronics and Mechanics One Molecule at a Time”
72. Yale University, Material Science Seminar, September 2013, “Electronics and Mechanics of Single-Molecule Circuits”
73. Quantum Transport in Nanoscale Molecular Systems, Telluride, July 2013, “Electronics of Single-Molecule Circuits”
74. Building blocks for carbon-based electronics: From molecules to nanotubes, Regensburg, April 2013, “Electronics and Structure of Single-Molecule Circuits”
75. American Physical Society March Meeting, “Probing van der Waals Forces at the Single-Molecule Level”, March 2013
76. Princeton University Physical Chemistry Seminar, “Mechanics and Electronics at the Single-Molecule Level”, March 2013
77. 4th International Symposium on Trends in Nanoscience, “Mechanics and Electronics at the Single-Molecule Level” Germany, February 2013
78. University of Konstanz, Physics Department Seminar, “Electronics of Single Molecule Circuits”, Konstanz, February 2013
79. ElecMol’12, Grenoble, “Structure and Electronics of Single-Molecule Circuits”, France, December 2012
80. Gordon Conference on Single Molecule Approaches to Biology, “Measuring Bond Rupture Forces at the Single-Molecule Level”, July 2012
81. Molecular Electronics International Meeting, “Probing the Conductance Superposition Law in Single Molecule Circuits”, Jerusalem, July 2012
82. NC-AFM Conference, “Conductance and force measurements across single-molecule junctions”, Czech Republic, July 2012
83. Lorentz Workshop on Future Directions of Molecular Electronics, “Conductance and force measurements across single-molecule junctions”, June 2012
84. Quantum Transport in Molecular Nanostructures, “Electronics of Single Molecule Circuits”, Dublin, May 2012
85. University of Delaware, Physics Department, “Electronics and Mechanics of Single Molecule Circuits”, April 2012
86. New York University Nanoscience Discussion Group, “Feeling the Invisible: Quantum Interference in Single Molecule Circuits”, New York, April 2012
87. Seminar at Denmark Technical University “Electronics and Mechanics of Single Molecule Circuits”, Copenhagen, February 2012
88. Chemistry Department Seminar at the University of Copenhagen “Electronics and Mechanics of Single Molecule Circuits”, Copenhagen, February 2012
89. AVS 58th Annual International Symposium and Exhibition Nashville, TN, October 2011
90. European Theoretical Spectroscopy Facility (ETSF), Torino, Italy, September 2011
91. 11th European Conference of Molecular Electronics (ECME 2011), Barcelona, September 2011.
92. Physical Organic Chemistry Gordon Research Conference, June 2011
93. Pan American Advanced Studies Institute, Cartagena, Colombia, June 2011
94. Marquette University, Chemistry Colloquium, March 2011
95. Indian Institute of Science, Chemistry Colloquium, October 2010

96. University of Pennsylvania, Physics Colloquium, October 2010
97. Massachusetts Institute of Technology, Physical Chemistry Seminar, October 2010
98. Yale University Applied Physics Seminar, September 2010
99. Spring College on Computational Nanoscience, Trieste, Italy, May 2010
100. The Russell Berrie Nanotechnology Institute at Technion, Winter School, Israel Feb 2010
101. New York University Nanoscience Discussion Group, New York, Feb 2010
102. Institute for Nanotechnology, Karlsruhe, Germany, Jan 2010
103. International Conference on Molecular Electronics, Emmetten, Switzerland, Jan 2010
104. Tata Institute of Fundamental Research, Mumbai, India, Dec 2009
105. Kavli Institute for Theoretical Physics at the University of California, Santa Barbara, Nov 2009
106. Packard Fellows meeting, September 2009
107. Invited Talk at the Contractor's Meeting organized by the Basic Energy Sciences Division of the U.S. Department of Energy, June 2009
108. Physics Colloquium, Rutgers University, April 2009
109. Invited talk at MRS Symposium B, April 2009
110. Invited talk at MRS Symposium Z, April 2009
111. Colloquium, Physical Review, March 2009
112. IWEPNM2009, Kirchberg/Tirol, Austria, March 2009 (declined)
113. Physics@FOM, Veldhoven, Netherlands, January 2009
114. Emergent Nanoscience Workshop, Columbia University, December 2008
115. University of Massachusetts, Amherst, November 2008
116. Department of Applied Physics, Columbia University, October 2008
117. Yeshiva University Physics Colloquium, September 2008
118. Gordon Conference, Electron Donor-Acceptor Interactions, August 2008
119. French – American Young Engineering Scientists Symposium, July 2008
120. IMEC, Belgium, July 2008
121. ESPMI IV Workshop, Princeton University, June 2008
122. Fundamentals of Electronic Nanosystems, St. Petersburg, June 2008 (declined)
123. HOT NANO TOPICS 2008, Slovenia, May 2008 (declined)
124. NSLS-CFN Workshop, Brookhaven National Labs, May 2008
125. VSLI-TSA Conference, Taiwan, April 2008
126. Chemistry Department, City College of New York, March 2008.
127. Chemistry Department, University of Maryland, November 2007.
128. Molecular Foundry, Lawrence Berkeley National Labs, October 2007.
129. Applied Physics, Columbia University, September 2007.
130. ELETTRA Synchrotron Light Laboratory, Trieste, Italy, July 2007.
131. Brookhaven National Labs, Undergraduate Outreach, June 2007
132. Building Electronic Function into Nanoscale Molecular Architectures, NSF-sponsored Workshop, June 2007
133. New York Academy of Sciences, May 2007
134. Chemistry Department, Princeton University, March 2007
135. American Physical Society March Meeting, March 2007
136. Barnard College Chemistry Department, February 2007
137. Physics Department Colloquium, University of Toronto, February 2007
138. Condensed Matter Seminar, New York University Department of Physics, February 2007

139. Mesilla Chemistry Workshop ‘Electron Transfer and Molecular Devices’, February 2007
140. Department of Applied Physics, Columbia University, February 2007
141. Department of Applied and Engineering Physics, Cornell University, January 2007
142. Brookhaven National Laboratories, January 2007
143. Canadian Institute of Advanced Research meeting, November 2006
144. Nanoscale Functional Materials, Cornell University, October 2006
145. Duke University, October 2006
146. 4th Annual Molecular Conduction and Sensor Workshop, July 2006
147. Chemistry and Physics of Nanostructure Fabrication Gordon Research Conference, July 2006
148. NNIN Synergy conference, Harvard University, May 2006