

Zachary M. Hudson

Curriculum Vitae

Updated February 2020

Department of Chemistry
University of British Columbia
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Education and Appointments

- 2019-Present Chief Scientific Officer
G-Pak Technologies Inc.
- 2018-Present Member, NSERC Council
- 2015-Present Assistant Professor and Tier II Canada Research Chair in Sustainable Chemistry
University of British Columbia, Vancouver, BC, Canada
- 2014-2015 Postdoctoral Fellow with Prof. Craig J. Hawker
California Nanosystems Institute, University of California, Santa Barbara, USA
- 2012-2014 Postdoctoral Fellow with Prof. Ian Manners
School of Chemistry, University of Bristol, United Kingdom
- 2008-2012 Doctor of Philosophy with Prof. Suning Wang
Department of Chemistry, Queen's University, Canada
- 2011 Exchange Student with Prof. Shigehiro Yamaguchi
Department of Chemistry, Nagoya University, Japan
- 2009 Exchange Student with Prof. Yue Wang
Laboratory for Supramolecular Structure and Materials, Jilin University, China
- 2004-2008 Bachelor of Science – Thesis Advisor: Suning Wang
Queen's University, Kingston, Ontario, Canada
- 2008 NSERC USRA with Suning Wang, Queen's University
2007 NSERC USRA with Hans-Peter Loock, Queen's University
2006 NSERC USRA with Robert Lemieux, Queen's University

Awards and Honours

- 2020 CSC Emerging Materials Investigator
2019 CNC-IUPAC Travel Award

Postdoctoral Awards:

- 2014 UCSB Elings Prize Fellowship in Experimental Science
2014 NSERC Postdoctoral Fellowship
2013 EU Marie Curie International Incoming Fellowship
2013 NSERC Postdoctoral Fellowship (declined)

Graduate Awards:

- 2013 Canadian Council of University Chemistry Chairs (CCUCC) Doctoral Award
*Awarded to the top doctoral student in chemistry in Canada.
2012 Governor General's Academic Gold Medal
*Awarded for the top Ph.D. thesis at each university in Canada.

- 2012 Chemical Institute of Canada Award for Graduate Work in Inorganic Chemistry
*Awarded to the top doctoral student in inorganic chemistry in Canada.
- 2011 Japan Society for the Promotion of Science (JSPS) Graduate Fellowship
- 2011 Queen's University Department of Chemistry Teaching Assistant of the Year
- 2011 Ludo Frevel Graduate Crystallography Scholarship
- 2010 Fisher Scientific Teaching Assistant Award
- 2010 Canadian Society for Chemistry Inorganic Division Poster Prize
- 2009 Inorganic Discussion Weekend Best Oral Presentation Prize
- 2009 NSERC Canada Graduate Scholarship (CGS-D)
- 2009 Sun Microsystems Graduate Scholarship
- 2009 Queen's University Department of Chemistry Teaching Assistant of the Year
- 2009 Engineering Society Teaching Assistant Award
- 2009 Inorganic Discussion Weekend Best Oral Presentation Prize
- 2008 Inorganic Discussion Weekend Best Oral Presentation Prize
- 2008 NSERC Canada Graduate Scholarship (CGS-M)
- 2008 Ontario Graduate Scholarship (declined)
- 2008 Queen's Tri-Council Recipient Award

Undergraduate Awards:

- 2008 Governor General's Academic Silver Medal
- 2008 Prince of Wales Prize
- 2008 Department of Chemistry Medal
- 2008 Society of Chemical Industry Merit Award
- 2008 Alfred Bader Scholarship in Chemistry
- 2008 Dean's Honour List with Distinction (2008, 2007, 2006, 2005)
- 2008 NSERC Undergraduate Student Research Award
- 2007 NSERC Undergraduate Student Research Award
- 2007 Canadian Society for Chemistry Medal
- 2007 Alumni Advisory Committee Scholarship
- 2007 R. W. Leonard Penultimate Year Scholarship
- 2007 W. Nichols Prize in Analytical Chemistry
- 2007 Northeastern Chemical Association Scholarship
- 2007 The Susan Near Prize in Chemistry
- 2006 NSERC Undergraduate Student Research Award
- 2005 Robert Bruce Scholarship
- 2005 A.E. Stafford Prize in Biology
- 2005 W. Macfarlane Smith Prize in Chemistry
- 2005 A.B. Lillie Prize in Calculus
- 2005 E.D. Merkley Prize in Mathematics
- 2005 M.C. Urquhart Prize in Economics
- 2004 Miller Thomson Foundation Scholarship
- 2004 Queen's University Chancellor's Scholarship
- 2004 Governor General's Academic Bronze Medal

Patents

3. **Z.M. Hudson**, S. Wang, M.G. Helander, Z.-B. Wang and Z.H. Lu. "Host Materials for Single-Layer Phosphorescent OLEDs." U.S. Patent Application No. 61/819,231 and Canadian Patent Application No. 2,814,679. Filed May 3, 2013.
2. **Z.M. Hudson**, X. Wang and S. Wang. "Luminescent Compounds and Methods of Using Same." U.S. Patent Application No. 61/780,123 and Canadian Patent Application No. 2,809,478, filed March 13, 2013. PCT International Application No. 2012-025-03PCT, filed March 13, 2014.
1. **Z.M. Hudson** and S. Wang. "Methods of Making Luminescent Compounds." U.S. Patent Application No. 61/780,156 and Canadian Patent Application No. 2,809,518, filed March 13, 2013.

Publications

61. Blue to Yellow Thermally Activated Delayed Fluorescence with Quantum Yields Near Unity in Acrylic Polymers Based on D- π -A Pyrimidines
A. M. Polgar, J. Poisson, N. R. Paisley, C. J. Christopherson, A. C. Reyes and **Z. M. Hudson**
2020, *submitted*.
60. Stimuli-Responsive Thermally Activated Delayed Fluorescence in Polymer Nanoparticles and Thin Films: Applications in Chemical Sensing and Imaging
N. R. Paisley, C. M. Tonge and **Z. M. Hudson**
2020, *submitted*.
59. 1,8-Naphthalimide-Based Polymers Exhibiting Deep-Red Thermally Activated Delayed Fluorescence and their Application in Ratiometric Temperature Sensing
C. J. Christopherson, D. M. Mayder, J. Poisson, N. R. Paisley, C. M. Tonge and **Z. M. Hudson**
2020, *submitted*.
58. Organization of Chromophores into Multiblock Bottlebrush Nanofibers Allows for Regulation of Energy Transfer Processes
E. R. Sauvé, C. M. Tonge and **Z. M. Hudson**
2020, *submitted*.
57. Bis(hexamethylazatriangulene)sulfone: A High-Stability Deep Blue-Violet Fluorophore with 100% Quantum Yield and CIE_y < 0.03
C. M. Tonge, J. Zeng, Z. Zhao, B. Z. Tang and **Z. M. Hudson**
2020, *submitted*.
56. Polymer Crystallization by Photochemical Dimerization of a PDMS Copolymer
T. Wright, Y. Petel, C. Zellman, E. R. Sauvé, **Z. M. Hudson**, C. Michal, and M. O. Wolf
Chem. Sci. **2020**, *accepted*.
55. Color-Tunable Thermally-Activated Delayed Fluorescence in Oxadiazole-Based Acrylic Copolymers: Photophysical Properties and Applications in Ratiometric Oxygen Sensing
C. M. Tonge, N. R. Paisley, A. M. Polgar, K. Lix, W. R. Algar and **Z. M. Hudson**
ACS Appl. Mater. Interfaces, **2020**, *12*, 6525-6535. DOI:10.1021/acscami.9b22464
54. Dextran-Functionalization of Semiconducting Polymer Dots and Conjugation with Tetrameric Antibody Complexes for Bioanalysis and Imaging
K. Lix, M. V. Tran, M. Massey, K. Rees, E. R. Sauvé, **Z. M. Hudson**, and W. R. Algar
ACS Appl. Bio. Mater. **2020**, *3*, 432-440. DOI: 10.1021/acscabm.9b00899
53. Tunable Benzothiadiazole-Based Donor-Acceptor Materials for Two-Photon Excited Fluorescence
N. R. Paisley, C. M. Tonge, D. M. Mayder, K. A. Thompson, and **Z. M. Hudson**
Mater. Chem. Front. **2020**, *4*, 555 - 566. DOI:10.1039/C9QM00627C
52. Donor-Acceptor Materials Exhibiting Thermally Activated Delayed Fluorescence using a Planarized *N*-phenylbenzimidazole Acceptor
E. R. Sauvé, J. Paeng, S. Yamaguchi and **Z. M. Hudson**
J. Org. Chem. **2020**, *85*, 108-117. DOI:10.1021/acs.joc.9b02283
51. Hierarchical Self-Assembly of Luminescent Triblock Bottlebrush Copolymers
F. Shao, Y. Wang, C. M. Tonge, E. R. Sauvé, and **Z. M. Hudson**
Polym. Chem. **2020**, *11*, 1062 - 1071. DOI:10.1039/C9PY01695C

50. Aggregation-Induced Energy Transfer in Colour-Tunable Multiblock Bottlebrush Nanofibers
E. R. Sauv , C. M. Tonge and **Z. M. Hudson**
J. Am. Chem. Soc., **2019**, *141*, 16422-16431. DOI:10.1021/jacs.9b08133
49. Interface-Dependent Aggregation-Induced Delayed Fluorescence in Bottlebrush Polymer Nanofibers
C. M. Tonge and **Z. M. Hudson**
J. Am. Chem. Soc. **2019**, *141*, 13970-13976. DOI:10.1021/jacs.9b07156
48. Self-Assembly of Giant Bottlebrush Block Copolymer Surfactants from Luminescent Organic Electronic Materials
Y. Wang, F. Shao, E. R. Sauv , C. M. Tonge and **Z. M. Hudson**
Soft Matter, **2019**, *15*, 5421 - 5430. DOI: 10.1039/C9SM00931K
47. Cu(0)-RDRP as an Efficient and Low-Cost Synthetic Route to Blue-Emissive Polymers for OLEDs
C.M. Tonge, F. Yuan, Z.-H. Lu and **Z.M. Hudson**
Polym. Chem. **2019**, *10*, 3288-3297. DOI: 10.1039/C9PY00294D
46. Fluorescent Heterotelechelic Single-Chain Polymer Nanoparticles: Synthesis, Spectroscopy and Cellular Imaging
D. N. F. Bajj, M. V. Tran, H.-Y. Tsai, H. Kim, N. R. Paisley, W. R. Algar and **Z. M. Hudson**
ACS Applied Nano Materials **2019**, *2*, 898–909. DOI: 10.1021/acsanm.8b02149
45. An Efficient Room-Temperature Synthesis of Highly Phosphorescent Styrenic Pt(II) Complexes and their Polymerization by ATRP
D. M. Mayder, K. A. Thompson, C. J. Christopherson, N. R. Paisley, and **Z. M. Hudson**
Polym. Chem. **2018**, *9*, 5418 - 5425. DOI:10.1039/C8PY01337C
44. Multiblock Bottlebrush Nanofibers from Organic Electronic Materials
C.M. Tonge, E.R. Sauv , S. Cheng, T. A. Howard and **Z.M. Hudson**
J. Am. Chem. Soc. **2018**, *140*, 11599–11603. DOI:10.1021/jacs.8b07915
43. Synthesis of Phosphorescent Iridium-Containing Acrylic Monomers and their Room-Temperature Polymerization by Cu(0)-RDRP
C. J. Christopherson, Z. S. Hackett, E.R. Sauv , N.R. Paisley, C.M. Tonge, D.M. Mayder and **Z.M. Hudson**
J. Polym. Sci. A: Polym. Chem. **2018**, *56*, 2539–2546. DOI:10.1002/pola.29233
*Selected as Cover Article
42. Synthesis of Polymeric Organic Semiconductors Using Semifluorinated Polymer Precursors
N.R. Paisley, C.M. Tonge, E.R. Sauv , S.V. Halldorson and **Z.M. Hudson**
J. Polym. Sci. A: Polym. Chem. **2018**, *56*, 2183–2191. DOI:10.1002/pola.29183
41. Polymerization of Acrylates Based on n-Type Organic Semiconductors using Cu(0)-RDRP
C.M. Tonge, E.R. Sauv , N.R. Paisley, J. E. Heyes and **Z.M. Hudson**
Polym. Chem. **2018**, *9*, 3359-3367. DOI:10.1039/C8PY00670A
*Highlighted in *Advances in Engineering: Copper Wire Makes Polymers for Plastic Electronics*, August, 2018.
40. Cu(0)-RDRP of Acrylates based on p-Type Organic Semiconductors
E.R. Sauv , C.M. Tonge, N.R. Paisley, S. Cheng and **Z.M. Hudson**
Polym. Chem. **2018**, *9*, 1397-1403. DOI:10.1039/C8PY00295A
*Highlighted as Paper of the Month in *Polymer Chemistry* for March, 2018.
39. Ti-Catalyzed Hydroamination for the Synthesis of Amine-Containing π -Conjugated Materials
H. Hao, K.A. Thompson, **Z.M. Hudson** and L.L. Schafer
Chem. Eur. J. **2018**, *24*, 5562-5568. DOI: 10.1002/chem.201704500

38. Z.A. Page, C.-Y. Chiu, B. Narupai, D.S. Laitar, S. Mukhopadhyay, A. Sokolov, **Z.M. Hudson**, R. Bou Zerdan, A.J. McGrath, J.W. Kramer, B.E. Barton, and C. J. Hawker. "Highly Photoluminescent Nonconjugated Polymers for Single-Layer Light Emitting Diodes" *ACS Photonics*, **2017**, *4*, 631–641.
37. S.O. Poelma, G.L. Burnett, E.H. Discekici, K.M Mattson, N.J Treat, Y. Luo, **Z.M Hudson**, S.L. Shankel, P.G. Clark, J.W. Kramer, C.J. Hawker and J. Read de Alaniz. "Chemoselective Radical Dehalogenation and C–C Bond Formation on Aryl Halide Substrates Using Organic Photoredox Catalysts" *J. Org. Chem.* **2016**, *81*, 7155-7160.
36. O.E.C. Gould, H. Qiu, D.J. Lunn, J. Rowden, R.L Harniman, **Z.M Hudson**, M.A Winnik, M.J. Miles and I. Manners. "Transformation and Patterning of Supermicelles using Dynamic Holographic Assembly" *Nature Communications* **2015**, *6*, 10009.
35. H. Qiu, **Z.M. Hudson**, M.A. Winnik and I. Manners. "Multidimensional Hierarchical Self-Assembly of Amphiphilic Cylindrical Block Comicelles." *Science*, **2015**, *347*, 1329-1332.
34. E.H. Discekici, N.J. Treat, S.O. Poelma, K.M. Mattson, Z.M. Hudson, Y. Luo, C.J. Hawker, J. Read de Alaniz. "A Highly Reducing Metal-Free Photoredox Catalyst: Design and Application in Radical Dehalogenations." *Chem. Commun.* **2015**, *51*, 11705-11708.
33. **Z.M. Hudson**, J. Qian, C.E. Boott, M.A. Winnik and I. Manners. "Fluorous Cylindrical Micelles of Controlled Length by Crystallization-Driven Self-Assembly of Block Copolymers in Fluorinated Media" *ACS Macro Lett.*, **2015**, *4*, 187-191.
32. K.M Mattson, A.A. Latimer, A.J. McGrath, N.A. Lynd, P. Lundberg, **Z.M. Hudson**, C.J. Hawker "A Facile Synthesis of Catechol-Functionalized Poly(Ethylene Oxide) Block and Random Copolymers" *J. Polym. Sci. A: Polym. Chem.* **2015**, *53*, 2685-2692.
31. **Z.M. Hudson**, X. Wang and S. Wang. "Triarylboron-Functionalized Metal Complexes for OLEDs." Chapter 8 in "Organometallics and Related Molecules for Energy Conversion." Wong, W.-Y., Ed. Springer-Verlag: Heidelberg, **2015**, pp 207-239.
30. J.R. Finnegan, D.J. Lunn, O.E.C. Gould, **Z.M. Hudson**, G.R. Whittell, M.A. Winnik and I. Manners. "Gradient Crystallization-Driven Self-Assembly: Cylindrical Micelles with "Patchy" Coronal Nanosegregation via the Coassembly of Linear and Brush Block Copolymers." *J. Am. Chem. Soc.* **2014**, *136*, 13835-13844.
29. **Z.M Hudson**, C.E. Boott, M.E. Robinson, P.A. Rugar, M.A. Winnik and I. Manners. "Tailored Hierarchical Micelle Architectures using Living Crystallization-Driven Self-Assembly in Two Dimensions." *Nature Chemistry*, **2014**, *6*, 893-898.
* Highlighted in *Nature Chemistry*: "Self-Assembly: Served on a Nanoplate," C. Cai and J. Lin, **2014**, *6*, 857.
28. **Z.M. Hudson**, D.J. Lunn, M.A. Winnik and I. Manners. "Colour-Tunable Fluorescent Multiblock Micelles." *Nature Communications*, **2014**, *5*:3372.
* Highlighted in *Chemical and Engineering News*: L.K. Wolf, "Nanopixels of Any Color," **2014**, *92*, 30.
27. **Z.M. Hudson** and I. Manners. "Assembly and Disassembly of Ferrocene-Based Nanotubes." *Science* **2014**, *422*, 482-483. (Invited Perspective)
26. J. Qian, X. Li, D.J. Lunn, J. Gwyther, **Z.M. Hudson**, E. Kynaston, P.A. Rugar, M.A. Winnik and I. Manners. "Uniform, High Aspect Ratio Fiber-like Micelles and Block Co-Micelles with a Crystalline π -Conjugated Polythiophene Core by Self-Seeding." *J. Am. Chem. Soc.* **2014**, *136*, 4121-4124.

25. M.-N. Belzile, X. Wang, **Z.M. Hudson** and S. Wang. "Impact of Constitutional Isomerism on Phosphorescence and Anion-Sensing Properties of Donor-Acceptor Organoboron Pt (II) Complexes" *Dalton Transactions*, **2014**, 43, 13696-13703.
24. **Z.M. Hudson**, S.-B. Ko, S. Yamaguchi, and S. Wang. "Modulating the Photoisomerization of N,C-Chelate Organoboranes with Triplet Acceptors." *Org. Lett.* **2012**, 14, 5610-5613.
23. **Z.M. Hudson**, C. Sun, M.G. Helander, Y.-L. Chang, Z.-H. Lu and S. Wang. "Highly Efficient Blue Phosphorescence from Triarylboron-Functionalized Platinum(II) Complexes of N-Heterocyclic Carbenes." *J. Am. Chem. Soc.* **2012**, 134, 13930-13933.
22. **Z.M. Hudson**, Z.-B. Wang, M.G. Helander, Z.-H. Lu and S. Wang. "N-Heterocyclic Carbazole-Based Hosts for Simplified Single-Layer Phosphorescent OLEDs with High Efficiency." *Adv. Mater.*, **2012**, 24, 2922-2928.
21. C. Sun, **Z.M. Hudson**, L. D. Chen and S. Wang. "Organoboron and Diarylplatinum-Enabled Double Cyclization/Aryl Migration across an Alkyne Bond." *Angew. Chem. Int. Ed.*, **2012**, 51, 5671-5674.
20. **Z.M. Hudson**, B.A. Blight and S. Wang. "Efficient and High Yield One-Pot Synthesis of Cyclometalated Platinum(II) β -Diketonates at Ambient Temperature." *Org. Lett.* **2012**, 14, 1700-1703.
19. Z.-B. Wang, M.G. Helander, D.P. Puzzo, **Z.M. Hudson**, S. Wang and Z.-H. Lu. "Unlocking the Full Potential of Organic Light-Emitting Diodes on Flexible Plastic." *Nature Photonics*, **2011**, 5, 737-757.
18. C. Sun, **Z.M. Hudson**, M.G. Helander, Z.-H. Lu and S. Wang. "A Polyboryl-Functionalized Triazine as an Electron-Transport Material for OLEDs." *Organometallics*, **2011**, 30, 5552-5555.
17. **Z.M. Hudson** and S. Wang. "Nonconjugated Dimesitylboryl-Functionalized Phenylpyridines and Their Cyclometalated Platinum(II) Complexes." *Organometallics*, **2011**, 30, 4695-4701.
16. Z.-B. Wang, M.G. Helander, **Z.M. Hudson**, J. Qiu, S. Wang and Z.-H. Lu. "Pt(II) Complex Based Phosphorescent Organic Light Emitting Diodes with External Quantum Efficiencies Above 20%." *Appl. Phys. Lett.*, **2011**, 98, 213301.
15. **Z.M. Hudson** and S. Wang. "Metal-Containing Triarylboranes: Photophysical Properties and Applications." *Dalton Trans.*, **2011**, 40, 7805-7816.
* Selected as cover article
14. **Z.M. Hudson**, C. Sun, K.J. Harris, B.E.G. Lucier, R.W. Schurko and S. Wang. "Probing the Structural Origins of Vapochromism of a Triarylboron-Functionalized Pt(II) Acetylide by Optical and Multinuclear Solid-State NMR Spectroscopy." *Inorg. Chem.*, **2011**, 50, 3447-3457.
13. Y. Sun, **Z.M. Hudson**, Y.-L. Rao and S. Wang. "Tuning and Switching MLCT Phosphorescence of $[\text{Ru}(\text{bpy})_3]^{2+}$ Complexes with Triarylboranes and Anions." *Inorg. Chem.*, **2011**, 50, 3373-3378.
12. V. Zlojutro, Y. Sun, **Z.M. Hudson**, and S. Wang. "Triarylboron-functionalized 8-Hydroxyquinolines and their Aluminum(III) Complexes." *Chem. Commun.*, **2011**, 3837-3839.
11. **Z.M. Hudson**, X.-Y. Liu and S. Wang. "Switchable Three-State Fluorescence of a Nonconjugated Donor-Acceptor Triarylborane." *Org. Lett.*, **2011**, 13, 300-303.
10. **Z.M. Hudson**, M.G. Helander, Z.-H. Lu and S. Wang. "Highly Efficient Orange Electrophosphorescence from a Trifunctional Organoboron-Pt(II) Complex." *Chem. Commun.*, **2011**, 47, 755-757.

9. N. Wang, **Z.M. Hudson** and S. Wang. "Reactivity of Aryldimesitylboranes under Suzuki-Miyaura Coupling Conditions." *Organometallics*, **2010**, 29, 4007-4011.
8. **Z.M. Hudson**, C. Sun, M.G. Helander, H. Amarné, Z.-H. Lu, and S. Wang. "Enhancing Phosphorescence and Electrophosphorescence Efficiency of Cyclometalated Pt(II) Compounds with Triarylboron" *Adv. Funct. Mater.*, **2010**, 20, 3426-3439.
* Selected as a hot paper
7. W. White, **Z.M. Hudson**, X. Feng, S. Han, Z.-H. Lu and S. Wang. "Linear and Star-Shaped Benzimidazolyl Derivatives: Syntheses, Photophysical Properties and Use as Highly Efficient Electron Transport Materials in OLEDs." *Dalton Trans.*, **2010**, 39, 892-899.
6. C. Baik, **Z.M. Hudson**, H. Amarné and S. Wang. "Enhancing the Photochemical Stability of N,C-Chelate Boryl Compounds: C-C Bond Formation versus C=C Bond *cis*, *trans*-Isomerization." *J. Am. Chem. Soc.*, **2009**, 131, 14549-14559.
* Highlighted in *Synfacts*, 2009, 12, 1348.
5. **Z.M. Hudson**, Y. Sun, B. Ross, R.Y. Wang, and S. Wang. "The Structure of an Anionic Coordination Polymer $\{K_2[Pt^{II}_2 Ag^I_8(2,2'-bipy)_2(O_2CCF_3)_{14}]\}_n$." *Acta Cryst. C*, **2009**, 65, m328-m330.
4. **Z.M. Hudson** and S. Wang. "Impact of Donor-Acceptor Geometry and Metal Chelation on Photophysical Properties and Applications of Triarylboranes." *Acc. Chem. Res.*, **2009**, 42, 1584-1596.
3. **Z.M. Hudson**, S.-B. Zhao, and S. Wang. "Switchable Ambient-Temperature Singlet-Triplet Dual Emission in Triarylboron-Pt(II) Complexes." *Chem. Eur. J.*, **2009**, 15, 6131-6137.
* Selected as Cover Article
2. S.-B. Zhao, P. Wücher, **Z.M. Hudson**, T.M. McCormick, X.-Y. Liu, S. Wang, X.-D. Feng, and Z.-H. Lu. "Impact of the Linker on the Electronic and Luminescent Properties of Diboryl Compounds: Molecules with Two BMes₂ Groups and The Peculiar Behavior of 1,6-(BMes₂)₂pyrene." *Organometallics*, **2008**, 27, 6446-6456.
1. J.C. Roberts, **Z.M. Hudson**, and R.P. Lemieux. "The Influence of Alkoxy Chain Length on the Ferroelectric Properties of Chiral Fluorene Liquid Crystals." *J. Mater. Chem.*, **2008**, 18, 3361-3365.

Invited Lectures

2020	Simon Fraser University
2020	Queen's University
2020	Carleton University
2020	University of Ottawa
2019	University of Waterloo
2019	McMaster University
2019	Tsinghua University
2019	Beijing Institute of Technology
2019	Beijing University of Chemical Technology
2019	Université du Québec à Montréal
2019	Université de Montréal
2017	Peking University, Beijing, China
2017	Tsinghua University, Beijing, China
2016	OSA Meeting, Vancouver, BC
2014	Queen's University, Kingston, ON
2013	Goethe Universität, Frankfurt, Germany
2013	University of Bristol, UK
2013	CSC National Meeting, Quebec, QC
2012	CSC National Meeting, Calgary, AB

Trainee Supervision

Postdoctoral Fellows

2018-Present Feng Shao

Ph.D. Students

2015-Present Chris Tonge
 2016-Present Ethan Sauve
 2016-Present Nathan Paisley
 2017-Present Cheyenne Christopherson
 2017-Present Don Mayder
 2018-Present Alex Polgar
 2018-Present Jade Poisson

M.Sc. Students

2015-2019 Kyle Thompson
 2016-2018 Kelly Wang

Undergraduate Students

2015-2016	Susan Cheng	CHEM 449 / Summer RA
2016-2017	Daniel Bajj	NSERC USRA / CHEM 449
2016-2017	Jordan Heyes	CHEM 449 / Summer RA
2016-2018	Teresa Howard	Volunteer
2017	Lasya Vankalaya	Volunteer
2017-2019	Sarah Halldorson	NSERC USRA/CHEM 449
2017-2018	Hayley McMillan	CHEM 449
2017-2018	Harrison Lefeaux	CHEM 444
2018	Luigi Alde	Volunteer
2018	Faith Park	Co-op
2018	Brandon Kato	Co-op
2018-2019	Angela Lin	NSERC USRA
2018-2019	Lingzi Gao	CHEM 445
2018-2019	Jaesuk Paeng	CHEM 445
2019	Shine Huang	Volunteer
2019-Present	Annelie Reyes	CHEM 445
2019-Present	Brendan Liaw	CHEM 445
2020-Present	Anoop Sangha	Volunteer
2020-Present	Dania Samara	Volunteer

Teaching

2015	CHEM 121 – Structure and Bonding in Chemistry
2016	CHEM 121 – Structure and Bonding in Chemistry
2017	CHEM 121 – Structure and Bonding in Chemistry
2017	CHEM 427 – Applications of Materials Chemistry
2018	CHEM 121 – Structure and Bonding in Chemistry
2018	CHEM 427 – Applications of Materials Chemistry
2019	CHEM 121 – Structure and Bonding in Chemistry
2019	CHEM 427 – Applications of Materials Chemistry