VINCENT LINDSAY, Ph.D.

Associate Professor



Associate Professor Department of Chemistry 434A Dabney Hall North Carolina State University Raleigh, NC 27695, USA Tel: (919) 515-2897 Email: vlindsa@ncsu.edu Website: lindsaylab.com	UNIVERSITY
PROFESSIONAL EXPERIENCE	
Associate Professor Department of Chemistry, North Carolina State University (Raleigh, NC)	Aug 2023 – present
Assistant Professor Department of Chemistry, North Carolina State University (Raleigh, NC)	Aug 2016 – Aug 2023
FRQNT Postdoctoral Fellow Department of Chemistry, University of California, Berkeley (Berkeley, CA) Supervisor: Prof. Richmond Sarpong Research Project: <i>Modern Synthetic Strategies to Alkaloids and other N-Heterocycles</i>	Jan 2013 – Mar 2016
EDUCATION	
Ph.D. Chemistry , <i>Dean's honor list</i> Department of Chemistry, Université de Montréal (Montreal, QC, Canada) Supervisor: Prof. André B. Charette Thesis title: <i>Catalytic Asymmetric Synthesis of Di-acceptor Cyclopropanes using Chiral Rhodid</i>	
B.Sc. Chemistry , <i>Dean's honor list</i> Department of Chemistry, Université de Montréal (Montreal, QC, Canada) Undergraduate Research Supervisor: Prof. André B. Charette Research Project: <i>Copper(I)-Catalyzed Enantioselective Addition of Diorganozinc Reagents to</i>	May 2007 D Nitroalkenes
AWARDS AND DISTINCTIONS	
Fellowships	
Post-Doctoral Research Fellowship (B3, \$60,000) Fonds de Recherche du Québec – Nature et Technologie (FRQNT)	Jan 2013 – Dec 2014
J. Armand Bombardier Scholarship (\$10,000) <i>Université de Montréal, Faculté des Études Supérieures et Postdoctorales</i> (FESP)	Sept 2010
Post-Graduate Doctoral Scholarship (PGS D, \$63,000) National Sciences and Engineering Research Council of Canada (NSERC)	Sept 2008 – Aug 2011
Post-Graduate Scholar Master's Award (\$30,000, <i>declined</i>) <i>Fonds de Recherche du Québec – Nature et Technologie</i> (FRQNT)	Sept 2007– Aug 2009
Post-Graduate Scholar Master's Award (CGS M, \$35,000) National Sciences and Engineering Research Council of Canada (NSERC)	Sept 2007 – Aug 2008
Scholarship for direct transfer from the B.Sc. to the Ph.D. (\$30,000) Université de Montréal, Faculté des Études Supérieures et Postdoctorales (FESP)	Sept 2007– Aug 2010
Undergraduate Student Research Award (USRA Industrial, Merck Frosst Canada, \$4,500) National Sciences and Engineering Research Council of Canada (NSERC)	May 2006 – Aug 2006
Undergraduate Student Research Award (USRA Academic, Prof. André B. Charette, \$4,500) <i>National Sciences and Engineering Research Council of Canada</i> (NSERC)	May 2005 – Aug 2005
Distinctions	
Thieme Chemistry Journals Award Thieme Chemistry	Jan 2019
Ph.D. Thesis on <i>Dean's Honor List</i> (Thesis judged 'excellent' by all committee members) Université de Montréal, Ph.D. Graduation	May 2013
Best Oral Presentation Award (Green Chemistry and Catalysis Symposium, \$100) <i>Canadian Society for Chemistry</i> (CSC, National meeting)	Jun 2011

Roger-Barré Award (Best Grades in Organic Chemistry for the B.Sc., \$1,000) Université de Montréal	Oct 2007
Medal of the Canadian Society for Chemistry (Best GPA for the last year of B.Sc.) <i>Université de Montréal</i> and <i>Canadian Society for Chemistry</i>	Oct 2007
Ogilvy-Renault Award (Best Oral Presentation, \$600) Université de Sherbrooke Symposium for Undergraduate Students	Oct 2005
B.Sc. Chemistry on <i>Dean's Honor List</i> (8 consecutive semesters) <i>Université de Montréal</i>	Sept 2003 – May 2007

RESEARCH CONTRIBUTIONS

Peer-Reviewed Publications ([‡]denotes equal contribution)

- 25. Machín Rivera, R.; Ferrin, Z. R.; Lindsay, V. N. G. *Org. Lett.* **2024**, *26*, 4738-4743. 'Iron-Catalyzed Oxidative Rearrangement of Cyclopropanone Hemiaminals: General Access to Pyrroloindolones from Indoles'.
- 24. Jang, Y.; Deng, W.; Sprague, I. S.; Lindsay, V. N. G. *Org. Lett.* **2023**, *25*, 5389-5394. 'Divergent Synthesis of β-Fluoroamides via Silver-Catalyzed Oxidative Deconstruction of Cyclopropanone Hemiaminals'.
- Jung, M.; Muir, J. E.; Lindsay, V. N. G. *Tetrahedron* 2023, *134*, 133296. 'Expedient synthesis of spiro[3.3]heptan-1ones via strain-relocating semipinacol rearrangements'.
 *Featured in *Tetrahedron's 2022 Editors' Choice Collection*.
- 22. Machín Rivera,[‡] R.; Burton,[‡] N. R.; Call, L. D.; Tomat, M. A.; Lindsay, V. N. G. *Org. Lett.* **2022**, *24*, 4275-4280. 'Synthesis of Highly Congested Tertiary Alcohols via the [3,3] Radical Deconstruction of Breslow Intermediates'.
- 21. Jung, M.; Lindsay, V. N. G. *J. Am. Chem. Soc.* **2022**, *144*, 4764-4769. 'One-Pot Synthesis of Strain-Release Reagents from Methyl Sulfones'.
- 20. Penn, K. R.; Anders, E. J.; Lindsay, V. N. G. *Organometallics* **2021**, *40*, 3871-3875. 'Expedient Synthesis of Bis(imidazolium) Dichloride Salts and Bis(NHC) Complexes from Imidazoles Using DMSO as a Key Polar Additive'.
- 19. Poteat, C. M.; Lindsay, V. N. G. *Org. Lett.* **2021**, *23*, 6482-6487. 'Stereospecific Synthesis of Enantioenriched Alkylidenecyclobutanones via Formal Vinylidene Insertion into Cyclopropanone Equivalents'.
- 18. Jang,[‡] Y.; Machín Rivera,[‡] R.; Lindsay, V. N. G. *Synthesis* **2021**, *53*, 3909-3934. 'Synthesis and Applications of Cyclopropanones and Their Equivalents as Three-Carbon Building Blocks in Organic Synthesis'. (Review)
- 17. Jang, Y.; Lindsay, V. N. G. Org. Lett. 2020, 22, 8872-8876. 'Synthesis of Cyclopentenones with Reverse Pauson– Khand Regiocontrol via Ni-Catalyzed C–C Activation of Cyclopropanone'.
- 16. Machín Rivera, R.; Jang, Y.; Poteat, C. M.; Lindsay, V. N. G. *Org. Lett.* **2020**, *22*, 6510-6515. 'General Synthesis of Cyclopropanols via Organometallic Addition to 1-Sulfonylcyclopropanols as Cyclopropanone Precursors'.
- Poteat,[‡] C. M.; Jang,[‡] Y.; Jung,[‡] M.; Johnson, J. D.; Williams, R. G.; Lindsay, V. N. G. Angew. Chem. Int. Ed. 2020, 59, 18655-18661. 'Enantioselective Synthesis of Cyclopropanone Equivalents and Application to the Formation of Chiral β-Lactams'.
- 14. Zhu, J.; Lindsay, V. N. G. ACS Catal. **2019**, *9*, 6993-6998. 'Benzimidazolyl Palladium Complexes as Highly Active and General Bifunctional Catalysts in Sustainable Cross-Coupling Reactions'.
- 13. Poteat, C. M.; Lindsay, V. N. G. *Chem. Commun.* **2019**, *55*, 2912-2915. 'Controlled α-mono- and α,α-di-halogenation of alkyl sulfones using reagent–solvent halogen bonding'.
- Lindsay,[‡] V. N. G.; Murphy,[‡] R. A.; Sarpong, R. *Chem. Commun.* **2017**, 53, 10291-10294. 'Effect of protic additives in Cu-catalysed asymmetric Diels-Alder cycloadditions of doubly activated dienophiles: towards the synthesis of magellanine-type *Lycopodium* alkaloids'.
- Johnson, R. E.; de Rond, T.; Lindsay, V. N. G.; Keasling, J. D.; Sarpong, R. Org. Lett. 2015, 17, 3474-3477.
 'Synthesis of Cycloprodigiosin Identifies the Natural Isolate as a Scalemic Mixture'.
 *Featured in ACS Editors' Choice.
- Lindsay, V. N. G.; Viart, H. M.-F.; Sarpong, R. J. Am. Chem. Soc. 2015, 137, 8368-8371. 'Stereodivergent Intramolecular C(sp³)–H Functionalization of Azavinyl Carbenes: Synthesis of Saturated Heterocycles and Fused N-Heterotricycles'.

- Schultz,[‡] E. E.; Lindsay,[‡] V. N. G.; Sarpong, R. Angew. Chem. Int. Ed. 2014, 53, 9904-9908. 'Expedient Synthesis of Fused Azepine Derivatives using a Sequential Rhodium(II)-Catalyzed Cyclopropanation/1-Aza-Cope Rearrangement of Dienyltriazoles'.
- Lindsay,[‡] V. N. G.; Fiset,[‡] D.; Gritsch, P. J.; Azzi, S.; Charette, A. B. *J. Am. Chem. Soc.* 2013, *135*, 1463-1470.
 'Stereoselective Rh₂(S-IBAZ)₄-Catalyzed Cyclopropanation of Alkenes, Alkynes and Allenes: Asymmetric Synthesis of Diacceptor Cyclopropylphosphonates and Alkylidenecyclopropanes'.
- Lindsay, V. N. G.; Charette, A. B. ACS Catal. 2012, 2, 1221-1225. 'Design and Synthesis of Chiral Heteroleptic Rhodium(II) Carboxylate Catalysts: Experimental Investigation of Halogen Bond Rigidification Effects in Asymmetric Cyclopropanation'.
- 6. Moreau, B.; Alberico, D.; Lindsay, V. N. G.; Charette, A. B. *Tetrahedron* **2012**, *68*, 3487-3496. 'Catalytic Asymmetric Synthesis of Nitrocyclopropane Carboxylates'.
- Lindsay, V. N. G.; Nicolas, C.; Charette, A. B. J. Am. Chem. Soc. 2011, 133, 8972-8981. 'Asymmetric Rh(II)-Catalyzed Cyclopropanation of Alkenes with Diacceptor Diazo Compounds: the *p*-Methoxyphenyl Ketone as a General Stereoselectivity Controlling Group'.
- 4. Marcoux, D.; Lindsay, V. N. G.; Charette, A. B. *Chem. Commun.* **2010**, *46*, 910-912. 'Use of achiral additives to increase the stereoselectivity in Rh(II)-catalyzed cyclopropanations'.
- Lindsay, V. N. G.; Lin, W.; Charette, A. B. J. Am. Chem. Soc. 2009, 131, 16383-16385. 'Experimental Evidence for the All-Up Reactive Conformation of Chiral Rhodium(II) Carboxylate Catalysts: Enantioselective Synthesis of *cis*-Cyclopropane α-Amino Acids'. **Highlighted in Synfacts:* Lindsay, V. N. G.; Lin, W.; Charette, A. B. Synfacts 2010, 0198.
- Charette, A. B.; Côté, A.; Desrosiers, J.-N.; Bonnaventure, I.; Lindsay, V. N. G.; Lauzon, C.; Tannous, J.; Boezio, A. A. *Pure Appl. Chem.* 2008, 80, 881-890. 'New methods in asymmetric catalysis based on new hemi-labile bidentate ligands'.
- Côté, A.; Lindsay, V. N. G.; Charette, A. B. Org. Lett. 2007, 9, 85-87. 'Application of the Chiral Bis(phosphine) Monoxide Ligand to Catalytic Enantioselective Addition of Dialkylzinc Reagents to β-Nitroalkenes'. **Highlighted in Synfacts:* Côté, A.; Lindsay, V. N. G.; Charette, A. B. Synfacts 2007, 0411.

Book Chapters

- 4. Lindsay, V. N. G. 'Rhodium(II)-Catalyzed Cyclopropanation' (Chapter 15) in *Rhodium Catalysis in Organic Synthesis: Methods and Reactions*; Wiley-VCH; 2018; pp.433-448 (Editor: Ken Tanaka).
- Charette, A. B.; Lindsay, V. N. G. 'Stereoselective Formation of Amines by Nucleophilic Addition to Azomethine Derivatives' in *Stereoselective Formation of Amines.*; *Top. Curr. Chem.* 2014, 343, 33-74. (Springer, Editors: Wei Li and Xumu Zhang).
- Lindsay, V. N. G.; Charette, A. B. 'Nucleophilic Addition of Non-Stabilized Carbanions to Imines and Imine Derivatives' (Chapter 1.11) in *Comprehensive Organic Synthesis (2nd Edition, Vol. 1)*, Oxford: Elsevier Science Ltd.; 2014, pp. 365-394 (Editors: Gary A. Molander and Paul Knochel).
- Roy, M.-N.; Lindsay, V. N. G.; Charette, A. B. 'Cyclopropanation Reactions' (Chapter 1.14) in *Stereoselective Synthesis: Stereoselective Reactions of Carbon-Carbon Double Bonds*; Georg Thieme Verlag KG; New York, 2011; pp 731-817 (Editor: Johannes de Vries).

Other Published Contributions

- Lindsay, V. N. G. '1-(Phenylsulfonyl)cyclopropanol'. *Encyclopedia of Reagents for Organic Synthesis*, 2024. A. B. Charette, D. Crich, R. A. Shenvi, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN02563, *In press*).
- Lindsay, V. N. G. 'Methyl Phenyl Sulfone' (Update). *Encyclopedia of Reagents for Organic Synthesis*, **2023**. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RM232.pub2).
- Lindsay, V. N. G. 'Dirhodium(II) Tetrakis[*R*-2-oxaazetidine-4(*S*)-carboxylate]' (Update). *Encyclopedia of Reagents for Organic Synthesis*, **2017**. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN00607.pub2).

- Lindsay, V. N. G. 'Methyl α-diazo-4-methoxy-β-oxobenzenepropanoate'. Encyclopedia of Reagents for Organic Synthesis, 2012. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN01540).
- Lindsay, V. N. G. 'α-Diazo-4-methoxy-β-oxobenzenepropanenitrile'. Encyclopedia of Reagents for Organic Synthesis, 2012. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN01541).
- Lindsay, V. N. G. '2-Diazo-1-(4-methoxyphenyl)-2-nitroethanone'. *Encyclopedia of Reagents for Organic Synthesis*, 2012. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN01542).
- Lindsay, V. N. G. '2-Azido-1,3-dimethylimidazolinium Chloride'. *Encyclopedia of Reagents for Organic Synthesis*, 2011. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN01465).
- Lindsay, V. N. G. '1-Nitropropane' (Update). *Encyclopedia of Reagents for Organic Synthesis*, **2011**. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN051).
- Lindsay, V. N. G. 'Nitromethane' (Update). *Encyclopedia of Reagents for Organic Synthesis*, **2011**. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN041).
- Lindsay, V. N. G. 'Dirhodium(II) Tetrakis[*N*-tetrachlorophthaloyl-(*S*)-*tert*-leucinate]'. *Encyclopedia of Reagents for Organic Synthesis*, **2010**. A. B. Charette, D. Crich, P. L. Fuchs, G. A. Molander (Eds); John Wiley & Sons Ltd.: Chichester, 2nd Ed.; (I.D.: RN01265).

Seminars and Oral Presentations (presenter is underlined)

- 63. Department of Chemistry & Biochemistry, University of North Carolina Wilmington (Wilmington, NC, USA, September 27, 2024). Lindsay, V. N. G. 'Synthesis and Application of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 62. *Telluride Science Research Center Workshop: Accelerating Reaction Discovery* (Telluride, CO, USA, July 28-August 1, 2024). <u>Lindsay, V. N. G.</u> 'Synthesis and Application of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 61. *Rising Stars in Organic Synthesis, Session* 3 (Thieme Cheminar, Virtual, April 24, 2024). <u>Lindsay, V. N. G.</u> 'Sulfonylcyclopropanols as Modular Cyclopropanone Equivalents'. (Invited, DOI: 10.52843/cassyni.nknztt)
- The Florida Heterocyclic and Synthetic Chemistry Conference 2024 (FloHet, Gainesville, FL, USA, March 10-13, 2024). <u>Lindsay, V. N. G.</u> 'Closing the Ring with Cyclopropanones as 3-Carbon Linchpins: Synthesis of Fused Indoles, Tetrahydrobenzazepinones and Quinolizinium Salts'. (Invited)
- Department of Chemistry, University of Toronto (Toronto, ON, Canada, February 27, 2024). <u>Lindsay, V. N. G.</u> 'Synthesis and Application of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 58. 4th Workshop on Synthetic Organic Chemistry for Young Investigators, Sponsored by Organic Syntheses, Inc. (Steamboat Springs, CO, USA, August 8-11, 2023). Lindsay, V. N. G. (Invited, Chalk talk)
- 57. Department of Chemistry & Biochemistry, Texas Tech University (Virtual, February 27, 2023). Lindsay, V. N. G. 'Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 56. Department of Chemistry, East Tennessee State University (Virtual, February 3, 2023). Lindsay, V. N. G. 'Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 55. 2nd Winter In-Person Organic Symposium (Honolulu, HI, USA, December 19-22, 2022). Lindsay, V. N. G. 'Reactivity of Sulfonylcyclopropanols as Precursors of Amide Homoenolates for the Synthesis of Fused Heterocycles'. (Invited)
- 54. Department of Chemistry, North Carolina State University (Raleigh, NC, USA, September 16, 2022). <u>Lindsay, V. N.</u> <u>G.</u> 'Synthetic Applications of Modular Cyclopropanone Equivalents and Development of pNHC as a New Bifunctional Catalysis Platform'. (Invited, Tenure Talk)
- 53. Department of Chemistry, Clemson University (Clemson, SC, USA, September 8, 2022). Lindsay, V. N. G. 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)

- 28th International Society of Heterocyclic Chemistry Congress (Short talk, Goleta, CA, USA, August 28 September 2, 2022). <u>Lindsay, V. N. G</u>. 'Reactivity of Sulfonylcyclopropanols as Precursors of Amide Homoenolates for the Synthesis of Fused Heterocycles'. (Invited)
- NSF Center for Selective C–H Functionalization: Alumni Symposium (Sunset meeting, Atlanta, GA, USA, July 30, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Research School of Chemistry, The Australian National University (Canberra, ACT, Australia, May 2, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 49. Department of Chemistry, New York University (New York, NY, USA, April 12, 2022). Lindsay, V. N. G. 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Schulich Faculty of Chemistry, Technion Israel Institute of Technology (Virtual, April 4, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Department of Chemistry and Biochemistry, University of California, Los Angeles (Los Angeles, CA, USA, March 31, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Department of Chemistry, The Scripps Research Institute (La Jolla, CA, USA, March 25, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- ACS Spring 2022 National Meeting & Exposition (San Diego, CA, USA, March 20-24, 2022). <u>Penn, K. R.</u>; Zhu, J.; You, G.; Lindsay, V. N. G. 'Development of Highly Active Bifunctional (benz)imidazolyl-Palladium Catalysts for Application in Sustainable Cross-Coupling Reactions'. (Contributed)
- 44. ACS Spring 2022 National Meeting & Exposition (San Diego, CA, USA, March 20-24, 2022). <u>Machin Rivera, R.</u>; Lindsay, V. N. G. 'General Synthesis of Cyclopropanols via Organometallic Addition to Cyclopropanone Equivalents: Application to the Formation of Enantioenriched Alkylidenecyclobutanones'. (Contributed)
- ACS Spring 2022 National Meeting & Exposition (San Diego, CA, USA, March 20-24, 2022). Jung, M.; Lindsay, V. N. G. 'Stereospecific Synthesis of Cyclopropanone Equivalents and Application to Alkylidenecyclopropanes and β-Amino Acid derivatives'. (Contributed)
- ACS Spring 2022 National Meeting & Exposition (San Diego, CA, USA, March 20-24, 2022). <u>Lindsay, V. N. G.</u> 'Synthesis and Evaluation of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Contributed)
- The Florida Heterocyclic and Synthetic Chemistry Conference 2022 (FloHet, Gainesville, FL, USA, March 6-10, 2022). <u>Lindsay, V. N. G.</u> 'Reactivity of Sulfonylcyclopropanols as Precursors of Amide Homoenolates for the Synthesis of Fused Heterocycles'. (Invited)
- 40. Department of Chemistry, Rice University (Houston, TX, USA, February 23, 2022). Lindsay, V. N. G. 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Department of Chemistry, University of Delaware (Virtual, February 16, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Department of Chemistry, University of Virginia (Charlottesville, VA, USA, February 11, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 37. Department of Chemistry, Duke University (Virtual, January 25, 2022). Lindsay, V. N. G. 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 36. Department of Chemistry, University of Florida (Gainesville, FL, USA, January 20, 2022). Lindsay, V. N. G. 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)

- 35. College of Chemistry, University of California, Berkeley (Virtual, January 11, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Department of Chemistry, University of Missouri (Columbia, MO, USA, December 3, 2021). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- Department of Chemistry, University of Georgia (Athens, GA, USA, November 18, 2021). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'. (Invited)
- 32. Department of Chemistry, Marshall University (Virtual, October 26, 2021). Lindsay, V. N. G. 'Enantioselective Synthesis of Modular Cyclopropanone Equivalents and Applications as Highly Strained Building Blocks'. (Invited)
- ACS Fall 2021 National Meeting & Exposition, Young Academic Investigator Symposium (Virtual presentation, Atlanta, GA, USA, August 22-26, 2021). <u>Lindsay, V. N. G.</u> 'Enantioselective synthesis and applications of sulfonylcyclopropanols as modular cyclopropanone and homoenolate equivalents'. (Invited)
- CCHF Virtual Symposium: Alumni Edition (Virtual, May 11, 2021). Lindsay, V. N. G. 'Enantioselective Synthesis of Modular Cyclopropanone Equivalents and Applications as Highly Strained Building Blocks'. (Invited)
- ACS Spring 2021 National Meeting & Exposition (Virtual presentation, April 15, 2021). <u>Penn, K. R.;</u> Lindsay, V. N. G. 'Simple and Expedient Synthesis of Bis(azolium)dichloride Salts from Dichloroalkanes and Imidazoles'. (Contributed)
- 27. Department of Chemistry, West Virginia University (Virtual, March 10, 2021). Lindsay, V. N. G. 'Enantioselective Synthesis of Modular Cyclopropanone Equivalents and Applications as Highly Strained Building Blocks'. (Invited)
- 26. Department of Chemistry, Howard University (Virtual, February 26, 2021). Lindsay, V. N. G. 'Synthesis and Application of Sulfonylcyclopropanols as Modular Cyclopropanone Equivalents'. (Invited)
- Department of Chemistry and Biochemistry, Auburn University (Virtual, February 19, 2021). <u>Lindsay, V. N. G.</u> 'Enantioselective Synthesis of Modular Cyclopropanone Equivalents and Applications as Highly Strained Building Blocks'. (Invited)
- 24. 11th Annual Symposium of the FRQNT Center for Green Chemistry and Catalysis (Virtual, January 8, 2021). <u>Lindsay, V. N. G.</u> 'Development of pNHC as a New Bifunctional Catalysis Platform and Synthetic Applications of Modular Cyclopropanone Equivalents'. (Invited, plenary speaker)
- Department of Chemistry, University of North Carolina at Chapel Hill (Virtual, November 6, 2020). Lindsay, V. N. G. 'Enantioselective Synthesis of Modular Cyclopropanone Equivalents and Applications as Highly Strained Building Blocks'. (Invited)
- 22. ACS Fall 2020 National Meeting & Exposition (Virtual presentation, August 17-20, 2020). Lindsay, V. N. G. 'Enantioselective synthesis of cyclopropanone equivalents and its application for the production of chiral β-lactams by formal [3+1] cycloaddition'. (Contributed)
- ACS Fall 2020 National Meeting & Exposition (Virtual presentation, August 17-20, 2020). <u>Machin Rivera, R.</u>; Lindsay, V. N. G. 'General Synthesis of Cyclopropanols via Organometallic Addition to 1-Sulfonylcyclopropanol as Cyclopropanone Precursors'. (Contributed)
- ACS Fall 2020 National Meeting & Exposition (Virtual presentation, August 17-20, 2020). Poteat, C. M.; Lindsay, V. N. G. 'Synthesis of β-Lactams and Cyclobutanones via Formal [3+1] Cycloaddition of Chiral Cyclopropanone Equivalents'. (Contributed)
- 19. 2020 Sci-athon (UNC-Chapel Hill (Virtual), NC, USA, May 13, 2020). Lindsay, V. N. G. 'Benzimidazolyl-metal complexes as simple bifunctional templates in sustainable catalysis'. (Invited)
- Florida Heterocyclic Conference 2020 (FloHet, Gainesville, FL, USA, March 1-4, 2020). <u>Lindsay, V. N. G.</u> 'Asymmetric Synthesis of Cyclopropanone Equivalents and Application as Substrates in Formal Cycloadditions'. (Invited)

- 17. Southeastern Regional Meeting of the American Chemical Society (Savannah, GA, USA, October 20-23, 2019). Lindsay, V. N. G. 'Benzimidazolyl-metal complexes as simple bifunctional templates in sustainable catalysis'. (Invited)
- 16. ACS Fall 2019 National Meeting & Exposition (San Diego, CA, USA, August 25-29, 2019). Lindsay, V. N. G.; Zhu, J. 'Bifunctional Palladium Complexes Bearing Masked Protic NHC Ligands as Highly Active Catalysts for Sustainable Cross-Coupling Reactions'. (Contributed)
- 15. ACS Fall 2019 National Meeting & Exposition (San Diego, CA, USA, August 25-29, 2019). Poteat, C. M.; Lindsay, V. N. G. 'Synthesis of β-Lactams via Metal- Catalyzed Formal [3+1] Cycloaddition of Cyclopropanones'. (Contributed)
- 14. Telluride Science Research Center Workshop: The Future of C-H Functionalization (Telluride, CO, USA, July 29-August 2, 2019). Lindsay, V. N. G. 'Deconstruction of Cyclopropanone Equivalents Enables the C-H Functionalization of Heterocycles'. (Invited)
- 13. ACS Spring 2019 National Meeting & Exposition (Orlando, FL, USA, March 31-April 4, 2019). Poteat, C. M.; Lindsay, V. N. G. 'Controlled α-Halogenation of Alkyl Sulfones using Reagent-Solvent Halogen Bonding'. (Contributed)
- 12. Southeastern Regional Meeting of the American Chemical Society (Augusta, GA, USA, October 31-November 3, 2018). Poteat, C. M.; Lindsay, V. N. G. 'Controlled α-Halogenation of Sulfones'. (Contributed)
- 11. The International Chemical Congress of Pacific Basin Societies (Pacifichem, Honolulu, Hawaii, USA, December 15-20, 2015), Lindsay, V. N. G.; Murphy, R. A.; Sarpong, R. 'Synthesis of Magellaninone-type Lycopodium Alkaloids using a Pyridine Functionalization / Reduction Approach'. (Contributed)
- 10. 98th Canadian Chemistry Conference and Exhibition (CSC, Ottawa, ON, Canada, June 13-17, 2015). Lindsay, V. N. G.; Murphy, R. A.; Sarpong, R. 'Synthesis of Magellaninone-type Lycopodium Alkaloids using a Pyridine Functionalization / Reduction Approach'. (Contributed)
- 9. ACS Fall 2014 National Meeting & Exposition (San Francisco, CA, USA, August 10-14, 2014). Lindsay, V. N. G.; Schultz, E. E.; Sarpong, R. Expedient Synthesis of Fused Azepine Derivatives using a Sequential Rhodium(II)-Catalyzed Cyclopropanation/1-Aza-Cope Rearrangement of Dienyltriazoles'. (Contributed)
- 97th Canadian Chemistry Conference and Exhibition (CSC, Vancouver, BC, Canada, June 2-6, 2014). Lindsay, V. 8. N. G.; Schultz, E. E.; Sarpong, R. 'Expedient Synthesis of Fused Azepine Derivatives using a Seguential Rhodium(II)-Catalyzed Cyclopropanation/1-Aza-Cope Rearrangement of Dienyltriazoles'. (Contributed)
- 7. 94th Canadian Chemistry Conference and Exhibition (CSC, Montreal, QC, Canada, June 5-9, 2011). Lindsay, V. N. G.; Charette, A. B. 'Design and Mechanistic Study of Chiral Rh(II)-Carboxylate Catalysts for Enantioselective Cyclopropanation Reactions with Diacceptor Diazo Compounds'. (Contributed) *1st prize for Best Oral Presentation, Green Chemistry & Catalysis Symposium
- 6. The International Chemical Congress of Pacific Basin Societies (Pacifichem, Honolulu, Hawaii, USA, December 15-20, 2010). Lindsay, V. N. G.; Charette, A. B. 'Enantioselective Rhodium(II)-Catalyzed Cyclopropanation of Alkenes with α-EWG-Diazoacetophenones: PMP-ketones as Stereoselectivity Controllers'. (Contributed)
- 5. ACS Fall 2010 National Meeting & Exposition (Boston, MA, USA, August 22-26, 2010). Lindsay, V. N. G.; Charette, A. B. 'Enantioselective Rhodium(II)-Catalyzed Cyclopropanation of Alkenes with α -EWG-Diazoacetophenones: PMP-ketones as Stereoselectivity Controllers'. (Contributed)
- 78^e Congrès de l'ACFAS (Montreal, QC, Canada, May 11-12, 2010). Lindsay, V. N. G.; Lin, W.; Charette, A. B. 4. 'Cyclopropanation énantiosélective d'alcènes en présence de diazoacetophenones α -substituées par catalyse au rhodium(II) : étude mécanistique du contrôle de la stéréosélectivité'. (Contributed)
- 77^e Congrès de l'ACFAS (Ottawa, ON, Canada, May 13-14, 2009). Lindsay, V. N. G.; Lin, W.; Charette, A. B. 3. 'Synthèse stéréosélective de dérivés cyclopropaniques acides aminés cis via une cyclopropanation énantiosélective d'alcènes à l'aide d' α -diazo- α -nitrocétones'. (Contributed)
- 74^e Congrès de l'ACFAS (Montréal, QC, Canada, May 15-19, 2006). Côté, A.; Lindsay, V. N. G.; Charette, A. B. 2. 'Addition catalytique sur des nitroalcènes utilisant une bis-phosphine monoxydée chirale comme ligand'. (Contributed)
- 1. 17^e Colloque annuel de chimie des étudiants au baccalauréat de l'Université de Sherbrooke (Sherbrooke, QC, Canada. October 28, 2005). Lindsay, V. N. G.; Côté, A.; Charette, A. B. 'Addition énantiosélective d'organozinciques sur des nitroalcènes catalysée par le cuivre (I)'. (Contributed)

*1st prize for Best Oral Presentation, Ogilvy-Renault Award

Poster Presentations (presenter is underlined)

- Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, July 26, 2024). <u>Rajbhandary, A.</u>; Huguenin, M. E.; Lindsay, V. N. G. 'Investigation of Novel α-Oxy Cyclopropyl Radical Generation for Use in Cross-Coupling Reactions'.
- Gordon Research Conference Stereochemistry (Newport, RI, USA, July 21-26, 2024). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis of Modular Cyclopropanone Equivalents: Application to the Formation of Highly Strained Spiro Compounds'.
- 57. Annual North Carolina State University Spring Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, April 24, 2024). <u>Dunlap, K. F.;</u> Hobbs, J. H.; Lindsay, V. N. G. 'Rearrangement of Unique Bis(cyclopropyl) Ethers Derived From Cyclopropanones into Biologically Relevant Spirocyclic Derivatives'.
- Annual North Carolina State University Spring Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, April 24, 2024). <u>MacMillan, A. K.;</u> Muir, J. E.; Sulc, B. M.; Lindsay, V. N. G. 'Synthesis of Spiro[2.3]hexan-4-ones Using Diphenylcyclopropyl Sulfonium Salts and 1-Sulfonylcyclopropanols as Cyclopropanone Equivalents'.
- The Florida Heterocyclic and Synthetic Chemistry Conference 2024 (FloHet, Gainesville, FL, USA, March 10-13, 2024). <u>Ferrin, Z. R.</u>; Lindsay, V. N. G. 'Expedient Synthesis of Tetrahydrobenzazepinones via Formal [1,5]-Rearrangement of Cyclopropanone Hemiaminals'. (Contributed)
- Southeastern Regional Meeting of the American Chemical Society (Durham, NC, USA, October 25-28, 2023). <u>Ferrin, Z. R.</u>; Lindsay, V. N. G. 'Expedient Synthesis of Tetrahydrobenzazepinones via Formal [1,5]-Rearrangement of Cyclopropanone Hemiaminals'.
- Southeastern Regional Meeting of the American Chemical Society (Durham, NC, USA, October 25-28, 2023). <u>Muir,</u> <u>J. E.</u>; Poteat, C. M.; Jung, M.; Lindsay, V. N. G. 'Stereospecific synthesis of cyclobutanone derivatives via 1,2rearrangements of cyclopropanone adducts'.
- Southeastern Regional Meeting of the American Chemical Society (Durham, NC, USA, October 25-28, 2023). <u>Sprague, I. S.</u>; Shah, M.; Deng, W.; Lindsay, V. N. G. 'Facile Synthesis of Benzyl Fluorides via Silver-Catalyzed C– C Bond Fluorination of Unstrained Tertiary Alcohols'.
- 51. Southeastern Regional Meeting of the American Chemical Society (Durham, NC, USA, October 25-28, 2023). <u>Sulc,</u> <u>B. M.</u>; Muir, J. E.; Lindsay, V. N. G. 'Synthesis of spiro[2.3]hexan-4-ones from stable cyclopropanone equivalents'.
- 50. 50th Annual Meeting of The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE, New Orleans, LA, USA, September 11-14, 2023). <u>Muir, J. E.</u>; Poteat, C. M.; Jung, M.; Lindsay, V. N. G. 'Stereospecific Synthesis of Cyclobutanone Derivatives via 1,2-Rearrangements of Cyclopropanone Adducts'.
- Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, July 28, 2023). <u>Shub, E. J.</u>; Ferrin, Z. R.; Lindsay, V. N. G. 'Expedient Synthesis of Dihydroquinolones from Anilines using 1-Sulfonylcyclopropanols as Cyclopropanone Equivalents'.
- Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, July 28, 2023). <u>Oudeh, A. I.</u>; Muir, J. E.; Lindsay, V. N. G. 'Synthesis of 2,3-disubstituted cyclobutanones from cyclopropanone equivalents'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 10, 2023). <u>Sulc, B. M.</u>; Lindsay, V. N. G. 'Sulfonylcyclopropanes as Precursors of Umpoled Cyclopropanones and Cyclopropyl Boronates'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 10, 2023). <u>Ferrin, Z. R.</u>; Lindsay, V. N. G. 'Expedient Synthesis of Tetrahydrobenzazepinones via Formal [1,5]-Rearrangement of Cyclopropanone Hemiaminals'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 10, 2023). <u>Muir, J. E.</u>; Poteat, C. M.; Jung, M.; Lindsay, V. N. G. 'Stereospecific Synthesis of Cyclobutanone Derivatives via 1,2-Rearrangements of Cyclopropanone Adducts'.
- 44. 2nd Winter In-Person Organic Symposium (Honolulu, HI, USA, December 19-22, 2022). Jung, M.; Lindsay, V. N. G. 'Synthesis and Applications of 1-Sulfonylcyclopropanols as Modular Cyclopropanone Equivalents'.
- Gordon Research Conference Stereochemistry (Newport, RI, USA, July 24-29, 2022). <u>Lindsay, V. N. G.</u> 'Stereoselective Synthesis and Applications of Sulfonylcyclopropanols as Modular Cyclopropanone and Homoenolate Equivalents'.

- 42. Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, August 1, 2022). <u>Do, A.</u>; Jung, M.; Lindsay, V. N. G. 'Effect of the acidity of 1-sulfonylcyclopropanols on their equilibrium to cyclopropanones and computational study of their trapping reaction with pyrazole as nucleophile'.
- 41. Gordon Research Conference Heterocyclic Compounds (Newport, RI, USA, June 19-24, 2022). Lindsay, V. N. <u>G.</u> 'Reactivity of Sulfonylcyclopropanols as Precursors of Amide Homoenolates and Fused Heterocycles'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 11, 2022). Penn, K. R.; Lindsay, V. N. G. 'Development of Highly Active Bifunctional (benz)imidazolyl-palladium Catalysts for Application in Sustainable Cross-Coupling Reactions'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 11, 2022). Jung, M.; Lindsay, V. N. G. 'Synthesis and Applications of 1-Sulfonylcyclopropanols as Modular Cyclopropanone Equivalents'.
- The Florida Heterocyclic and Synthetic Chemistry Conference 2022 (FloHet, Gainesville, FL, USA, March 6-10, 2022). <u>Sprague, I. S.</u>; Lindsay, V. N. G. 'Expedient Synthesis of Novel Heterocyclic Scaffolds from Azinium Ylides and Cyclopropanone Equivalents'. (Contributed)
- 19th Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, July 29, 2021). <u>McGowan, C.</u>; Tubb, J.; Lindsay, V. N. G. 'Studying the Ag(I)-Catalyzed Radical Ring Opening of N-Heterocyclic Adducts of Cyclopropanones through Computational Methods'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 12, 2021). <u>Penn, K. R.</u>; Lindsay, V. N. G. 'Controlled α-Halogenation of Sulfonamides'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 12, 2021). Jung, M.; Lindsay, V. N. G. 'Enantioselective synthesis of 1-sulfonylcyclopropanols as tunable precursors of cyclopropanones'.
- International Virtual C–H Functionalization Poster Session (NSF CCHF, Virtual, December 15, 2020). <u>Machín Rivera, R.</u>; Jang, Y.; Poteat, C. M.; Lindsay, V. N. G. 'Synthesis and Rearrangement of Tertiary Cyclopropanols via Addition to New Cyclopropanone Precursors'. (Contributed)
- 133rd Annual Meeting of the North Carolina Section of the American Chemical Society (Raleigh, NC, USA, November 10, 2019). <u>Zhu, J.</u>; Lindsay, V. N. G. 'Benzimidazolyl Palladium Complexes as Highly Active and Bifunctional Catalysts in sustainable Cross-Coupling Reactions'.
- 133rd Annual Meeting of the North Carolina Section of the American Chemical Society (Raleigh, NC, USA, November 10, 2019). <u>Machín Rivera, R.;</u> Lindsay, V. N. G. 'Practical Synthesis of Cyclopropanols from Cyclopropanone Equivalents'.
- 31. 133rd Annual Meeting of the North Carolina Section of the American Chemical Society (Raleigh, NC, USA, November 10, 2019). Penn, K. R.; Lindsay, V. N. G. 'Synthesis of Bis(azolium) Salts'.
- 133rd Annual Meeting of the North Carolina Section of the American Chemical Society (Raleigh, NC, USA, November 10, 2019). Jung, M.; Lindsay, V. N. G. 'Enantioselective synthesis of 1-sulfonylcyclopropanols as tunable precursors of cyclopropanones'.
- ACS Fall 2019 National Meeting & Exposition (San Diego, CA, USA, August 25-29, 2019). Jang, Y.; Lindsay, V. N. G. 'Synthesis of Cyclopentenones via Ni-Catalyzed Formal [3+2] Cycloaddition of Cyclopropanones and Internal Alkynes'. (Contributed)
- 18th Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, August 1, 2019). <u>Flores, J.</u>; Machín Rivera, R.; Lindsay, V. N. G. 'Design and Synthesis of Novel Iridium N-Heterocyclic Carbene Based Complexes for Application in Magnetic Resonance Imaging'.
- 18th Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, August 1, 2019). <u>Flynn, K.;</u> Jang, Y.; Lindsay, V. N. G. 'Studying the Formation and Reactivity of 2-Substituted Cyclopropanone Adducts of N-Heterocyclic Carbenes'.
- Gordon Research Conference Heterocyclic Compounds (Newport, RI, USA, June 16-21, 2019). Poteat, C. M.; Jang, Y.; Johnson, J. D.; <u>Lindsay, V. N. G.</u> 'Synthesis of β-Lactams by Metal-Catalyzed Formal [3+1] Cycloaddition of Cyclopropanones'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 15, 2019). Poteat, C. M.; Lindsay, V. N. G. 'Synthesis of β-Lactams via a Cyclopropanone-based [3+1] Cycloaddition'.

- 24. NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 15, 2019). <u>Machin Rivera,</u> <u>R.</u>; Lindsay, V. N. G. 'Synthesis and Application of Cyclopropanols from New Cyclopropanone Precursors'.
- 23. NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 15, 2019). Deng, W.; Lindsay, V. N. G. 'C-H Fluoroethylation of Heterocycles from Cyclopropanone Precursors'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 15, 2019). <u>Zhu, J.</u>; Lindsay, V. N. G. 'Benzimidazolyl Palladium Complexes as Highly Active and Bifunctional Catalysts in sustainable Cross-Coupling Reactions'.
- The State of North Carolina Undergraduate Research and Creativity Symposium (SNCURCS, Raleigh, NC, USA, November 10, 2018). <u>Burton, N. R.</u>; Tomat, M. A.; Lindsay, V. N. G. 'Catalytic Formation of α-Substituted Ketones from Simple Aldehydes'.
- The State of North Carolina Undergraduate Research and Creativity Symposium (SNCURCS, Raleigh, NC, USA, November 10, 2018). <u>Johnson, J. D.</u>; Poteat, C. M.; Lindsay, V. N. G. 'One-pot Synthesis of β-lactams from Primary Amines'.
- 132nd Annual Meeting of the North Carolina Section of the American Chemical Society (Chapel Hill, NC, USA, November 9, 2018). <u>Poteat, C. M.</u>; Lindsay, V. N. G. 'Controlled α-Halogenation of Sulfones'.
 *1st prize for Best Poster Presentation
- 132nd Annual Meeting of the North Carolina Section of the American Chemical Society (Chapel Hill, NC, USA, November 9, 2018). <u>Johnson, J. D.</u>; Poteat, C. M.; Lindsay, V. N. G. 'One-pot Synthesis of β-lactams from Primary Amines'.
- 17. 17th Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, July 31, 2018). <u>Figueroa-Martínez, G. I.</u>; Machín Rivera, R.; Lindsay, V. N. G. 'Computational Study of 1- (arylsulfonyl)cyclopropanol and Cyclopropanone Equilibrium'.
- Gordon Research Conference Organic Reactions & Processes (Easton, MA, USA, July 15-20, 2018). Poteat, C. M.; <u>Lindsay, V. N. G.</u> 'Controlled α-Halogenation of Sulfones'.
- 32nd National Conference on Undergraduate Research (NCUR, Edmond, OK, USA, April 4-7, 2018). Johnson, J. D.; Anders, E.; Jang, Y. J.; Lindsay, V. N. G. 'Synthesis of Michael Adducts Utilizing Umpolung of Strained Ketones'.
- 14. 14th Atlantic Coast Conference Meeting of the Minds (Louisville, KY, USA, March 29-31, 2018). Johnson, J. D.; Anders, E.; Jang, Y. J.; Lindsay, V. N. G. 'Synthesis of Michael Adducts Utilizing Umpolung of Strained Ketones'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 9, 2018). <u>Tomat, M. A.</u>; Lindsay, V. N. G. 'Protic NHC Complexes as Catalytic Directing Leaving Groups in Regioselective Allylic Substitution'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 9, 2018). Poteat, C. M.; Lindsay, V. N. G. 'Controlled α-Halogenation of Sulfones'.
- NC State Recruitment Week-End Department of Chemistry (Raleigh, NC, USA, March 9, 2018). Jang, Y.; Lindsay, V. N. G. 'Metal- and Organo-Catalyzed Activation of Cyclopropanone for the Synthesis of Carbo-and Heterocycles'.
- 16th Annual North Carolina State University Summer Undergraduate Research and Creativity Symposium (Raleigh, NC, USA, August 1, 2017). <u>Muñoz Miró, H. A.</u>; Poteat, C. M.; Lindsay, V. N. G. 'Use of Aryl Methyl Sulfones for Divergent One-Carbon Functionalization Reactions'.
- ACS Fall 2014 National Meeting & Exposition, Academic Employment Initiative (San Francisco, CA, USA, August 10-14, 2014). <u>Lindsay, V. N. G.</u> 'Catalytic asymmetric synthesis of diacceptor cyclopropanes using chiral Rh(II) complexes / Modern synthetic strategies to alkaloids and other *N*-heterocycles'.
- NSF Center for Stereoselective C-H Functionalization (Annual Meeting, Atlanta, GA, USA, August 16-18, 2013). <u>Murphy, R. A.; Lindsay, V. N. G.;</u> Ye, M.; Yu, J.-Q; Sarpong, R. 'An Approach to the Magellaninone-type Lycopodium Alkaloids Using C–H Functionalization'.
- 7. *43rd National Organic Symposium* (Seattle, WA, USA, June 2013). <u>Murphy, R. A.</u>; Lindsay, V. N. G.; Pushkarskaya, E.; Sarpong, R. 'Toward the Synthesis of Lycopladine- and Magellanine-type *Lycopodium* Alkaloids'.
- 93rd Canadian Chemistry Conference and Exhibition (CSC, Toronto, ON, Canada, May 29-June 2, 2010). <u>Lindsay.</u> <u>V. N. G.</u>; Charette, A. B. 'Enantioselective Rhodium(II)-Catalyzed Cyclopropanation of Alkenes with α-EWG-Diazoacetophenones: PMP-ketones as Stereoselectivity Controllers'.

- 5. 20th Québec-Ontario Minisymposium in Bio-Organic and Organic Chemistry (QOMSBOC, Québec, QC, Canada, October 31-November 1, 2009). Lindsay, V. N. G.; Lin, W.; Charette, A. B. 'Stereoselective synthesis of *cis*-cyclopropane α-amino acids via a rhodium-catalyzed asymmetric cyclopropanation of alkenes with α-nitro diazoacetophenones'.
- 19th Québec-Ontario Minisymposium in Bio-Organic and Organic Chemistry (QOMSBOC, Toronto, ON, Canada, November 8-9, 2008). <u>Lindsay, V. N. G.</u>; Lin, W.; Charette, A. B. 'Stereoselective synthesis of *cis*-cyclopropane αamino acids via a rhodium-catalyzed asymmetric cyclopropanation of α-diazo-α-nitroketones and alkenes'.
- 89th Canadian Chemistry Conference and Exhibition (CSC, Halifax, NS, Canada, May 27-31, 2006). Charette, A. B.; <u>Côté, A.</u>; Lindsay, V. N. G. 'Chiral Bisphosphine Monoxide as a New Class of Ligands in Catalytic Enantioselective Addition of Diorganozincs to β-Nitroalkenes'.
- 3^e Symposium des étudiants gradués en chimie de l'Université de Montréal (Montréal, QC, Canada, March 21, 2006). <u>Côté, A.</u>; Lindsay, V. N. G.; Desrosiers, J.-N.; Charette, A. B. 'BozPHOS in Catalytic Enantioselective Reduction and Addition of Diorganozinc Reagents to β-Nitroalkenes'.
- 16th Québec-Ontario Minisymposium in Bio-Organic and Organic Chemistry (QOMSBOC, S^{te}-Adèle, QC, Canada, November 11-13, 2005). <u>Côté, A.;</u> Lindsay, V. N. G.; Charette, A. B. 'Catalytic Enantioselective Addition of Diorganozinc Reagents to β-Nitroalkenes Using a Bisphosphine Monoxide Ligand'.

TEACHING AND MENTORING EXPERIENCE

Courses taught at NCSU

Graduate courses

CH 755 – Organic Reaction Mechanisms

Fall 2024 (21 students) Fall 2023 (20 students) Fall 2022 (18 students) Fall 2021 (25 students) Fall 2020 (22 students) Fall 2019 (13 students) Fall 2018 (17 students) Fall 2017 (25 students) Fall 2016 (28 students)

Undergraduate courses

Postdoctoral Fellows

CH 227 – Organic Chemistry II (for chemistry majors)

Spring 2024 (66 students) Spring 2023 (53 students) Spring 2021 (47 students)

CH 223 – Organic Chemistry II (for non-chemistry majors)

Spring 2020 (230 students) Spring 2019 (208 students) Spring 2018 (176 students)

Students/Postdocs mentored at NCSU

Manish K. Singh (Ph.D. The City College of The City University of New York)	Jul 2017 – Aug 2018
Graduate students	
Evan J. Anders (B.A. Hanover College) Marshall A. Tomat (B.A. Franklin & Marshall College) Yujin Jang (B.S./M.S. Kwangwoon University) Christopher M. Poteat (B.S./M.S. University of North Carolina Wilmington) Jiancheng Zhu (B.S. Nankai University, B.E. Tianjin University, M.S. NC State University) Weixia Deng (B.S. University of Kentucky – Lexington) Roger Machín-Rivera (B.S. University of Puerto Rico – Cayey)	Oct 2016 – Jun 2018 Oct 2016 – Dec 2018 Oct 2016 – May 2021 Oct 2016 – May 2021 Oct 2017 – Dec 2019 Oct 2017 – May 2020 Oct 2017 – May 2022

Myunggi Jung (B.S. Yeungnam University, M.S. Seoul National University) Kyle R. Penn (B.S. NC State University) Garim You (B.S./M.S. Seoul National University Science and Technology) Ivan Sprague (B.S./M.S. D. Mendeleev University of Chemical Technology) Zack Ferrin (B.S. University of California, Los Angeles) Joanna Muir (B.S. Florida Gulf Coast University) Brandon Sulc (B.S. University of North Carolina Wilmington) Malcolm Huguenin (B.S. University of Virginia) Joshua Hobbs (B.S. College William & Mary) Danh Tran (B.S. HCMC University of Technology)	Oct 2018 – May 2023 Oct 2018 – May 2023 Sept 2019 – Dec. 2020 Oct 2020 – present Oct 2021 – present Oct 2021 – present Oct 2022 – present Oct 2022 – present Oct 2022 – present Oct 2023 – present
Undergraduate students	
Kyle R. Penn (B.S. Chemistry, NC State University) Mirna Dave (B.S. double major in Biol. Sciences/International studies, NC State University) Héctor A. Muñoz Miró (B.S. University of Puerto Rico – Río Piedras, NSF REU) Nikolas R. Burton (B.S. Chemistry, NC State University) John D. Johnson (B.S. Chemistry, NC State University) Rachel Williams (B.S. Chemistry, NC State University) Gabriel I. Figueroa-Martínez (B.S. University of Puerto Rico – Río Piedras, NSF REU) Casey Thompson (B.S. Chemistry, NC State University) Jamin Flores (High school student, ACS SEED) Kaitlyn Flynn (B.S. University of Miami, Ohio, NSF REU) Luke Call (B.S. Chemistry, NC State University) Christian McGowan (B.S. Morgan State University) Emma Messina (B.S. Chemistry, NC State University) Maandvi Shah (B.A. Chemistry, NC State University) Anh Do (B.S. Chemistry, NC State University) Maandvi Shah (B.A. Chemistry, NC State University) Anh Do (B.S. Chemistry, NC State University) Akil Jayanty (B.S. Chemistry, NC State University) Akhil Jayanty (B.S. Chemistry, NC State University) Akhil Jayanty (B.S. Chemistry, NC State University) Ameer Oudeh (High school student, ACS SEED) Kenyon Dunlap (B.S. Chemistry, NC State University) Ameer Oudeh (High school student, ACS SEED) Kenyon Dunlap (B.S. Chemistry, NC State University) Ameer Oudeh (High school student, ACS SEED) Kenyon Dunlap (B.S. Chemistry, NC State University) Antalie Zachman (B.S. Chemistry, NC State University) Anika Rajbhandary (B.S. Comput. Sci. and Chemistry, Carleton Coll., NSF REU)	Jan 2017 – May 2018 Jan 2017 – May 2017 Jun 2017 – Aug 2018 Aug 2017 – May 2019 Aug 2017 – May 2019 Sept 2017 – Aug 2018 Jun 2018 – Aug 2018 May 2019 – May 2021 Jun 2019 – Aug 2019 Sept 2019 – Aug 2019 Sept 2019 – May 2021 Jun 2021 – Aug 2021 Sept 2021 – May 2022 Sept 2021 – May 2022 Sept 2021 – July 2023 May 2022 – Aug 2022 Jun 2022 – Aug 2022 Jun 2023 – present May 2023 – present Jun 2023 – Aug 2023 Sept 2023 – present Sept 2023 – May 2024 Jun 2024 – July 2024
Training of undergraduate students prior to NCSU	
Carole Pelletier (M.S. Chemistry, Québec-France Exchange Internship) Éric Lévesque (B.Sc. Chemistry, Université de Sherbrooke) Nicolas Bélanger-Desmarais (B.Sc. Chemistry, Université de Montréal)	Sept 2008 – Aug 2009 Sept 2009 – Dec 2009 May 2011 – Aug 2011
Teaching assistant experience	
Teaching assistant, Organic Chemistry III (for 3 rd year undergraduate students)	Jan 2012 – May 2012

SERVICE

Professional Service on campus

Graduate Admission Committee, NCSU Dept. of Chemistry Graduate Students Advisory Committee (40 students), NCSU Dept. of Chemistry Host for Seminar Speakers (12), NCSU Dept. of Chemistry Graduate Student Representative (2 prelim., 1 thesis defense), NCSU College of Sciences Safety Committee, NCSU Dept. of Chemistry Organizer of Symposiums on C–H Functionalization (14), NCSU Dept. of Chemistry Reviewer for Undergraduate Research Grants, OUR, NCSU College of Sciences NSF-REU Mentor (6 summers), NCSU Dept. of Chemistry GSK Fellowship Committee, NCSU Dept. of Chemistry	2016 – present 2016 – present 2016 – present 2016 – present 2017 – present 2017 – 2022 2017 – 2023 2017 – present 2018 – 2019
	2018 – 2019 2018 – present 2019 – 2023
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Professional Track Faculty Search Committee, NCSU Dept. of Chemistry Stockroom Employee Search Committee, NCSU Dept. of Chemistry Dabney Renovation Committee, NCSU X-ray User Committee, METRIC, NCSU	2021 2021 – 2022 2022 – present 2023 – present	
Professional Service off campus		
Reviewer for >20 scientific journals (>100 publications overall), including: Journal of the American Chemical Society, Angewandte Chemie, Nature Communications, ACS Catalysis, Chemical Science, Organic Letters, Chemical Communications, Chemical Reviews Advanced Synthesis & Catalysis, Organometallics, Journal of Organic Chemistry, Chemistry – A European Journal, European Journal of Organic Chemistry, New Journal of Chemistry, Tetrahedron, Tetrahedron Letters, Bioorganic & Medicinal Chemistry, Organic & Biomolecular Chemistry, Synlett, Synthesis, Asian Journal of Organic Chemistry, Beilstein Journal of Organic Chemistry	2016 – present	
Reviewer, ACS Petroleum Research Funds (6 reports)	2018 – present	
Reviewer, FRQNT panel for Faculty Starting Grants (Canada, 8 reports) Judge, Sci-athon 2020 (UNC Chapel Hill)	2018 – present 2020	
Member, Science of Synthesis Early Career Advisory Board (Thieme Chemistry)	2022– present	
Member, Chemistry Evaluation Group (NSERC)	2024– present	
RESEARCH SUPPORT		
Comparative Medicine Institute, Chemistry of Life (CLP) division (NCSU, \$10,000) 2022 'Strain-promoted bioconjugation using modular cyclopropanone equivalents' (Collaboration with Prof. Jun Ohata)		
Maximizing Investigators' Research Award (MIRA) for Early Stage Investigators (NIH R35, \$1.8M 'Unlocking Access to Cyclopropanones as Divergent Reactive Intermediates in Synthesis'	1) 2021 – 2026	
Faculty Early Career Development (CAREER) Program (NSF CAREER Award, DECLINED) 'CAREER: Unlocking Access to Cyclopropanone Analogues as Versatile High-Energy Intermedia	2021 – 2026 tes in Synthesis'	

 Faculty Research and Professional Development Program (NCSU College of Sciences, \$3,000)
 2018 – 2019

 'Construction of All Carbon Quaternary Centers by Azole-Catalyzed [3,3] Sigmatropic Rearrangement'

REFERENCES

Available upon request.