

CURRICULUM VITAE

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WORK ADDRESS:

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EDUCATION

- 2008-2013 **Doctor of Philosophy in Inorganic Chemistry**
University of Alberta, Edmonton, AB
Dissertation Title: “The Synthesis of Rhodium Catalyst-Organic Frameworks for Isomerization and Continuous-Flow Hydrogenation Reactions”
- 2004-2008 **Bachelor of Science with Honours in Chemistry**
Saint Francis Xavier University, Antigonish, NS

EMPLOYMENT HISTORY

2022-present **Associate Professor of Chemistry**
University of Alberta Augustana Faculty, Camrose, AB

In my current position I am responsible for designing and teaching the following courses: General Chemistry I and II (AUCHE 110/112), Structure and Bonding (AUCHE 230), Physical Chemistry (AUCHE 279), Introductory Synthesis Lecture and Lab (AUCHE 350/351), Advanced Synthesis Lecture and Lab (AUCHE 352/353), Environmental Chemistry (AUCHE 341) and Student Mentorship Experience (AUSCI 425). In addition, I maintain a disciplinary research program that is focused on developing immobilized catalytic systems for use in the continuous-flow production of industrially relevant materials. I also maintain a number of Scholarship of Teaching and Learning (SOTL) research projects focused on two-stage exams and the use of student-generated crib sheets during exams.

2016-2022 **Assistant Professor of Chemistry**
University of Alberta Augustana Faculty, Camrose, AB

In this position I was responsible for designing and teaching the following courses: General Chemistry I and II (AUCHE 110/112), Instrumental Analysis lab (AUCHE 222), Physical Chemistry (AUCHE 279), Inorganic Chemistry I and II (AUCHE 230/232), Organometallic Chemistry (AUCHE 330), Environmental Chemistry (AUCHE 341), Advanced Synthetic

Laboratory (AUCHE 360), Senior Project I (AUCHE 390), Senior Project II (AUCHE 392) and Directed Reading I (AUCHE 397). In addition, I maintain a disciplinary research program that is focused on developing immobilized catalytic systems for use in the continuous-flow production of industrially relevant materials and a pedagogical research program that is focused on the educational benefits of two-stage exams.

2015-2016 Sessional Lecturer

Thompson Rivers University, Kamloops, BC

In this position I was responsible for preparing and delivering weekly lectures and designing and grading assignments and exams for the following courses: (a) Chemical Bonding and Organic Chemistry (CHEM 1500). Content included bonding theories, periodic trends, intermolecular forces, functional groups, stereochemistry and conformational analysis. (b) Organic Chemistry 2 (CHEM 2220). Content included structure and bonding of organic compounds, reactions of the different functional groups and applications of organic chemistry. (c) Advanced Organic Chemistry (CHEM 3220). Content included the theory and practice of modern organic synthesis with an emphasis on carbonyl chemistry and C-C bond forming reactions. (d) Organic Spectroscopy (CHEM 3230). Content included the theory and practice of modern spectroscopic techniques for structural elucidation. (e) Advanced Chemical Biology (CHEM 4450). This was a seminar course with an emphasis on providing students with a chemical perspective of biological systems and modern laboratory techniques.

2014-2015 Sessional Lecturer

The King's University, Edmonton, AB

In this position I designed the course and laboratory curricula for both the introductory and advanced inorganic chemistry courses (CHEM 330 and 431). As well, I was responsible for preparing and delivering three 50-minute lectures weekly and supervising a three-hour laboratory and help session on a weekly basis. I also designed and graded student laboratory reports, quizzes, assignments, midterms and exams. Content for CHEM 330 included the inorganic chemistry of energy (solar and fuel cells), and the theory and application of nuclear, astro-, geo-, electro-, acid-base and coordination chemistry. Content for CHEM 431 included atomic and simple bonding theory, symmetry, molecular orbital theory and application, coordination chemistry, electronic spectroscopy, ligand field theory, organometallic chemistry and catalysis.

2013-2014 Research and Scale-Up Manufacturing Chemist

SBI Fine Chemicals Inc. / SBI BioEnergy Inc., Edmonton, AB

In this position I developed proprietary continuous-flow chemical processes for the production of biofuels from renewable feedstocks, such as canola oil. In addition, I was responsible for supervising pilot plant operations and implemented new lab maintenance and record keeping initiatives. As well, I was elected to serve as the safety officer for the site and was responsible for updating and enforcing safety protocols.

2008-2013 **Graduate Student Teaching Assistant**
University of Alberta, Edmonton, AB

In this position I was responsible for conducting a weekly three-hour laboratory session and a one-hour help session for introductory and advanced inorganic chemistry courses (CHEM 241 and 243) and introductory general chemistry (CHE 101/103 and 102/105). In addition, I graded weekly laboratory assignments and quizzes and proctored and graded midterm and final exams.

2008-2013 **Graduate Student**
University of Alberta, Edmonton, AB

In this position, I synthesized heterogeneous, polymer-based, rhodium catalysts for C-C bond forming reactions, olefin isomerization and hydrogenation reactions and successfully produced the pharmaceutical (+)-pilocarpine from a study on 1,6-enyne cycloisomerization reactions. I utilized nuclear magnetic resonance spectroscopy, chiral gas chromatography and chiral high-performance liquid chromatography extensively for substrate and product characterization and installed and developed experimental protocols for an H-Cube® continuous-flow hydrogenation reactor.

LEAVES OF ABSENCE

January 2019 – January 2020 **Maternity Leave**

September 2021 – October 2022 **Maternity Leave**

AWARD HISTORY AND RECOGNITIONS

2020 **Early Achievement for Excellence in Teaching Award**
University of Alberta Augustana Faculty

2019 **University of Alberta Award for Outstanding Mentorship in Undergraduate Research and Creative Activities**
University of Alberta (nominated but not awarded)

2018-2023 **Adjunct Professorship Appointment**
Thompson Rivers University (5-year appointment)

2017 **Building Capacity for Reconciliation Certificate**
University of Alberta Augustana Faculty

2014 **Industry R&D Associates Award**
Alberta Innovates Technology Futures (awarded but declined)
- Award value: \$62,000.00

- 2012 **Profiling Alberta's Graduate Students Award**
University of Alberta
- 2011 **University Teaching Services Graduate Student Teaching Award**
University of Alberta
- 2010-2011 **Queen Elizabeth II Graduate Fellowship (Doctoral)**
Government of Alberta
- Award value: \$15,000.00
- 2009-2010 **Walter H. Johns Memorial Scholarship**
University of Alberta
- Award value: \$4,627.00
- 2009-2010 **NSERC Alexander Graham Bell Canada Graduate Scholarship**
Natural Sciences and Engineering Research Council of Canada
- Award value: \$17,500.00
- 2009 **Professor Osman James Walker Memorial Scholarship**
University of Alberta
- Award value: \$1700.00
- 2008-2009 **Queen Elizabeth II Graduate Fellowship (Master's)**
Government of Alberta
- Award value: \$10,800.00
- 2007 **University Council for Research Award**
Saint Francis Xavier University
- Award value: \$4,500.00

RESEARCH AND TEACHING FUNDING HISTORY

- 2023 **Augustana Faculty Research Grant – Summer Student RAship**
University of Alberta
- Funds awarded to student: \$7,500.00
- 2021 **Augustana Faculty Research Grant – Summer Student RAship**
University of Alberta
- Funds awarded to student: \$7,500.00
- 2021 **Augustana Faculty Critical Research Equipment Grant – Benchtop NMR Spectrometer**
University of Alberta
- Funds awarded: \$55,225.00

- 2020 **Teaching and Learning Enhancement Fund Conference Travel Grant**
 University of Alberta
 - Funds Requested: \$2,905.11
 - Not adjudicated due to COVID-19
- 2019 **Augustana Faculty Research Grant – Summer Student RAship**
 University of Alberta
 - Funds awarded to student: \$7,500.00
- 2018 **Teaching and Learning Enhancement Fund Conference Travel Grant**
 University of Alberta
 - Funds awarded: \$2,751.00
- 2018 **Augustana Faculty Research Grant – Summer Student RAship**
 University of Alberta
 - Funds awarded to student: \$7,500.00
- 2017 **Teaching and Learning Enhancement Fund Conference Travel Grant**
 University of Alberta
 - Funds awarded: \$1,862.00
- 2017 **University of Alberta Research Experience (UARE) Internship Grant**
 University of Alberta
 - Funds awarded: \$6,000.00
- 2017 **MITACS 2017 Globalink Research Internship Grant**
 Mathematics of Information Technology and Complex Systems (MITACS)
 - Funds awarded: \$7,500.00
- 2016 **Start-Up Funding Grant**
 University of Alberta Augustana Faculty
 - Funds awarded: \$7,500.00
- 2016 **Continuous-Flow Reactor for Heterogeneous Catalysis Grant**
 University of Alberta Augustana Faculty
 - Funds awarded: \$22,300.00

TEACHING EXPERIENCE

- 2016 – present **Courses Designed, Prepared and Taught**
 AUCHE 110 (lecture only) – General Chemistry I
 AUCHE 112 (lecture only) – General Chemistry II
 AUCHE 222 (lab only) – Instrumental Analysis
 AUCHE 230 (lecture only) – Inorganic Chemistry I
 AUCHE 232 (lecture and lab) – Inorganic Chemistry II

AUCHE 279 (lecture and lab) – Physical Chemistry
 AUCHE 330 (lecture and lab) – Organometallic Chemistry
 AUCHE 341 (lecture only) – Introduction to Environmental Chemistry
 AUCHE 350 (lecture only) – Synthesis II
 AUCHE 351 (lab only) – Synthesis II Lab
 AUCHE 352 (lecture only) – Synthesis III
 AUCHE 353 (lab only) – Synthesis III Lab
 AUCHE 360 (lab only) – Advanced Synthetic Laboratory
 *AUCHE 390 – Senior Project I
 *AUCHE 392 – Senior Project II
 *AUCHE 397 – Directed Reading I
 *AUCHE 492 – Advanced Project II

My typical teaching responsibilities at Augustana comprise three lecture and/or lab sections per semester. Each lecture and lab section requires three contact hours each per week, with the exception of AUCHE 351, 353 and 360 which require four contact hours per week.

*These courses are taught in addition to my typical teaching responsibilities and consist of four contact hours per week with the exception of AUCHE 397, which requires 1 contact hour per week.

STUDENT SUPERVISION HISTORY

Summer Research Assistants

- 2024 **Halden Nicolajsen**, University of Alberta, Augustana Campus
 - Summer research student (recipient of Summer Research Assistantship Funds from the Dean of Augustana)
 - Undergraduate (BA) student (anticipated graduation May 2026)
 - Project title: “Experimenting with Photography: Arts and Science Integration at Augustana”
- 2023 **Kaylin Wildcat**, University of Alberta Augustana Campus
 - Summer research student (employed through NSERC PromoScience initiative)
 - Undergraduate (BSc) student (graduated May 2024)
 - Developed STEM and land-based learning programs for indigenous youth (K-12)
- 2023 **Hope Zimmerman**, University of Alberta Augustana Campus
 - Summer research student (recipient of an Augustana Summer Research Assistantship Grant)
 - Undergraduate (BSc) student (graduated May 2024)
 - Project title: “Collaborative Learning, Testing Aids and Student Perceptions”
- 2021 **Rhythm Singh**, University of Alberta Augustana Campus

- Summer research student (recipient of an Augustana Summer Research Assistantship Grant)
- Undergraduate (BSc) student (graduated May 2022)
- Project title: “Continuous-Flow Catalysis of Allylic Alcohols: Isomerization vs Hydrogenation”

- 2018, 2019 **Shaylynn Nickel**, University of Alberta Augustana Campus
- Summer research student (recipient of two Augustana Summer Research Assistantship Grants)
 - Undergraduate (BSc) student (graduated from the University of Alberta’s Pharmacy program)
 - Project Title: “Development of Metal-Organic Framework Catalysts for use in Continuous-Flow Catalytic Transformations”
 - This work was presented at the 102nd Canadian Chemistry Conference and Exhibition in Quebec City in June 2019. This is the largest and most well recognized chemistry conference in Canada.
- 2017 **Banruo (Francis) Li**, University of Alberta Augustana Campus
- Summer research student (recipient of a MITACS Globalink Research Internship Grant)
 - Visiting international undergraduate (BSc) student intern from Nanjing University, Jiangsu Province, China
 - Project Title: “Development of a Biphenol-Based Ligand Building Block for Metal-Organic Frameworks”
- 2017 **Marina Schmidt-Thomé**, University of Alberta Augustana Campus
- Summer research student (recipient of a University of Alberta Research Experience Internship Grant)
 - Visiting international graduate (MSc) student intern from Ludwig-Maximilians University of Munich, Munich, Germany and currently employed as a chemistry work-student in Munich, Germany
 - Project Title: “Development of a BINOL-Based Ligand Building Block for Metal-Organic Frameworks”

Directed Reading and/or Directed Study Students

- Winter 2024 **Emma Fraser**, University of Alberta, Augustana Campus
- Directed studies student
 - Undergraduate (BSc) student (anticipated graduation May 2025)
 - Project title: “Synthesis of Gold Nanoparticles Using Various Teas”
- Winter 2023 **Thanhhai Nguyen**, University of Albeta Augustana Campus
- Directed reading student
 - Undergraduate (BSc) student (anticipated graduation May 2025)
 - Project title: “The Future is Bright: A Review of Thin Film Solar Cell Technology”

- Fall 2021 **Rhythm Singh**, University of Alberta Augustana Campus
 - Directed studies student
 - Undergraduate (BSc) student (graduated May 2022)
 - Project title: “Continuous-Flow Catalysis of Allylic Alcohols: Isomerization vs Hydrogenation”
- Winter 2020 **William Dobson**, University of Alberta Augustana Campus
 - Directed studies and directed reading student
 - Undergraduate (BSc) student (graduated May 2020 and graduated from the MSc Brewing and Distilling program at the Heriot-Watt University)
 - Directed reading project title: “Making Whisky Overnight: Pipe-Dream or Possibility?”
 - Directed studies project title: “Continuous-Flow Catalysis of 3-Buten-2-ol”
- 2018-2019 **Benjamin Schmidt**, University of Alberta Augustana Campus
 - Directed studies student (co-supervisor with Dr. James Kariuki)
 - Undergraduate (BSc) student (graduated May 2019)
 - Project Title: “Synthesis of a BINOL Derivative for use in Electrocatalytic Applications
 - Awarded an NSERC-CGS M award (2019)
- Fall 2018 **Kaylee Ma**, University of Alberta Augustana Campus
 - Directed studies student
 - Undergraduate (BSc) student (graduated May 2020)
 - Project Title: “Synthesis of a BINOL Derivative for use in Electrocatalytic Applications
- Fall 2018 **Shaylynn Nickel**, University of Alberta Augustana Campus
 - Directed studies student
 - Undergraduate (BSc) student (graduated from the University of Alberta’s Pharmacy program)
 - Project Title: “Development of Metal-Organic Framework Catalysts for use in Continuous-Flow Catalytic Transformations
- 2017-2018 **Jared Baker**, University of Alberta Augustana Campus
 - Directed studies student
 - Undergraduate (BSc) student (graduated May 2018)
 - Project Title: “Continuous-Flow Study of Allylic Alcohol Isomerization”
 - This work was presented at the 101st Canadian Chemistry Conference and Exhibition in Edmonton in May 2018. This is the largest and most well recognized chemistry conference in Canada.
- Fall 2017 **Victoria Brenton**, University of Alberta Augustana Campus
 - Directed studies student

- Undergraduate (BSc) student (graduated May 2018 and currently employed as a high-school teacher in Yellowknife, Northwest Territories)
- Project Title: “Development of Catalyst-Containing Metal-Organic Frameworks from Metal-Phosphoramidite Building Blocks”

Fall 2017 **Patrick Smith**, University of Alberta Augustana Campus
 - Directed studies student
 - Undergraduate (BSc) student (graduated May 2019 and currently employed as an Environmental Analyst with the Government of the Northwest Territories)
 - Project Title: “Development of Immobilized Metal-Phosphoramidite Complexes for use as Continuous-Flow Catalysts”

Fall 2017 **Mathew Kowalski**, University of Alberta Augustana Campus
 - Directed reading student
 - Undergraduate (BSc) student (graduated May 2020)
 - Project Title: “Recent Advances in Continuous-Flow Catalysis”

Community Service Learning (CSL) Students

Fall 2017 **Alexander Dobson**, University of Alberta Augustana Campus
 - CSL student enrolled in AUCHE 320

Fall 2017 **Benjamin Schmidt**, University of Alberta Augustana Campus
 - CSL student enrolled in AUCHE 320

INVITED GUEST LECTURES

2020 **McGinitie, E. G.*** Practicing Professionalism. Invited guest lecture for AUCHE 410 at the University of Alberta Augustana Campus, Camrose, AB, February 2020.

2020 **McGinitie, E. G.*** Chemical Kinetics. Invited guest lecture for AUCHE 112 at the University of Alberta Augustana Campus, Camrose, AB, February 2020.

2017 **McGinitie, E. G.*** Hybrid Orbital Theory. Invited guest lecture for AUCHE 250 at the University of Alberta Augustana Campus, Camrose, AB, September 2017.

PROFESSIONAL DEVELOPMENT ACTIVITIES

2024 Participated in a teaching square at the University of Alberta’s Augustana Campus in Camrose, AB.

2024 Attended and moderated a session at the 2024 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) in Camrose, AB.

- 2023 Attended and presented at the 2023 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) in Camrose, AB.
- 2020 Attended the Center for Teaching and Learning's "Online Teaching Institute: Equity, Diversity and Inclusivity (EDI) across the digital teaching and learning divide".
- 2020 Planned to attend and present at the 26th Biennial Conference on Chemical Education (BCCE) hosted by Oregon State University in Corvallis, OR, USA. Due to the COVID-19 pandemic, this conference was cancelled.
- 2020 Planned to attend and present at the 2020 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) in Camrose, AB. Due to the COVID-19 pandemic, this conference was cancelled.
- 2020 Enrolled in the Center for Teaching and Learning's course entitled "Teaching and Learning Online: Introductory Self-Study Course".
- 2018 Attended the 25th Biennial Conference on Chemical Education (BCCE) hosted by the University of Notre Dame in South Bend, IN, USA.
- 2018 Attended and presented at the 2018 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) in Camrose, AB.
- 2018 Attended the 101st Canadian Society for Chemistry (CSC) annual meeting in Edmonton, AB.
- 2017-2018 Participated in a teaching square at the University of Alberta's Augustana Campus in Camrose, AB.
- 2017 Attended the Society for Teaching and Learning in Higher Education (STLHE) annual meeting in Halifax, NS.
- 2017 Attended the chemistry education symposia at the 100th Canadian Society for Chemistry (CSC) annual meeting in Toronto, ON.
- 2017 Attended the 2017 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) in Camrose, AB.
- 2016-present Regularly attended numerous teaching seminars conducted at the University of Alberta's Augustana Campus in Camrose, AB.
- 2016-present Regularly attended the biannual Student Academic Conference (SAC) conducted at the University of Alberta's Augustana Campus in Camrose, AB.

- 2016-2018 Member of the organizing committee for the chemistry education symposia/division for the 101st Canadian Society for Chemistry (CSC) annual meeting in Edmonton, AB (~2 formal meetings per month).
- 2016 Attended the Harris Workshop on Teaching Chemistry hosted by the Department of Chemistry at the University of Alberta in Edmonton, AB.
- 2016 Attended an Augustana workshop focused on online assignments and grading in Camrose, AB.

PEER REVIEWED PUBLICATIONS

- 2024 Rempel, B. P., Snyman, M., King, D., Kariuki, J., **McGinitie, E. G.** Development and Implementation of a Senior Mentorship Experience Course That Utilizes Senior Undergraduate Chemistry Students as Learning Assistants in the Introductory Chemistry Laboratory to Foster Transferable Skill Development. *The Journal of Chemical Education* (**in review**).
- Corresponding author
- 2023 Rempel, B. P., Dirks, M. B., **McGinitie, E. G.** The influence of two-stage testing on peer relationships: a study of first-year university student perceptions. *The Canadian Journal for the Scholarship of Teaching and Learning* **2023**, 2, 1-19.
- Corresponding author
- 2022 King, D., Snyman, M., **McGinitie, E. G.** Design, implementation and instructor reflections on teaching a face-to-face advanced synthetic chemistry laboratory course during the COVID-19 pandemic. *The Journal of Chemical Education* **2022**, 99, 1579-1586.
- Corresponding author
- 2021 Rempel, B. P., Dirks, M. B., **McGinitie, E. G.** Two-stage testing reduces student-perceived exam anxiety in introductory chemistry. *The Journal of Chemical Education* **2021**, 98, 2527-2535.
- Corresponding author
- 2015 **Corkum, E. G.**, Wang, R., Aquino, M. A. S. Compromising the metal-metal bond in diruthenium(II,III) tetraacetate: Reaction of $[\text{Ru}_2(\mu\text{-O}_2\text{CMe})_4(\text{MeOH})_2]^+$ with phosphines to form 'Ru($\mu\text{-O}_2\text{CMe}$)₂($\mu\text{-OMe}$)₂Ru' cores. *Inorganica Chimica Acta* **2015**, 424, 202-209.
- Member of research team
- 2012 **Corkum, E. G.**, Kalapugama, S., Hass, M. J., Bergens, S. H. Solvent-free Isomerization of Allylic Alcohols Catalyzed by a Rhodium Catalyst-Organic Framework. *RSC Advances* **2012**, 2, 3473-3476.
- Co-author

- 2011 **Corkum, E. G.**, Hass, M. J., Sullivan, A. D., Bergens, S. H. A Highly Reusable Rhodium Catalyst-Organic Framework for the Intramolecular Cycloisomerization of 1,6-Enynes. *Organic Letters* **2011**, *13*, 3522-3525.
- Co-author

PATENTS, LICENSES AND SCHOLARLY RESEARCH CONTRIBUTIONS

- 2023 Ball, N., Gomez, M., Rempel, B., Farkas, E., Makal, T., Shields, G., Parish, C., Tresca, B., **McGinitie, E. G.** Conducting research at primarily undergraduate institutions. *Cell Reports Physical Sciences* **2023**, *4*, 1-6.
- Contributor
- 2016 **McGinitie, E. G.**, Nepal, P., Kalapugama, S., Bergens, S. H. Catalyst systems for use in continuous flow reactors and methods of manufacture and use thereof. Patent issued (US2016/0175829 A1).
- Co-inventor
- 2013 **McGinitie, E. G.**, Nepal, P., Kalapugama, S., Bergens, S. H. Reusable Catalysts for Asymmetric Cycloisomerization Reactions. Catalyst systems for use in continuous flow reactors and methods of manufacture and use thereof. License issued for commercialization of the technology through GreenCentre Canada and Chiral Technologies Inc.
- Co-inventor
- 2013 **Corkum, E. G.** The synthesis of rhodium catalyst-organic frameworks for isomerization and continuous-flow hydrogenation reactions. Ph. D. Thesis. University of Alberta: Canada.
- 2008 **Corkum, E. G.** The disassembly of diruthenium(II,III) tetracarboxylates by mono- and diphosphine ligands. B.Sc. Thesis. Saint Francis Xavier University: Canada.

PUBLISHED TEACHING MANUALS

- 2022 **McGinitie, E.** AUCHE 351 Synthesis II Lab Course Manual. Published, University of Alberta, Augustana Campus.
- 2021 **McGinitie, E.** AUCHE 360 Advanced Synthetic Laboratory Course Manual. Published, University of Alberta Augustana Campus.
- 2018 **McGinitie, E.** AUCHE 330 Organometallic Chemistry Lab Manual. Published, University of Alberta Augustana Campus.

- 2018 **McGinitie, E.** AUCHE 232 Inorganic Chemistry II Lab Manual. Published, University of Alberta Augustana Campus.
- 2017 **McGinitie, E.** AUCHE 230 Inorganic Chemistry I Lab Manual. Published, University of Alberta Augustana Campus.

PRESENTATIONS – PEER REVIEWED ABSTRACTS

*Indicates the presenter(s).

- 2024 Rempel, B., Kariuki, J., Zimmerman, H., Weenink, T., Spreen, M., **McGinitie, E. G.*** Student Perspectives on Two-Stage Collaborative Exams in Introductory Chemistry. Oral presentation delivered at the 2024 Biennial Conference on Chemical Education, Kentucky, USA, July 2024.
- 2024 Rempel, B., Zimmerman, H., **McGinitie, E. G.*** Student Perspectives on Generating and Using Their Own Crib Sheets for Exams in Introductory Chemistry. Oral presentation delivered at the 2024 Biennial Conference on Chemical Education, Kentucky, USA, July 2024.
- 2024 Rempel, B.*, Kariuki, J., Snyman, M., King, D., **McGinitie, E. G.** Students Mentoring Students: Senior Undergraduate Laboratory Instructors. Oral presentation delivered at the 2024 Biennial Conference on Chemical Education, Kentucky, USA, July 2024.
- 2024 Rempel, B.*, Zimmerman, H., **McGinitie, E. G.** Analyzing Student Generated Exam Crib Sheets in Introductory Chemistry. Oral presentation delivered at the 2024 Biennial Conference on Chemical Education, Kentucky, USA, July 2024.
- 2023 Rempel, B.*, Zimmerman, H., **McGinitie, E. G.** Analyzing Student-Generated Exam Crib Sheets. Oral presentation delivered at the Mount Royal University 2023 Symposium for Scholarship of Teaching and Learning, Banff, AB, November 2023.
- 2023 **McGinitie, E. G.***, Dirks, M., Rempel, B. Two-Stage Exams: An Exercise in Collaborative Learning. Oral presentation delivered at the annual Augustana Conference on Undergraduate Research and Innovative Teaching, Camrose, AB, May 2023.
- 2023 **McGinitie, E. G.***, King, D., Pockock, E-J., Reiter, D., Snyman, M., Rempel, B., Kariuki, J. Learning-By-Doing: Teaching Students to Become Student Teachers. Oral presentation delivered at the annual Augustana Conference on Undergraduate Research and Innovative Teaching, Camrose, AB, May 2023.
- 2022 Spreen, M., **McGinitie, E. G.**, Kariuki, J., Rempel, B.* Two-Stage Exams in General Chemistry: What do Students Like and Dislike? Oral presentation

delivered remotely at the 105th Canadian Chemistry Conference and Exhibition, June 2022.

- 2021 Rempel, B.*, Dirks, M., **McGinitie, E. G.** Implementation and Student Responses to Two-Stage Exams in General Chemistry. Oral presentation delivered remotely at the 104th Canadian Chemistry Conference and Exhibition, August 2021.
- 2020 Kariuki, J.*, Rempel, B.*, Snyman, M., King, D., **McGinitie, E. G.*** Student Teachers: Reflections of Lab Teaching Experiences. Oral presentation abstract accepted February 25th, 2020. Because of the global COVID-19 pandemic, ACURIT 2020 was cancelled by the organizing committee; and, therefore, this presentation could not be given as intended.
- 2020 Kariuki, J.*, Rempel, B.*, Snyman, M., King, D., **McGinitie, E. G.*** Teaching Students to Become Student Teachers. Oral presentation abstract accepted February 25th, 2020. Because of the global COVID-19 pandemic, ACURIT 2020 was cancelled by the organizing committee; and, therefore, this presentation could not be given as intended.
- 2020 Kariuki, J., Rempel, B., Snyman, M., King, D., **McGinitie, E. G.*** Learning-By-Doing: Teaching Students to Become Student Teachers. Oral presentation abstract accepted March 31st, 2020. Because of the global COVID-19 pandemic, the 2020 Biennial Conference on Chemical Education was terminated on April 2, 2020, by the Executive Committee of the Division of Chemical Education, American Chemical Society; and, therefore, this presentation could not be given as intended.
- 2020 Kariuki, J., Rempel, B., **McGinitie, E. G.*** Two-Stage Exams: An Exercise in Collaborative Learning. Oral presentation abstract accepted March 31st, 2020. Because of the global COVID-19 pandemic, the 2020 Biennial Conference on Chemical Education was terminated on April 2, 2020, by the Executive Committee of the Division of Chemical Education, American Chemical Society; and, therefore, this presentation could not be given as intended.
- 2019 Nickel, S.*, **McGinitie, E. G.** Synthesis of Metal-Organic Framework Heterogenous Catalysts via Synthetic Modification of Privileged Ligand Systems. Poster presentation delivered at the 102nd Canadian Chemistry Conference and Exhibition, Quebec City, QC, June 2019.
- 2019 Kariuki, J., Schimdt, B.*, Nickel, S.*, **McGinitie, E. G.** Undergraduate Research: Benefits and Challenges of a High-Impact Practice. Poster presentation delivered at the 102nd Canadian Chemistry Conference and Exhibition, Quebec City, QC, June 2019.
- 2019 Kariuki, J.*, Schimdt, B.*, Nickel, S.*, **McGinitie, E. G.** Triumphs and Challenges of Undergraduate Research. Oral presentation delivered at the annual Augustana

- Conference on Undergraduate Research and Innovative Teaching, Camrose, AB, May 2019.
- 2018 **McGinitie, E. G.***, Kariuki, J., Rempel, B. Two-Stage Exams: A New Tool for Collaborative Learning and Student Assessment. Poster presentation delivered at the 101st Canadian Chemistry Conference and Exhibition, Edmonton, AB, May 2018.
- 2018 Baker, J.*, **McGinitie, E. G.** Using Flow Chemistry to Manipulate Product Ratios in the Palladium Catalyzed Isomerization/Hydrogenation of Allylic Alcohols. Poster presentation delivered at the 101st Canadian Chemistry Conference and Exhibition, Edmonton, AB, May 2018.
- 2018 **McGinitie, E. G.***, Kariuki, J., Rempel, B. Two-Stage Exams: A New Tool for Student Assessment. Oral presentation delivered at the annual Augustana Conference on Undergraduate Research and Innovative Teaching, Camrose, AB, May 2018.
- 2012 **Corkum, E. G.***, Hass, M. J., Sullivan, A. D., Bergens, S. H. A Rhodium Catalyst-Organic Framework for the Intramolecular Cycloisomerization of 1,6-Enynes. Poster presentation delivered at the 25th International Conference on Organometallic Chemistry, Lisbon, Portugal, September 2012.
- 2012 **Corkum, E. G.**, Kalapugama, S.*, Hass, M. J., Bergens, S. H. Solvent-free Isomerizations of Allylic Alcohols Catalyzed by a Rhodium Catalyst-Organic Framework. Poster presentation delivered at the 95th Canadian Chemistry Conference and Exhibition, Calgary, AB, May 2012.
- 2012 **Corkum, E. G.***, Hass, M. J., Sullivan, A. D., Bergens, S. H. A Rhodium Catalyst-Organic Framework for the Intramolecular Cycloisomerization of 1,6-Enynes. Oral presentation delivered at the 95th Canadian Chemistry Conference and Exhibition, Calgary, AB, May 2012.
- 2010 Bergens, S. H.*, Takebayashi, S., Hass, M. J., **Corkum, E. G.**, John, J. M., Sullivan, A. D. Enantioselective Desymmetrization of Imides by Hydrogenation. A Reusable Catalyst-Organic Framework for Cycloisomerization of 1,6-Enynes. Oral presentation delivered at the 3rd International IUPAC Conference on Green Chemistry, Ottawa, ON, August 2010.
- 2010 Bergens, S. H.*, Takebayashi, S., Hass, M. J., **Corkum, E. G.**, John, J. M., Sullivan, A. D. Mechanistic and Developmental Enantioselective Catalysis: Stoichiometric Bifunctional Additions, Desymmetrization of Imides by Hydrogenation, and a Reusable Catalyst for Cycloisomerizations. Oral presentation delivered at the 24th International Conference on Organometallic Chemistry, Taipei, Taiwan, July 2010.

2008 **Corkum, E. G.***, Wyman, I. W., Aquino, M. A. S. The disassembly of diruthenium(II,III) tetracarboxylates by mono- and diphosphine ligands. Oral presentation delivered at the 33rd Annual APICS/CIC Undergraduate Chemistry Conference, Halifax, NS, May 2008.

PRESENTATIONS AND SEMINARS – NON-PEER REVIEWED

*Indicates the presenter(s).

2024 Fraser, E. *, **McGinitie, E. G.** Synthesis of Gold Nanoparticles Using Various Teas. Oral presentation delivered at the April Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, April 2024.

2023 **McGinitie, E. G.*** Designing Your 3 Week Course to be Enjoyable. Invited panel speaker for an Augustana Teaching Seminar, University of Alberta Augustana Campus, Camrose, AB, November 2023.

2023 Zimmerman, H. *, Rempel, B. P., **McGinitie, E. G.** Collaborative Learning, Testing Aids and Student Perceptions. Oral presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2023.

2023 Nguyen, T. *, **McGinitie, E. G.** The Future is Bright: A Review of Thin Film Solar Cell Technology. Oral presentation delivered at the April Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, April 2023.

2021 Singh, R. *, **McGinitie, E. G.** Continuous-Flow Catalysis of Allylic Alcohols to Obtain Their Isomerized and Hydrogenated Products. Oral presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2021.

2021 **McGinitie, E. G.*** The Science of Applying to Graduate School. Oral presentation delivered at the University of Alberta Augustana Campus What To Do With Your Science Degree Workshop, Camrose, AB, March 2021.

2020 **McGinitie, E. G.*** In-Person Teaching in the Time of COVID-19: A Personalized, Real-World Senior Chemistry Lab Experience. Invited panel speaker for an Augustana Teaching Seminar, University of Alberta Augustana Campus, Camrose, AB, October 2020.

2019 Schmidt, B. *, Kariuki, J., **McGinitie, E. G.** Synthesis of Novel BINOL Derivative Ligands for use in Electrocatalysis. Oral presentation delivered at the April Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, April 2019.

- 2018 Schmidt, B.*, Ma, K.*, Kariuki, J., **McGinitie, E. G.** Synthesis of BINOL Derivatives for use in Electrocatalysis. Oral presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2018.
- 2018 Nickel, S.*, **McGinitie, E. G.** Synthesizing a Metal-Organic Framework: Advancements and Next Steps. Oral presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2018.
- 2018 Baker, J.*, **McGinitie, E. G.** Using Flow Chemistry to Manipulate Product Ratios in the Palladium Catalyzed Isomerization/Hydrogenation of Allylic Alcohols. Poster presentation delivered at the April Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, April 2018.
- 2018 **McGinitie, E. G.*** The Science of Applying to Graduate School. Oral presentation delivered at the University of Alberta Augustana Campus AfterU Workshop, Camrose, AB, January 2018.
- 2017 Kowalski, M*, **McGinitie, E. G.** The Changing “Flow” of Chemistry: Recent Advances in Continuous-Flow Catalysis. Poster presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2017.
- 2017 Smith, P.*, Li, B., **McGinitie, E. G.** Design and Synthesis of a Novel Ligand for Metal-Organic Framework Catalysts. Poster presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2017.
- 2017 Brenton, V.*, Schmidt-Thomé, M., **McGinitie, E. G.** Designing Synthetic Building Blocks for Catalytic Metal-Organic Frameworks. Oral presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2017.
- 2017 Baker, J.*, **McGinitie, E. G.** Improving Catalysis Through Flow-Chemistry. Oral presentation delivered at the December Student Academic Conference at the University of Alberta Augustana Campus, Camrose, AB, December 2017.
- 2017 **McGinitie, E. G.***, Kariuki, J.* Fun with Chemistry: Chemistry Demonstrations. Oral presentation/demonstration delivered at the University of Alberta Augustana Campus Science Olympics, Camrose, AB, February 2017.
- 2016 **McGinitie, E. G.*** Strategies for Solving Practice Problems. Oral presentation delivered at the University of Alberta Augustana Campus Residence Life Critical Thinking Workshop, Camrose, AB, October 2016.

2016 **McGinitie, E. G.***, Kariuki, J.,* Rempel, B.* Colour in our World: Using Colour Changes to Visualize Chemical Reactions. Oral presentation/demonstrations delivered at the University of Alberta Augustana Campus Annual Theme Faculty Talks Symposia, Camrose, AB, September 2016.

PROFESSIONAL INTERVIEWS

2018 **McGinitie, E.** Interviewed in “Forging a Successful Graduate”, Article by Brett McCollum. Appeared in Canadian Chemical News (ACCN), May 2018.

SERVICE AND COMMITTEE MEMBERSHIPS

University of Alberta Service

2024 Participated in the Augustana Faculty Feud event

2024 Composed a letter of nomination for a colleague for a prestigious career service award, Augustana Faculty

2024 Featured in the Women, Girls and Gender Diversity in Science event run by the Augustana Student Association

2023 Augustana teaching seminar speaker
- Presentation Topic: “Designing your 3 Week Course to be Enjoyable”

2023 Member of the Ad Hoc Academic Leadership Restructuring Committee, Augustana Faculty

2023 Member of the Assistant Professor in Physics Hiring Committee, Augustana Faculty

2023 Member of the COPLAC Dunn award committee, Augustana Faculty

2022-present Member of the Committee on the Learning Environment, Augustana Faculty

2022-2023 Member of the Outstanding Undergraduate Research award adjudication committee, Augustana Faculty

2022-2023 Co-organized the science program reforms related to the elimination of Science Foundations

2022 Master of Ceremonies of the opening plenary session of the Fall Student Academic Conference, Augustana Faculty

- 2021 “What to do with your science degree?” event speaker organized by the Augustana Science Club and the Augustana Chemistry Society
- Presentation Topic: “The Science of Applying to Graduate School”
- 2021 Conducted student interviews for AUSCI 425 (formerly AUCHE 410) enrollment
- 2021 Interviewed by the Augustana Science Club for the Science Monthly newsletter
- 2020-2022 Member of the Off Campus Experiential Learning Committee, Augustana Faculty
- 2020-2021 Augustana representative on the Undergraduate Research Initiative Advisory Committee
- 2020 Co-organizer and co-host of the 2020 Nobel Prizes Lunch and Learn
- 2020 Augustana teaching seminar speaker
- Presentation Topic: “In-Person Teaching in the Time of COVID-19: A Personalized, Real-World Senior Chemistry Lab Experience”
- 2020 Organized and hosted the AUSCI 425 (formerly AUCHE 410) information session
- 2019 Co-organized and co-hosted a reception for the Augustana chemistry graduates and their families
- 2018-present Organized and led numerous workshops dedicated to the reform of the Augustana chemistry program curriculum
- 2018 Member of the hiring committee for the Physical Chemistry sessional instructor position
- 2018 Volunteer during the alumni weekend at Augustana
- I supervised chemistry activities for children in the lab and helped set-up chemistry demonstrations. As well, I ran the science open house and gave tours of the chemistry lab facilities.
- 2018 Chemistry representative in the Science Capital Campaign initiative run by the Augustana Faculty
- 2018 Co-organized and co-hosted a graduate school information session for Augustana students
- 2018 AfterU workshop speaker organized by the Augustana Student Council
- Presentation Topic: “The Science of Applying to Graduate School”
- 2017-present Co-organized and co-hosted annual chemistry program information sessions for Augustana students

- 2017-present Faculty advisor for the Augustana Chemistry Society
- 2017-present Course coordinator for AUCHE 110/112
 - Organized and chaired numerous meetings with faculty, staff and sessional instructors regarding AUCHE 110/112 course and lab curricula, student and staff expectations, teaching and student policies, lab innovation and staff training.
- 2017-2018 Faculty advisor for the Augustana Human Rights Society
- 2017-2018 Organized and implemented chemistry demonstrations for the Augustana Science Fair
- 2017 Participated in the Augustana Capital Campaign Planning - “Immersive Science Experience Initiative”
- 2017 Participated in the interview process of two candidates for the Environmental Science faculty position
- 2017 Member of the hiring committee for the Inorganic Chemistry Lab sessional instructor position
- 2017 Participated in the biennial Augustana Faculty Follies event
- 2017 Participated in a round-table discussion regarding the state of affairs for new tenure-track faculty members with the University of Alberta’s Vice-President (Research) Lorne Babiuk
- 2016-present Participated in numerous Augustana Faculty opening and closing convocation ceremonies
- 2016-2023 Wrote numerous instrumentation pitches/requests for potential donors and for the Augustana advancement office
- 2016-present Science department representative for numerous Augustana preview days for prospective students
- 2016-2017 Panel member at the graduate school information sessions for Augustana students
- 2016 Presenter at a critical thinking workshop organized by the Augustana Residence Life program
 - Presentation Topic: “Strategies for Solving Practice Problems”
- 2011 Panel member for an Augustana graduate student experience seminar hosted by the Augustana Faculty

Professional Service

- 2025 Member of the 2025 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) organizing committee
- 2024 Member of the 2024 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) organizing committee
- 2023 Member of the 2023 Augustana Conference on Undergraduate Research and Innovative Teaching (ACURIT) organizing committee
- 2023-present Peer-reviewer for the Journal of Chemical Education
- 2022 Provided a reference letter for the promotion of a colleague at Thompson Rivers University
- 2019 Peer-reviewer for the Journal of Flow Chemistry
- 2019 Provided a reference letter for the tenure promotion of a colleague at Thompson Rivers University
- 2018 Student oral/poster presentation judge at the 101st Canadian Society for Chemistry (CSC) annual meeting in Edmonton, AB (judged 10 orals and 10 posters)
- 2016-2018 Member of the chemical education symposium organizing committee for the 101st Canadian Society for Chemistry (CSC) annual meeting
- 2010-2011 Laboratory assistant at the WISEST SET conference
- Supervised 12-15 female high-school students in a laboratory setting to promote interest in science and science related disciplines.

Service to the Community

- 2024 Organized and hosted an interactive science event at the Augustana Winter Student Academic Conference for members of the Augustana and Camrose communities
- 2023-2024 Co-lead of the NSERC PromoScience project focused on land-based learning and STEM programming for indigenous youth
- 2023 Organized a chemistry lab tour at Augustana for a group of racialized immigrant girls as part of the Pathways to STEM for Racialized Immigrant Girls project funded by Women and Gender Equality (WAGE) Canada and the Actions for Healthy Communities (AHC) group
- 2010 Science fair advisor for “Expert’s Day” at Oliver School in Edmonton, AB

2010 Presenter for the Wagner High School panel discussion in Edmonton, AB
- Presentation Topic: “Strategies for choosing an undergraduate university”

PROFESSIONAL MEMBERSHIPS

2012-present Member of the Canadian Society for Chemistry (CSC)
- Inorganic and Chemical Education Divisions