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LinkedIn: www.linkedin.com/pub/lianne-lefsrud/9/872/ba6/
Google Scholar: https://scholar.google.com/citations?user=5OUTlEQAAAAJ&hl=en&oi=ao
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EDUCATION

PhD, Strategic Management and Organization, Alberta School of Business, 2014.
PEng, Association of Professional Engineers and Geoscientists of Alberta, since 1997.
MSc, Interdisciplinary Civil & Environmental Engineering and Sociology, 1996, University of Alberta.
BSc, Civil Engineering, Cooperative Program, 1994, University of Alberta.

Beyond technical design, as engineers, we also have a professional, ethical, and legal responsibility to ensure that the operations and maintenance of these systems include risk management (broadly defined) that protects people and the environment. Since most losses have organizational failures as the latent cause, if we focus only on technical design, without integrated management systems, we miss preventing these losses and realizing gains. This motivates my research: *How can risk management systems be enhanced so that actors at all levels are better equipped to recognize, understand, and respond to risks??*

AFFILIATIONS AND EMPLOYMENT

Insight Risk Systems
CEO and Co-Founder, December 2024-

University of Alberta, Faculty of Engineering

Associate Dean Research, Programs and Development (Acting), Faculty of Engineering, July 2026-June-2027

Professor, Engineering Management, Department of Mechanical Engineering, Faculty of Engineering, March 2025 -

Professor Risk Management, Department of Chemical and Materials, Faculty of Engineering, July 2024 –

Risk, Innovation, and Sustainability Chair (RISC), David and Joan Lynch School of Engineering Safety and Risk Management, July 2022 – July 2027

Kule Scholar, Pandemics, Politics, and Misinformation, July 2022 – July 2025

Associate Professor, Department of Chemical and Materials, Faculty of Engineering, July 2021 – June 2024

Director (Outreach and Diversity), Department of Chemical and Materials, Faculty of Engineering, August 2019 –

Assistant Professor, Department of Chemical and Materials, Faculty of Engineering, May 2015 – June 2021

University of Michigan, Erb Institute for Global Sustainable Enterprise,
Erb Post-Doctoral Fellowship and concurrent Dow Sustainability Research Fellowship, Ross School of Business / School of Natural Resources and Environment, September 2013 – May 2015

APEGA - Association of Professional Engineers and Geoscientists of Alberta

Assistant Director Professional Practice, Regulatory Affairs. APEGA regulates 70,000+ individuals and 4000 companies practicing engineering and geoscience in Alberta. Managed Environment Committee, Continuing Professional Development, Practice Review Board, and Practice Standards Committee. Provided ethics advice, January 2003 - June 2007

Canadian National Railways
Worked in Engineering and Environmental Services (cleaned up contaminated and derailment sites, risk management for rockfalls and avalanches), Transportation Supervisor (supervised running trades, trained as locomotive engineer and conductor), Manager Network Operations (managed train operations), Market Manager (coal, sulphur & fertilizers), Senior Manager Support Services (chief of staff for Sr. VP Operations), and Director Guaranteed Car Order Program (implemented system-wide railcar distribution system), May 1996 - January 2003

Zirkon Consulting
Consultant, environmental risk assessment / management consulting for the design of industrial facilities, January 1994 - July 1995

University of Alberta, Department of Civil and Environmental Engineering
Environmental Engineering Research Assistant, completed risk perception and environmental impact assessment/management research, May 1993 - September 1994

AWARDS, HONOURS, AND RECOGNITIONS

2026 A1. University champion and national representative, Map the System Canada to the Global Finals at Oxford University, for students from *CME 694/494 / EngM 680 / HGEO 581 Sustainable Design*: Niam Lad, Allana Mason, David-Way Oladokun, Teagan Sterling

2025 A2. University champion and national representative, Map the System Canada to the Global Finals at Oxford University, for my student team from *CME 694/494 / EngM 680 / HGEO 581 Sustainable Design*: Claire Theaker-Brown, Ayla McCallum, Moyosooreoluwa Okunlola, and Zi Rui Wang.

A3. University Nominee, Dorothy Killam Fellowship, Killam Trust

2024 A4. University Nominee, Dorothy Killam Fellowship, Killam Trust

2022 A5. 2022 Process Safety Management Award, Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC), $1500.

A6. Kule Scholar (2022-2025), Kule Institute for Advanced Study (KIAS), University of Alberta.

A7. Visiting Scholar, Universität Hamburg, German Cluster of Excellence *Climate, Climatic Change, and Society (CLICCS)* with the Max Planck Institute for Meteorology (MPI-M), Helmholtz Center Geesthacht, and German Climate Computing Center.

2021 A8. Best Symposium Award Runner-up, *Science denial: causes, courses, and remedies. A route map for organizational scholars*, 2021 Organizations and Management Theory Division, Academy of Management Meeting. PIs: Elena Bruni (WU Vienna, Wirtschaftsuniversität Wien, Vienna University of Economics and Business) & Lianne Lefsrud

2020 A9. One of four professors in the Faculty of Engineering doing an exceptional job with remote delivery, from a survey of graduate students.
A10. Recipient of 2020 Canadian Dam Association Published Paper Award of Excellence (one of two granted) for Boswell, J., Rentz, A., Cavanagh, P., Staples, L., & Lefsrud, L.M. 2019. *Preliminary Work by the Dam Integrity Advisory Committee Towards Thinking Clearly and Communicating Effectively About Risk*. Proceedings of the Canadian Dam Association
A11. Most cited paper for 2015-2019 in *Canadian Public Administration* for Gehman, Lefsrud & Fast (2017) Social License to Operate: Legitimacy by Another Name?
A12. University representative, *Inclusive and Intersectional Research and Analysis in engineering and computer science*, $1000 grant to attend workshop hosted by the Natural Sciences and Engineering Research Council of Canada (NSERC) and the National Science Foundation (NSF), February 6-7, Washington DC.
2019 A13. APEGA Summit Award winner, Women in Engineering and Geoscience Champion Award, for co-chairing Canadian Coalition of Women in Engineering Science, Trades and Technology (CCWESTT) 2019, Biennial Conference.
2018 A14. APEGA Volunteer Appreciation Award for five years of dedicated service.
A15. Best Article by the Canadian Association for the Study of Discourse and Writing (CASDW) published in 2017 for *Dirty Oil or Ethical Oil? Visual Rhetoric in Legitimation Struggles*
A16. University of Alberta Award for Outstanding Mentorship in Undergraduate Research & Creative Activities, Nominee
A17. Visiting Scholar on Sustainability, Jerusalem School of Business Administration, Hebrew University of Jerusalem. $10,000. Asper Foundation
2017 A18. Confederation of Alberta Faculty Associations (CAFA) Distinguished Academic Early Career Award, $2000
2013-2019 A19. Most read paper, *Organization Studies* (FT45 journal), every month February 2013 – September 2019 (except in February 2015, #2 to a paper on Game Theory by Greece's finance minister)
2013 - 2015 A20. Best Paper Award, European Group of Organizational Studies, 2000 €
A21. Best Practice Paper 2013, Academy of Management ONE Division & Network for Business Sustainability (NBS), finalist
A22. TEDx speaker, https://www.youtube.com/watch?v=t5LZ9MNC_Ts
2012 A23. Best International Paper, Organization and Management Theory (OMT) Division, Academy of Management, finalist
A24. Dissertation Award, Kule Institute for Advanced Studies (KIAS), $7,000
2011 A25. Best Reviewer, Social Issues in Management (SIM) Division, Academy of Management
2011-2009 A26. Izaak Walton Killam Scholarship, Killam Trust, National level scholarship, $54,000
A27. Social Sciences and Humanities Research Council of Canada (SSHRCC) Doctoral Fellowship, $40,000
A28. President's Doctoral Prize of Distinction, University of Alberta, $20,000
2010 A29. Research Grant, Energy and Environment Solutions, Alberta Innovates, $46,000
2009 A30. Doctoral Exchange Program Fellowship, $25,000
A31. Persons Case Scholarship, Province of Alberta, $5,000
2008 A32. Engineers Canada TD Insurance Meloche Monnex National Scholarship, $7,500
A33. Dr. Alice E. Wilson Award, Canadian Federation of University Women, $6,000
A34. Provost Doctoral Awards, University of Alberta, $4,400
A35. Queen Elizabeth II Scholarship (Doctoral), Province of Alberta, $15,000

RESEARCH GRANTS

2026 RG1. Alberta Occupational Health and Safety (OHS) Gender-Related Injury and Illness Prevention Program (GRIIPP) Grant, Mitacs, Alberta Centre, *The Gendered Dynamics of Labour Trafficking: A Mixed Methods Analysis of Occupational Vulnerability*, $355,000, 2026-2028. PIs: Lianne Lefsrud & Eleni Stroulia.

RG2. Alberta Innovates Hydrogen Centre of Excellence – Services Capacity, Clean Resources Continuous Intake Program, *Regulatory and Insurance Gap Analysis for Hydrogen Value Chain Development in Alberta*, Amendment $556,000, 2026-2027. PIs: Lianne M. Lefsrud & Mohd Adnan Khan.

RG3. Mitacs Accelerate, Internship Grant, *Development of a Workforce Competence Management System for Alberta Construction Industry,* $150,000

2025 RG4. NSERC Discovery Grant, *Eliminating Serious Incidents and Fatalities (SIFs)*, $240,000

RG5. Creative sentencing research grant*, Enhancing Safe Work Practices for Hoisting, Rigging, and Lifting Operations*, $1,246,000. PIs: Thomas O'Neill, Lianne Lefsrud, Junho Park, Estacio Pereira, Samantha Jones, Fereshteh Sattari, Matthew McLarnon.

2024 RG6. Social Sciences and Humanities Research Council of Canada, Insight Grant, The Future of Work is Hybrid: Engineering Team Success through Leadership (2024-2029), $196,200. O'Neill (PI), Co-applicants: Behjat, L., Lefsrud, L. M., Grenier, S., Griffith, T., McLarnon, M. J. W., Gellatly, I. R., & Woodley, H. J. R.

RG7. WorkSafeBC Proof of Principle and Prototyping, *Creating Resilience in Safety Management Systems to Reduce Serious Incidents and Fatalities (SIFs)*, $100,000. PIs: Thomas O'Neill, Lianne Lefsrud, Ian Gellatly, Fereshteh Sattari.

RG8. Creative sentencing research grant*, Reducing Serious Injuries and Fatalities (SIF) in Oilsands Mining Operations*, $390,000. PIs: Lianne Lefsrud, Fereshteh Sattari, Michael Hendry, Renato Macciotta, Albert Liu.

RG9. Mitacs Accelerate Grant, *Creating resilience in mining management systems to reduce Serious Incidents and Fatalities (SIFs)*, $180,000. PIs: Lianne Lefsrud, Ian Gellatly, Fereshteh Sattari, Thomas O'Neill (UCalgary)

RG10. NSERC Alliance Grant, *Monitoring, measuring and verification of rock deformation due to subsurface fluid injection*, $889,000, 2023-2025. PIs: Mirko Van der Baan, D. Eaton, J. Leung, L. Lefsrud, R. Macciotta.

2023 RG11. Alberta Innovates Hydrogen Centre of Excellence – Services Capacity, Clean Resources Continuous Intake Program, *Regulatory and Insurance Gap Analysis for Hydrogen Value Chain Development in Alberta*, $501,700, 2023-2026. PIs: Lianne M. Lefsrud & Mohd Adnan Khan.

RG12. Creative sentencing research grant*, Building Resilience into Safety Management Systems: Precursors and Controls to Reduce Serious Injuries and Fatalities (SIFs)*, $370,000. PIs: Lianne Lefsrud & Ian Gellatly.

RG13. NSERC Alliance Missions Grant Application, *Application of Knowledge-based Decision Support Systems (KBDSS) to Reduce Greenhouse Gas (GHG) Emissions in the Major Phases of Construction Projects*, $731,250. PIs: Ahmed Hammad and Lianne M. Lefsrud.

2022 RG14. Risk, Innovation, and Sustainability Chair (RISC) (2022-2027), Endowed Funds, $625,000

RG15. Technology Alberta Research Grant. *Regulatory Scan for Hydrogen Fuel Cells*. $2000.

RG16. New Frontiers in Research Fund - Exploration: *The longevity of innovations: A multidisciplinary tool to evaluate the ecology of change,* 2022-2024, $250,000. PIs: Deena Hamza, Betty Onyura, Ahmed Hammad, Lianne Lefsrud, Anna Oswald, Neil Price, David Stanley, Jaime Rangel, Jessica Vandenberghe.

RG17. Visiting professorship, *Networks of Power: Examining the discourse, networks, and resources that catalyze climate change and energy transformation policies*, with Hamburg University. This world class institute coordinates the German Cluster of Excellence Climate, Climatic Change, and Society (CLICCS) with the Max Planck Institute for Meteorology (MPI-M), Helmholtz Center Geesthacht, and German Climate Computing Center to create the largest climate research cluster in Germany. The fellowship is €2,670 per month * 6 months = $21,720

2021 RG18. SSHRC Insight Development Grant, *Saving Lives: The development and evaluation of a universal information design response for opioid poisonings*, 2021-2023, $69,746. PIs: Gillian Harvey (Art and Design), Lianne Lefsrud, Stephanie VandenBerg (Medicine), Kate Sellen (Health Design), Susann Sommerfeldt (Nursing), Mary Forhan (Rehab/OT), Elaine Hyshka (School of Public Health), Marta-Marika Urbanik (Sociology), Daniel Laforest (Modern Languages & Cultural Studies)

RG19. NSERC Alliance Grant, *Enhancing safety management systems practices on construction projects: A proactive data-driven approach for project safety planning and control*, 2021-2025, $749,000. PIs: Lianne Lefsrud & Yasser Mohamed

RG20. AI4Society and Energy System Seed Grant, *Pulse Check for Canada's Energy Conversations*, $10,000. PI: Lianne Lefsrud, Joel Gehman, Eleni Stroulia, Denilson Barbosa, Jean-Christophe Boucher, Jennifer Winter

RG21. AI4Society Grant, *The Improbable Persistence of low probability events in the energy industry*, $10,000. PI: Lianne Lefsrud

RG22. Transport Canada, *Application of Artificial Intelligence techniques to identify and quantify key leading indicators,* 2021-2024, $150,000. PIs: Renato Macciotta, Lianne Lefsrud, Fereshteh Sattari.

2020 RG23. NSERC Alliance Grant, *Towards Future Interconnected Electric System*, 2020-2025, $4,230,090. PIs: Petr Musilek, Lori Thorlakson, Greg Kish, Qing Zhao, John Salmon, Ali Khajehoddin, Yunwei (Ryan) Li, Hamidreza Zareipour, Andy Knight, Omid Ardakanian, Wilsun Xu, Hao Liang, Lianne Lefsrud, Marek Reformat, Yindi Jing, Tim Weis

RG24. SSHRC Partnership Development Grant and Impact Assessment Agency of Canada, 2020-2023, $652,000, *Advancing Impact Assessment for Canada's Socio-Ecological Systems*, PIs: Debra Davidson, Ian Stewart, Amber Fletcher, Gerald Singh, Lianne Lefsrud, Kevin Jones, Brenda Parlee, Kelly Bronson, Gwendolyn Blue

RG25. Enablon, *Applying AI / Machine learning to data cleaning, categorization, prediction, and system integration,* datasharing agreement. PI: Lianne Lefsrud

RG26. Canadian Energy and Climate Nexus & Mitacs, *A Toolkit for Analyzing Online Conversations for Solutions Based Policy Development,* $125,000. PIs: Lianne Lefsrud, Eleni Stroulia, Denilson Barbosa & Joel Gehman

RG27. Natural Resources Canada, Office of Energy Research and Developing ERD, *Performance study of the Oil and Gas Clean Tech Program to enhance corporate reporting and accountability requirements*, $40,000. PI: Lianne Lefsrud

2019 RG28. KIAS Grant, *Information Design to Save Lives Co Design for Complex Health Communication (Naloxone Kit Information Re-Design),* $7500. PIs: Gillian Harvey (Art and Design), Lianne Lefsrud, Susann Sommerfeldt (Nursing), Mary Forhan (Rehab/OT), Elaine Hyshka (School of Public Health), Aiden Rowe (Art and Design)

RG29. Transport Canada research grant, *Risk Tolerance Strategy for Rail Transport of Dangerous Goods*, $150,000. PIs: Renato Macciotta & Lianne Lefsrud

RG30. KIAS Cluster Grant, *New Approaches to Communities, Communication and Consultation through the Lens of Geothermal Energy Development on the Traditional Lands of the Alexis Nakota Sioux Nation*, $35,000. PIs: Lianne Lefsrud & Andie Palmer

RG31. Blended Learning Grant from Faculty of Engineering for Centre for Teaching and Learning, $15,000

2018 RG32. Alberta Innovates Research Grant, *Geothermal Power from co-produced fluids and hydrocarbon reservoirs throughout the Western Canadian Sedimentary Basin*, $950,000. PI: Jonathan Banks, Collaborator: Lianne Lefsrud

RG33. NSERC Connect Grant, Tailings Safety Symposium, $7500, PI: Lianne Lefsrud.

RG34. NSERC Discovery Grant, *Developing Safety Management System Models*, $142,500. PI: Lianne Lefsrud

RG35. SSHRC Partnership Development Grant, *Enhancing Regulatory Effectiveness and Corporate Performance*, $135,708. PIs: Lianne Lefsrud, Heather Eckert and Joel Gehman. VP Research, University of Alberta and Faculty of Engineering $37,500

RG36. Kule Institute of Advanced Studies (KIAS), cluster grant *Advancing Environmental Impact Assessment for Canada's Socio-Ecological Systems*, $70,000. PIs: Debra Davidson & Ian Stewart. Collaborators: Brenda Parlee, Kevin Jones, Lianne Lefsrud

2017 RG37. MITACS, IBM Canada, Cerebri AI, Canada's Oil Sands Innovation Alliance (COSIA), *Multi-Perspective Text Analysis of Social Knowledge Networks*. $195,119. PIs: Kelly Lyons, Eleni Stroulia, Lianne Lefsrud

RG38. Alberta OHS Futures Research Funding Program, *Improving OHS Performance with OHS and Environmental Creative Sentencing Spillovers.* $37,700. PIs: Heather Eckert & Lianne Lefsrud

RG39. Railway Association of Canada, *Role of Safety Management Systems (SMS) in the railway industry and potential for enhancement of the Railway Safety Act (RSA)*, $16,800. PI: Lianne Lefsrud, co-PI: Renato Macciotta Pulisci

RG40. Construction Owners Association of Alberta and Mitacs, *Creating a Positive Safety Culture and Continuous Improvement in Alberta's Construction Industry*, research grant, $15,000. PI: Lianne Lefsrud

RG41. Creative sentencing research grant, *Protecting Worker Safety in Alberta by Enhancing Field Level Hazard Assessments and Training for Ground Hazards Associated with Tailings Facilities, Dams, and Systems*, 2017-2019, $285,000. PIs: Lianne Lefsrud & Michael Hendry

RG42. *Future Energy Systems,* Geothermal ($277,000) and Community and Aboriginal ($375,000) themes

RG43. Undergraduate Research Initiative stipend: *Workplace Culture: Diversity in Engineering*. $5000

2016 RG44. Seeding Food Innovation 2016 program, Weston Foods, *Social dimensions of climate change mitigation in Alberta agriculture*, $140,801. PIs: Debra Davidson, Andreas Hamann & Lianne Lefsrud

RG45. Genome Canada, Large-Scale Applied Research Project Competition, Natural Resources and the Environment: Sector Challenges, *Managing Microbial Corrosion in Canadian Offshore & Onshore Oil Production Operations*, $7,850,739. PIs: Lisa Gieg, Faisal Khan, John Wolodko. Collaborator: Lianne Lefsrud ($140,000)

RG46. Data Grant, Alberta Workers Compensation Board*, Assessing Partners' OHS Tools for Improving Alberta Workplace Safety*. PIs: Lianne Lefsrud & Joel Gehman

RG47. Centre for Teaching and Learning (CTL) Blended Learning Award - ENGG404: *Engineering Safety and Risk Management – Leadership in Risk Management*, $22,000. PIs: John Cocchio and Lianne Lefsrud

RG48. Centre for Teaching and Learning (CTL) Summer Student Employment Award, $7,000, PIs: Lianne Lefsrud and John Cocchio

2015 RG49. Research Grant, *Creating a Basis for Genuine Dialogue: Developing a Science-Based Understanding of Public/Industry Communication*, Alberta Chamber of Resources, $35,000. PIs: Lianne Lefsrud and Chris Westbury.

RG50. NSERC Engage Grant, *Using first- and second-order lexical co-occurrence to assess temporal changes in media valence and content*, $25,000. PI: Chris Westbury, collaborator: Lianne Lefsrud

2013 - RG51. Dow Sustainability Research Fellowship and Erb Research Fellowship, $175,000

RG52. SSHRC Partnership Development Grant, *Engendering Engineering Success*, $194,000, PI: Elizabeth Croft, co-PIs: Toni Schmader and Michelle Inness, collaborator: Lianne Lefsrud

RESEARCH PUBLICATIONS

Given my interdisciplinary research, I work with scholars in engineering, computer science, geoscience, cognitive psychology, medicine, design, business, economics, anthropology, and environmental sociology. For all publications, the order of authors is determined by the scientific contribution of the researcher, with the primary author listed first. For next generation mentoring, 73% of my publications are with students. Lastly, I strive to communicate my research in high-impact interdisciplinary journals, practitioner-focused journals (i.e., *Corrosion*, *Transportation Research Record*) and in public presentations, interviews, social media, and policy and industry reports to reach the broadest possible academic and practitioner audiences.
**** Denotes student or Post-Doctoral Fellow***

Journal Articles - Refereed

JA1. Srivastava, P. N., Perewernycky, N., Filippo, L.*, Lefsrud, L. M., & Ungrin, M. 2026. Integrating design-of-experiments (DOE) optimization and risk assessment towards a safe and simplified electroporation protocol for Toxoplasma gondii. PLOS Neglected Tropical Diseases, 20(4), e0014194. (Impact Factor=3.4) https://doi.org/10.1371/journal.pntd.0014194

JA2. Venkatesan, K.*, Joshi, A.*, Sattari, F., Lefsrud, L., & Khan, M. A. 2026. Beyond quantitative risk assessment: A spatial machine learning framework for risk-informed hydrogen appliance deployment. *International Journal of Hydrogen Energy*, *217*, 153950. (Impact Factor=8.3) https://doi.org/10.1016/j.ijhydene.2026.153950

JA3. Golabchi, H.*, Lefsrud, L., Pereira, E., & Mohamed, Y. 2026. Unlocking Systemic Safety Dynamics in Construction: A Fuzzy Cognitive Mapping Framework for Leading Indicator Analysis. *Canadian Journal of Civil Engineering*, forthcoming. (Impact Factor = 1.3) https://doi.org/10.1139/cjce-2025-0295

JA4. Joshi, M.R.A.*, Sattari, F., Lefsrud, L.M., & Khan, M.A. 2026. Hydrogen Combined Heat and Power (CHP) Facilities: Risk-Informed Modeling for Safety and Land-Use Planning. *Energy Conversion and Management, 328 (2026) 120793* (Impact Factor = 11.53) https://doi.org/10.1016/j.enconman.2025.120793

JA5. Joshi, M.R.A.*, Sattari, F., **Lefsrud, L.M.**, & Khan, M.A. 2025. Hydrogen Integration into Natural Gas Pipelines: Risk Analysis and Regulatory Recommendations. Forthcoming *Reliability Engineering & System Safety*, 264(B): 111422. https://doi.org/10.1016/j.ress.2025.111422

JA6. Rad, M.A.*, **Lefsrud, L.M.**, Hendry, M.T., Cen, A.C.*, Bachelor, S.*, Sltaninejad, S.* 2025. Analysis of Freight Train Passing a Stop Signal Using Machine Learning: Application of XGBoost and SHAP. Forthcoming *Journal of Rail Transport Planning & Management*, 35: 100532. *https://doi.org/10.1016/j.jrtpm.2025.100532*

JA7. Abellanosa, A.*, Pereira; E., **Lefsrud, L.**, Mohamed, Y. 2025. Integrating Knowledge Management and Large Language Models to Advance Construction Job Hazard Analysis: A Systematic Review and Conceptual Framework. Forthcoming *Journal of Safety and Sustainability*. *https://doi.org/10.1016/j.jsasus.2025.05.004*

JA8. Golabchi, H.*, **Lefsrud, L.M.**, Pereira, E. & Mohamed, Y. 2025. Proposal of a safety maturity framework in construction: Implementing leading indicators for proactive safety management. Forthcoming *Journal of Safety and Sustainability*. https://doi.org/10.1016/j.jsasus.2025.06.001

JA9. Golabchi, H.*, **Lefsrud, L.M.**, Pereira, E. & Mohamed, Y. 2025. Development of a Causation Model for Assessing Safety Performance of Construction Projects Using Fuzzy Cognitive Mapping. Forthcoming *Journal of Safety and Sustainability*.

JA10. Dehkordi, M.K.*, Sattari, F., & **Lefsrud, L.M.** 2025. Creating an Incident Investigation Framework for a Complex Socio-Technical System: Application of Multi-label Text Classification and Bayesian Network Structure Learning. *Reliability Engineering & System Safety*, *260*, 110971. https://doi.org/10.1016/j.ress.2025.110971

JA11. Joshi, A.*, Sattari, F., **Lefsrud, L.M**, & Khan, M. A. 2025. Risk-based approach for safe terminal operation and route planning of on-road hydrogen distribution network. *Process Safety and Environmental Protection*, 195: 106712. https://doi.org/10.1016/j.psep.2024.12.093

JA12. Reischauer, G., Biscaro, C. & Lefsrud, L.M. 2025. Cultivating Green Innovation in Established Organisations and Fields. *Industry and Innovation*, Special Issue, 32(1): 1-11. https://doi.org/10.1080/13662716.2024.2434061

JA13. Charuvil Elizabeth, R. M.*, Sattari, F., **Lefsrud, L.M**, & Gue, B. 2025. Visualizing what's missing: Using deep learning and Bow-Tie diagrams to identify and visualize missing leading indicators in industrial construction. *Journal of Safety Research*, 93: 1-11. https://doi.org/10.1016/j.jsr.2025.02.007

JA14. Charuvil Elizabeth, R. M.*, Sattari, F., **Lefsrud, L.M**, & Gue, B. 2024. Reducing serious injuries and fatalities in industrial construction-application of machine learning to analyze emotional intelligence and psychosocial factors. *International Journal of Construction Management*, 1–11. https://doi-org.login.ezproxy.library.ualberta.ca/10.1080/15623599.2024.2417629

JA15. Blue, G., Lajoie O'Malley, A., Yaworski, H.*, Holden. W., & **Lefsrud, L.M**. 2024. Jurisdictional imaginaries as contested geographies: A metaphor analysis of references cases on Canada's Impact Assessment Act. *International Journal of Canadian Studies / Revue internationale d'études canadiennes* 114, 103190. https://doi.org/10.1016/j.polgeo.2024.103190

JA16. Joshi, A.*, Sattari, F., **Lefsrud, L.M**, Tufail, M., & Khan, M. A. (2024). Mitigating uncertainty: A risk informed approach for deploying hydrogen refueling stations. *International Journal of Hydrogen Energy*, *74*, 136-150.

JA17. **Lefsrud, L.M.,** Ali, H.*, Gutierrez, C.A.G., Gehman, J., Barbosa, D., Stroulia, E. Energy to Contest? Emotional and multimodal contestation of energy infrastructure. *Research in the Sociology of Organizations, Special issue: Beyond microfoundations and macrofoundations: A cross-level linguistic perspective of institutions*, forthcoming.

JA18. Golabchi, H.*, Abellanosa, A. D.*, Lefsrud, L., Pereira, E., & Mohamed, Y. 2024. A comprehensive systematic review of safety leading indicators in construction. *Safety science*, 172, 106433. https://doi.org/10.1016/j.ssci.2024.106433

JA19. Xue, Y.*, Sattari, F., & **Lefsrud, L.M**. 2024. A quantitative analysis method for ecological-health risks caused by rainfall-induced soil erosion and LaRonde Mine. *Engineering Geology,* 107410. https://doi.org/10.1016/j.enggeo.2024.107410

JA20. Rana, P.*, Sattari, F., **Lefsrud, L.**, & Hendry, M. 2024. Prediction of Accidents and Severity of Casualty at Highway Railroad Grade Crossing by the Application of Machine Learning and Use of ArcGIS software for Accident Hotspot Identification. *Transportation Research Record*, 03611981231212162. https://doi.org/10.1177/036119812312121

JA21. Naef, M.* & **Lefsrud, L.M**. 2023. Smooth operator: Aligning performance assessment techniques with design and operating objectives. *Journal of Loss Prevention in the Process Industries*, *85*, 105158. https://doi.org/10.1016/j.jlp.2023.105158

JA22. Naef, M.* & **Lefsrud, L.M**. 2023. Application of engineering principles in assessing air quality in an elementary school. *Journal of Building Engineering*, 78, 107651. https://doi.org/10.1016/j.jobe.2023.107651

JA23. Ebrahimi, H.*, Sattari, F.*, **Lefsrud, L.M.**, Macciotta, R. 2023. A machine learning approach to predicting evacuation during hazardous materials incidents on railways. *Safety science*, 164, 106180. https://doi.org/10.1016/j.ssci.2023.106180

JA24. Esmaeeli, N.*, Sattari, F.*, **Lefsrud, L.M.**, & Macciotta, R. 2023. Assessing the risks associated with the Canadian Railway System using a Safety Risk Model approach. *Transportation Research Record*, 03611981231176549. https://doi.org/10.1177/03611981231176549

JA25. Couture, A.*, Sattari, F.*, Charuvil, R.M.E.* & **Lefsrud, L.M**. 2023. Evaluation of workplace exposure to respirable crystalline silica within road construction in Alberta. *Toxicology and Industrial Health, 39(7): 07482337231176602*. https://doi.org/10.1177/07482337231176602

JA26. Rad, M.*, **Lefsrud, L.M.**, and Hendry, M. 2023. Application of systems thinking accident analysis methods: A review for railways. *Safety Science, 160, 106066*. https://doi.org/10.1016/j.ssci.2023.106066

JA27. Vinayak, A.K.*, & **Lefsrud, L.** 2022. Analysis of Induced Seismicity at Pohang Geothermal Power Plant and Examination of Public Perception following the Incident-A Perspective. *Petroleum & Coal*, *64*(4).

JA28. Ebrahimi, H.,* Sattari, F., **Lefsrud, L.**, & Macciotta, R. 2022. Human vulnerability modeling and risk analysis of railway transportation of hazardous materials. *Journal of Loss Prevention in the Process Industries*, 80 (2022) 104882. https://doi.org/10.1016/j.jlp.2022.104882

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- ✓ Our paper has been the topic of two *Forbes* articles and online discussions worldwide, resulting in over 100,000 downloads. Most read paper in *Organization Studies,* February 2013 to October 2019.
- ✓ NBS-ONE Best Practice Paper 2013 finalist, for research that has important implications for practice, focusing on any dimension of social or environmental sustainability. Available online at: http://nbs.net/new-award-recognizes-global-research-providing-sustainability-solutions/

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Patents

1. United States Provision Patent Application Serial No. 63/748,579, for technology entitled "Artificial Intelligence Enhanced Safety Monitoring Systems and Method" Inventors: Lianne Michelle Lefsrud, Abbas Abaei, and Fereshteh Sattari. The current invention contributes to real-time safety monitoring systems and automation technology. The system mentioned utilizes artificial intelligence (AI) to process input data from user inputs, web APIs, sensors, and cameras to detect hazards and cause automated responses. The patent comprises various components for data acquisition, image processing, signal processing, natural language processing (NLP), alarming mechanisms, and actuator controls. This results in enhanced safety management through a mobile application and electrical boards in industrial environments with critical infrastructure.

2. United States Provisional Patent Application for our Technology entitled "United States Provisional Patent Application Serial No. 63/658,568, "METHOD FOR ENHANCING SAFETY OUTCOMES AT A WORKSITE" Inventors: Lianne Michelle LEFSRUD, Fereshteh SATTARI, Brian GUE, Rose Marie CHARUVIL ELIZABETH. The present invention relates to a method for enhancing safety outcomes at a worksite in an industry with a large number of workplace injuries or fatalities, including construction, oil and gas, railroads, and mining, and in particularly to a method for enhancing safety outcomes at a worksite that leverages advanced natural language processing (NLP) techniques to identify safety risk factors that are commonly missed under existing inspection protocols.

Conference Proceedings - Refereed

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CP2. Jing., E.L. & Lefsrud, L.M. 2025. Power Narrativized: How Temporality and Emotionality Empower Activist Identity Construction. Academy of Management (AOM), Copenhagen, July 26-30. https://doi.org/10.1080/13662716.2024.2434061

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CP5. Assaf, M.*, Atsebgua, J.*, Golabchi, H., Mohamed, Y, Lefsrud, L.M., & Sattari, F. 2023. *An Optimized Machine Learning Approach to Classify Incidents in the Canadian Construction Industry*. Canadian Society of Civil Engineering 2023 Proceedings. June 23, 2023, Moncton.

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CP7. Yaworski, H.*, Blue, G., **Lefsrud, L.M**., & Holden. W.N. 2023. Trojan Horses and Rowboats: What do metaphors reveal about conflicts over environmental jurisdiction in Canada's impact assessment landscape? Canadian Association of Geographers, Université du Québec à Montréal, 8 May 2023.

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CP17. Jamieson, M.*, **Lefsrud, L.M.**, Donald, J.R., & Sattari, F.* 2020. *Safety and Risk Management: A Structured Case Study Approach to Investigating Chemical Process Safety*, Proceedings of the American Society of Engineering Education Annual Conference and Exposition, 24 pages. https://peer.asee.org/engineering-safety-and-risk-management-a-structured-case-study-approach-to-investigating-chemical-process-safety . 1 citation on google scholar.

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CP20. Silva, V.*, Herman, A.*, Mirzaei, M.*, Du, E.*, Hu, B.*, Sawchyn, M., **Lefsrud, L.M.**, Sander, J. & Stroulia. E. 2019. Analyzing and Visualizing the Canadian Research Landscape. *CASCON Proceedings*. https://dl.acm.org/doi/abs/10.5555/3370272.3370306

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CP29. **Lefsrud, L.M.*** & Suddaby, R. 2010. Oil & Water: Stakeholders' Framing of Resources in Alberta's Oil Sands. *Proceedings of the Annual Conference for the International Association for Business and Society*. https://www.pdcnet.org/iabsproc/content/iabsproc_2010_0021_0124_0138

Books - Refereed

1. Bruni, E. & **Lefsrud, L.M.** *Organized Science Denial: An Action Plan of Solutions,* published 2025. For this book, we extend organizational theory and risk communication principles to provide advice to senior decision- and policy-makers in science, technology, and engineering.
2. Lefsrud, L.M. *A Systems Approach to Risk Management: Illuminating Organizations' Hidden Hazards and Blind Spots*. Under contract with CRC Press, an imprint of Taylor and Francis. Senior executives who rely on sophisticated enterprise risk management systems presume that we can see hazards, report them, and manage them. Information siloing, operational complexity, and organizational change create additional blind spots. Missing is a systems-level perspective for senior executives to understand their operational risks. In this book, I draw from my own research and others to describe hidden hazards and blind spots and present methods of visualizing risks to these can be better managed.

Book Chapters - Refereed

BC1. **Lefsrud, L.M.**, Graves, H. & Phillips, N. 2015. Chapter 22: Analyzing Visual Rhetoric in Organizational Research, In *Innovative Qualitative Methods Handbook*. Kim Elsbach & Rod Kramer (Eds.). Routledge, 225-237. 16 citations on google scholar.
- ✓ Among the most downloaded from SSRN for CommRN: Visual Rhetoric (Topic) Top Ten and Visual Communication eJournal Top Ten.

BC2. **Lefsrud, L.M.** & Jennings, P.D. 2015. Chapter 9: Entrepreneurial Storytelling: An Institutional Tale, In *Small Business in a Global Economy: Creating and Managing Successful Organizations,* Scott L. Newbert (Ed.). Santa Barbara: Praeger, 215-241. 6 citations on google scholar.
- ✓ Available online at: http://ssrn.com/abstract=2340100 . When introduced, it was listed in the top ten downloads for SSRN in New Institutional Economics eJournal and Sustainability at Work eJournal.
- ✓ Profiled by Ross School of Business in a media release. Available online at: http://www.ns.umich.edu/new/releases/21872-what-s-your-story-six-strategies-for-entrepreneurs

BC3. **Lefsrud, L.M.** * & Suddaby, R. 2012. After the Gold Rush: The Role of Professionals in the Emergence and Configuration of Organizational Fields. *The Handbook of Research on Entrepreneurship in Professional Services*, edited by Markus Reihlen & Andreas Werr. Cheltenham: Edward Elgar. 20 citations on google scholar.

BC4. Suddaby, R. & **Lefsrud, L.M.** * 2010. Institutional Theory, Old and New. *Sage Encyclopaedia of Case Study Research*, Elden Wiebe, Gabrielle Durepos, & Albert J. Mills (Eds.). London: Sage. 11 citations on google scholar.

BC5. Zeiss, C. & **Lefsrud, L.M.** * 2001. Analytical Framework for Waste Facility Siting. *Waste Management and Planning (Managing the Environment for Sustainable Development Series, Number 5),* edited by J.C. Powell, R.K. Turner, and I. Bateman. North Hampton: Edward Elgar Publishers.

Interviews - Print, Radio, and Online Video

I1. Using data analytics to find missing leading indicators, Podcast with the Safety Guru, Eric Michrowski.

I2. Safety by Design, Podcast with the Safety Guru, Eric Michrowski.

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Dissertation

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- ✓ My dissertation forms the basis of my TEDx talk. Available URL: http://www.youtube.com/watch?v=t5LZ9MNC_Ts

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RR33. *Member Consultation on Climate Change - Report to Council.* A Survey by APEGA's Environment Committee, Feb. 2008. Completed research and wrote report on behalf of the Environment Committee.

RR34. *Outsourced Engineering in Alberta's Major Projects*. 2006. An Inquiry by APEGA's Practice Review Board, May 2006. Completed research and wrote report on behalf of the Practice Review Board.

RR35. Zeiss, C. & **Lefsrud, L.M.*** 1995. *Property Value Effects and Property Value Protection Programs for Waste Facilities in Host Communities*, prepared for the Siting Task Force on Low-Level Radioactive Waste Management.

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RR39. Hicks, F., Gerard, R., Chen, X.* & **Lefsrud, L.M.*** 1992. *A Preliminary Investigation of Break Up Processes on the Mackenzie River at the Ft. Providence Ferry Crossing,* Water Resources Engineering Report No. 92-2, Department of Civil Engineering, University of Alberta, Edmonton, Alberta.

Regulations - Policy Statements, Practice Standards and Guidelines

Developed and revised – under the auspices of APEGA's Practice Standards Committee and Environment Committee –policy statements, practice standards, and guidelines to establish the standard of care expected of professional engineers and geoscientists. My role varied from being the sole author of original documents and incorporating reviewers' comments to the technical editor of a subcommittee revising existing documents. Most of these remain in force, unchanged since my departure from APEGA. Of these, several have become adopted (in whole or part) as national engineering guidelines by Engineers Canada, the national organization of the 12 engineering regulators that license the country's 280,000 members of the profession.

R1. *Guideline for Management of Risk in Professional Practice*. APEGA. Currently revising.

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R4. *Determining the Need for Professional Involvement in Outsourced Engineering. APEGA, v.* 1.0, May 2009, 9 pages.
R5. *Professional Members as Contract Employees and Independent Contractors*. APEGA, Sep. 2007. 20 pages.
R6. *Development of Consulting Rate Structures and Contracts V1.0*. APEGA, Feb. 2005. 38 pages. This document is an update and replacement of four APEGA practice standards and guidelines.
R7. *Guidelines for Considerations for Establishing a Consulting Practice V1.0*. APEGA, Sep. 2005. 14 pages.
R8. *Concepts of Professionalism V1.0*. APEGA, Sep. 2004. 10 pages. Adapted as national guideline by Engineers Canada.
R9. *Guideline for Environmental Practice V1.0.* APEGA, Feb. 2004. 15 pages. Adapted as national guideline by Engineers Canada.
R10. *Determining the Need for Professional Involvement in Outsourced Engineering*. APEGA, v. 1.0, May 2009, 9 pages.
R11. *Professional Responsibilities in the Completion and Assurance of Reclamation and Remediation Work in Alberta*. Joint Practice Standard by APEGA, Alberta Institute of Agrologists, Alberta Society of Professional Biologists, Alberta Chemical Professionals of Alberta, College of Alberta Professional Foresters, and College of Alberta Professional Foresters Technologists, September 2007. 37 pages. Forms the basis of a national guideline being developed by Engineers Canada.
R12. *Guideline for Selecting Engineering, Geological and Geophysical Consultants*. APEGA, September 2006. 24 pages.
R13. *Continuing Professional Development - A Guideline for Professional Members*. APEGA, June 2006. 29 pages.
R14. *Guideline for Professional Responsibilities in Developing Software* V1.0. APEGA, February 2006. 17 pages.
R15. *Guideline for Copying and Use of Computer Software* V1.1. APEGA, November 2005. 4 pages.
R16. *Guideline for Human Rights Issues in Professional Practice* V1.1. APEGA, November 2005. 10 pages.
R17. *Guideline for Advertising of Professional Services* V2.0. APEGA, April 2005. 14 pages.
R18. *Guideline for Professional Practice Management Plans* V1.2. APEGA, June 2004. 15 pages.
R19. *Guideline for Professional Member as a Witness* V1.0. APEGA, October 2003. 16 pages.
R20. *Guideline for Relying on Work Prepared by Others* V1.0. APEGA, June 2003. 13 pages.

CONFERENCE PRESENTATIONS - Refereed

C1. Joshi, A.* Sattari, F. & **Lefsrud, L.M.** 2025. *Risk-Based Assessment of Hydrogen-Natural Gas Blends in Low-Pressure Distribution Networks: Implications for Safety and Regulatory Standards in Urban Areas.* Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Canadian Chemical Engineering Conference (CCEC 2024), 6 October 2025, Montreal
C2. Venkatesan, K*., Joshi, A.* **Lefsrud, L.M.**, Sattari, F. & Khan, M.A. 2025. *Quantitative Risk Assessment & Regulatory Gap Analysis of Hydrogen Powered Combined Heat & Power (CHP) System for Hospitals.* Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Canadian Chemical Engineering Conference (CCEC 2024), 6 October 2025, Montreal
C3. Dehkordi, M.K.*., Sattari, F. & **Lefsrud, L.M.** 2025. *Hazard causation analysis in the hydrogen value chain using knowledge graph: A roadmap to develop control strategies.* Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Canadian Chemical Engineering Conference (CCEC 2024), 6 October 2025, Montreal.

C4. Dehkordi, M.K.*., Sattari, F. & **Lefsrud, L.M.** 2024. *Advancing Incident Investigation: A Framework for Complex Socio-Technical Systems.* Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Canadian Chemical Engineering Conference (CCEC 2024), 9 October 2024, Toronto.

C5. Charuvil, R.M.*, Sattari, F., **Lefsrud, L.M.**, Gue, B. 2024. *Reducing Serious Injuries and Fatalities in Industrial Construction- Application of Machine Learning to Analyze Emotional Intelligence and Psychosocial Factors.* Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Canadian Chemical Engineering Conference (CCEC 2024), 9 October 2024, Toronto.

C6. Joshi, A.*, Sattari, F. & **Lefsrud, L.M.** 2024. *Towards a Safe and Sustainable On-Road Hydrogen Distribution Network: A Quantitative Risk Assessment of Transportation and Terminal Operations.* Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Canadian Chemical Engineering Conference (CCEC 2024), 9 October 2024, Toronto.

C7. Filippo, L*., Lefsrud, L.M., Ungrin, M., & Lipsett, M. 2024. *Laboratory Acquired Infections: A Process Safety and Human Factors Perspective on Biosafety in Microbiological Research.* Canadian Biosafety Symposium. 17 September 2024, Saskatoon.

C8. Lefsrud, L.M. 2024. *Using Machine Learning and Data Analytics to Prevent Serious Incidents and Fatalities*. Construction Innovation Centre (CIC) Forum, 12-13 June 2024. Edmonton.

C9. Lefsrud, L.M., Kanerva, J.*, Griffiths, J., Naaman, N. 2024. *Construction Frontline Safety: Challenges and Collaboration Opportunities***,** Construction Innovation Centre (CIC) Forum, 12-13 June 2024. Edmonton.

C10. Giang, V.*, Palmer, A., **Lefsrud, L.M.** 2023. From Hawai'i to Alberta: Parallels and contrasts of geothermal energy development on Indigenous traditional lands. 26th Association for Canadian Studies in the United States (ACSUS) Biennial Conference. 16-19 November, Arlington, VA.

C11. Giang, V.*, Palmer, A., **Lefsrud, L.M**. and Beier, N. 2023. The role of Indigenous-informed risk communication strategies in adaptive management. The Society for Social Studies of Science (4S) 2023 Conference. 8-11 November, Honolulu, HI.

C12. Giang, V.*, Hopkins, J., Palmer, A. and **Lefsrud, L.M.** 2023. Free, Prior, Informed and Continued Consent: A conceptual framework to bridge policy to practice. Fulbright Canada Fourth Canada Colloquium. 25-27 October, Honolulu, HI.

C13. Naef, M.* & **Lefsrud, L.M**. 2023. *Aligning performance assessment techniques with design and operating objectives*. Canadian Society for Chemical Engineers (CSChE), Process Safety Management Division, Calgary, 30 October 2023.

C14. Charuvil, R.*, Sattari, F. & **Lefsrud, L.M.** 2023. *A deep learning approach to enhance safety inspection reports by correlating incidents in industrial construction* Canadian Society for Chemical Engineers (CSChE), Process Safety Management Division, Calgary, 30 October 2023.

C15. **Lefsrud, L.M.** 2023. *Visualizing Risk.* Canadian Society for Chemical Engineers (CSChE), Process Safety Management Division, Calgary, 30 October 2023.

C16. Joshi, A.*, Sattari, F., **Lefsrud, L.M**., Tufail, M. Khan, M.A. 2023. *Regulatory gap analysis for hydrogen value chain development in Alberta – consequence-based assessment*. Canadian Society for Chemical Engineers (CSChE), Process Safety Management Division, Calgary, 31 October 2023.

C17. **Lefsrud, L.M**., Sattari, F., Charuvil Elizabeth, R.M.*, Dehkordi, M.* 2023. *Building resilience into safety management systems using precursors and controls*. CIAC (Chemistry Industry Association of Canada), Process Safety Management Division, Fort Saskatchewan, 3 October 2023.

C18. Sattari, F., & **Lefsrud, L.M**. 2023. *Application of artificial intelligence & machine learning to improve safety and risk management in mining sector.* CIAC (Chemistry Industry Association of Canada), Process Safety Management Division, Fort Saskatchewan, 3 October 2023.

C19. Charuvil Elizabeth, R.M.*, Sattari, F., & **Lefsrud, L.M**. 2023. *How to see what is missing? Deep Learning Approach to Enhance Safety Inspections in an Organization by Correlating with Subsequent Incidents*. CIAC (Chemistry Industry Association of Canada), Process Safety Management Division, Fort Saskatchewan, 3 October 2023.

C20. Dehkordi, M.*, Sattari, F., & **Lefsrud, L.M**. 2023. *Incident Investigation in an Oil and Gas Company through Incident Causation Network*. CIAC (Chemistry Industry Association of Canada), Process Safety Management Division, Fort Saskatchewan, 3 October 2023.

C21. Joshi, A.*, Sattari, F., **Lefsrud, L.M**., Tufail, M., & Khan, M.A. 2023. *Quantitative Risk Assessment of a gaseous hydrogen refueling station (HRS) in Canada*. 8th Annual Center for Chemical Process Safety (CCPS) Canadian Regional Meeting, Calgary Alberta, 7 September 2023.

C22. Dehkordi, M.*, Sattari, F., **Lefsrud, L.M**. 2023. *Application of Machine Learning for Root Cause Analysis and Fuzzy Logic in Barrier Assessment*. 8th Annual Center for Chemical Process Safety (CCPS) Canadian Regional Meeting, Calgary Alberta, 7 September 2023.

C23. **Lefsrud, L.M.** & Kanerva, J. 2023. *Construction Safety Panel: Building Collaboration and Competency into Collective Agreements*. Construction Innovation Centre (CIC) Forum, Innovation and Collaboration for Smart Sustainable Construction July 28, 2023, Edmonton Alberta.

C24. **Lefsrud, L.M.** 2023. *Enhancing Safety Management Systems on Construction Projects: A data driven approach*. Construction Innovation Centre (CIC) Forum, Innovation and Collaboration for Smart Sustainable Construction July 27, 2023, Edmonton Alberta.

C25. Jing, E.* & **Lefsrud, L.M.** 2023. *Turning Adversity into Strength: Mobilizing Temporal Resources to Construct an Activist Identity*. PDW 08: Addressing the World's Pressing Challenges with Institutional Theory, European Group of Organizational Studies (EGOS) Colloquium, Cagliari Italy, July 5, 2023.

C26. Rad, M.A. *, **Lefsrud, L.** and Hendry, M. 2023. "Impacts of the Enhanced Train Control (ETC) System on Train Operators in Canadian Railways". *ITEUA Presentation Competition*, Virtual Conference, Edmonton, Canada.

C27. Rad, M.A. *, **Lefsrud, L.** and Hendry, M. 2022. Examining Human Risks Associated with Implementing Enhanced Train Control (ETC). *APEGA Nexus Conference*, Virtual Conference, Edmonton, Canada.

C28. Rad, M.A. *, **Lefsrud, L**. and Hendry, M. 2022. "Analysis of Human-Automation Railway Accidents: Application of Text Mining and Machine Learning". *YEG Innovation Showcase*, Virtual Conference, Edmonton, Canada.

C29. Rad, M.A. *, **Lefsrud, L.** and Hendry, M. 2022. "Leverage text mining for analyzing accident reports of automated train control systems". *AI4Society Reverse EXPO 2022*, Virtual Conference, Edmonton, Canada.

C30. **Lefsrud, L.M.** & Jennings, D.J. 2022. *Visualizing Systems: Visual analytics built on big data as a form of analysis and theoretical interpretation*. PDW for The Collection, Analysis, Theorization and Representation of Visual Data in Qualitative Scholarship 2nd Edition, Academy of Management, Seattle, 7 August 2022.

C31. Charuvil Elizabeth, R.M.*, Sattari, F.*, & **Lefsrud, L.M.** 2022. *Measuring organizational performance changes from team integration*. Multi-conference 2022 MOC Summit, IGLC30, and the CIC Forum, Edmonton, July 27, 2022.

C32. Schribar, M.*, Sattari, F.*, & **Lefsrud, L.M**. 2022. *Enhancing safety management systems on construction projects: A data-driven approach*. Multi-conference 2022 MOC Summit, IGLC30, and the CIC Forum, Edmonton, July 27, 2022.

C33. **Lefsrud, L.M.**, Gutierrez, C.A.G.*, Gehman, J., Barbosa, D., & Stroulia, E. 2022. *Energy to Contest? Emotional and Multimodal Contestation of Energy Markets*. Sub-theme 42: Markets for

Sustainability: Evolving Challenges, Imperfections, and Trade-offs. European Group of Organizational Studies (EGOS), Vienna, July 7-9, 2022.

C34. **Lefsrud, L.M**. 2022. *Back to the drawing board: Reconstructing risk management systems through visualization.* (Re)constructing risks for decision making. Copenhagen Business School, July 4-5, 2022.

C35. Bruni, E.* & **Lefsrud, L.M.** 2021. Symposium: *Science denial: causes, courses, and remedies. A route map for organizational scholars*, Academy of Management Conference, July 31 – August 3, 2021.

C36. Etchanchu, H., Cascadden, M.*, & **Lefsrud, L.M.** 2021. Panel Symposium: Addressing Grand Challenges in Organization Theory-System Change through Theory, Engagement & Action, Academy of Management Conference, July 31 – August 3, 2021.

C37. Jansary, D., Svenjenova, S., Islam, G., Hoellerer, M., Zilber, T., **Lefsrud, L.M.**, Zundel, M., Lehtonen, M., Toraldo, M.L. 2021. *Publishing multimodal research / publishing research multimodally*, Academy of Management Conference, July 31 – August 3, 2021.

C38. **Lefsrud, L.M.**, Baker, K.E.* & Gehman, J. 2021. Hiding Blind: Organizational ambiguity, fear, and silence. Sub-theme 34 Ignorance at Work: How Organizations Strive Not to Know. 37th Colloquium, European Group of Organizational Studies (EGOS) Sub-theme 17: Enlightening the Future through Riskwork. Amsterdam and online, July 2-9, 2021.

C39. Rad, M.*, **Lefsrud, L.M.,** & Hendry, M. 2021. Literature Review on Cognitive Impacts of Cab Warning Systems and Train Control Technologies. *Canadian and Cold Regions Rail Research Conference*, 9-10 November 2021, Virtual Conference. https://doi.org/10.7939/r3-gapp-mc47

C40. Rad, M.A. *, **Lefsrud, L.** and Hendry, M. 2021. "Inadvertently introducing human factors in automated systems control: Train protection systems". *Process Safety Management Symposium*, Virtual Conference, Montreal, Canada.

C41. Rad, M.A.*, **Lefsrud, L.** & Hendry, M. 2020. "Human Factors of In-Cab Warning Systems". *70th Canadian Chemical Engineering Conference*, Virtual Conference, Ottawa, Canada.

C42. Rad, M.A.*, **Lefsrud, L.** & Hendry, M. 2020. "Examining Human risks associated with implementing Enhanced Train Control". *5th Annual Center for Chemical Process Safety Canadian Virtual Regional Meeting*, Virtual Conference, Calgary, Canada.

C43. **Lefsrud, L.M.**, Mullick, A., Pederson, A., Jensen-Fontaine, M., Asiedu, E.*, Miles, S.*, Baker, K.E. 2019. *Spanning Boundaries Through Conferences: Engaging Diverse EDI Stakeholders to Promote Change*. 1st Annual Intersections of Gender Conference (Working the Intersections of Gender), Edmonton, October 2019.

C44. **Lefsrud, L.M.**, Mullick, A., Vandenberghe, J., & Burgart. D. 2019. *Becoming an EDI Activist in Engineering: Motivations, Inspiration, and Learnings*. 1st Annual Intersections of Gender Conference (Working the Intersections of Gender), Edmonton, October 2019.

C45. **Lefsrud, L.M.**, Oberg, A. & Meyer, R.E. 2019. *Heated Atmosphere: Organizational Emotions and Field Structuring in Online Climate Change Debates*. Academy of Management, Boston, August 2019.

C46. Baker, K.E.,* & **Lefsrud, L.M.** 2019. *Organizational myopia: How organizations create complexity, ambiguity, and uncertainty to blind their risk management efforts*. 35th Colloquium, European Group of Organizational Studies (EGOS) Sub-theme 17: Enlightening the Future through Riskwork. University of Edinburgh, July 2019.

C47. Baker, K.E.,* & **Lefsrud, L.M.** 2019. *Using Process Safety Management tools to identify and assess oil sands tailings hazards.* Society for Risk Analysis, University of Luxembourg, March 2019.

C48. Baker, K.E.,* & **Lefsrud, L.M.** 2019. *Communicating risks across organizations and to contractors in the oil sands tailings operations.* Society for Risk Analysis, University of Luxembourg, March 2019.

C49. Baker, K.E.,* & **Lefsrud, L.M.** 2019. *"Deviance? Wrongdoing? Myopia?* Society for Risk Analysis, University of Luxembourg, March 2019.

C50. Pope, G., **Lefsrud, L.M.** & Oliver, M. 2018. *Canadian Workplace Culture: Human Rights Issue or Essential Competency?* Canadian Network of Association Regulators (CNAR) Annual Conference, Banff, October 2018.

C51. Baker, K.E.,* Zettl, J.,* Macciotta, R., Hendry, M., & **Lefsrud, L.M.** 2018. *Protecting workers exposed to ground hazards through enhanced hazard identification and management tools.* GeoEdmonton Conference, September 2018.

C52. **Lefsrud, L.M.**, Fox, K., Cooper, D., & Taminiau, Y. 2018. *Inter- professional categorization in accounting regulation.* Organizations and Management Theory Division, Academy of Management Annual meeting, Chicago, August, 2018.

C53. **Lefsrud, L.M.**, Fox, K., Cooper, D., & Taminiau, Y. 2018. *Inter- professional relations and categorization in accounting regulation: The case of Modernizing Oil and Gas Reserve Reporting.* 12th Interdisciplinary Perspectives on Accounting Conference, University of Edinburgh Business School, 11-13 July 2018.

C54. Davidson, D.J. & **Lefsrud, L.M.** 2018. Can Farmers be Climate Leaders. RC24 Session, "Climate change mitigation and adaptation: Progress and pitfalls in low-carbon transition," at the World Congress of Sociology, Toronto, July 2018.

C55. Baker, K.E.,* Zettl, J.,* Macciotta, R., Hendry, M., **Lefsrud, L.M.** 2018. *Using Process Safety Management tools to identify and assess tailings hazards*. Canadian Institute of Mining (CIM), Vancouver, May 2018.

C56. Baker, K.E.,* Zettl, J.,* Macciotta, R., Hendry, M., & **Lefsrud, L.M.** 2018. *Communicating risks across organizations and to contractor.* Canadian Institute of Mining (CIM), *Vancouver, May 2018.*

C57. Baker, K.E.,* Zettl, J.,* Macciotta, R., Hendry, M., & **Lefsrud, L.M.** 2018. *Protecting workers exposed to ground hazards through enhanced Field Level Hazard Assessment tools*, Geohazards 7 Conference – Engineering Resiliency in a Changing Climate, Canmore, June 3-6.

C58. McRory, S., Walsh, D., Tait, A., & **Lefsrud, L.M.** 2017. Our journey with creative sentencing, Canadian Society of Safety Engineers, Annual Conference, September 17, Halifax.

C59. Farjoo, A.*, Pennetta de Oliveira, L.*, Caldera, A.*, Esmaeeli, N.*, & **Lefsrud, L.M.** 2017. Creating a Positive Safety Culture and Continuous Improvement in Alberta's Construction Industry. XXI World Congress on Safety and Health at Work 2017. 3-6 September, 2017, Singapore.

C60. **Lefsrud, L.M.**, Oberg, A. & Meyer, R. 2017. Organizational emotions in online climate change debate. 33rd EGOS Colloquium, Copenhagen, July 6-8, 2017.

C61. **Lefsrud, L.M.** & Gieg, L.M. 2017. 'Managing Microbial Corrosion in Canadian Offshore & Onshore Oil Production Operations', CORROSION 2017 (NACE). Project presentation to Technology Exchange Group (TEG) 187X (Microbiologically-Influenced Corrosion technical group), New Orleans, LA, March 28.

C62. Bak, N.*; **Lefsrud, L.M**., Wolodko, J. 2017. Determining the scope of MIC in the research literature and in industry. Abstract (poster presentation), CORROSION 2017 (NACE), New Orleans, LA, March 26- 30.

C63. **Lefsrud, L.M.**, Fox, K., Cooper, D., & Taminiau, Y. 2016. *Maintaining Oil and Gas Reserves Accounting: The Limits of Commensuration.* Accounting, Organizations, and Society Conference, London School of Economics, December 14, 2016.

C64. Umme, M.* & **Lefsrud, L.M.** 2016. *How Can Regulatory Prosecution Improve Workplace Safety?* 66th Canadian Chemical Engineering Conference, Quebec City, October 16-19, 2016.

C65. **Lefsrud, L.M.,** Gehman, J. & Jamieson, M.J. 2016. *Revisiting How 'Acceptable Risk' and 'Social License to Operate' Become Defined: An Incorporation of Social-psychological Processes into Technical Risk Management.* 66th Canadian Chemical Engineering Conference, Quebec City, October 16-19, 2016.

C66. Jamieson, M.J. & **Lefsrud, L.M.** 2016. *Using Hazard Identification, Risk Assessment, and the Sustainable Design Process to Evolve Environmental Regulations*. 66th Canadian Chemical Engineering Conference, Quebec City, October 16-19, 2016.

C67. **Lefsrud, L.M.** Graves, H. & Phillips, N. *"Giant Toxic Lakes You Can See from Space": A Theory of Multimodal Messages and Emotionality in Legitimacy Work*. Copenhagen Business School conference on visuality, materiality, multimodality on September 22-23, 2016.

C68. **Lefsrud, L.M.**, Jamieson, M. & Gehman, J. 2016. *Revisiting how Acceptable Risk and Social License to Operate Become Defined.* Congreso Colombiano de Mineria. Medellin Colombia, May 24, 2016.

C69. Baker, K.E.* & **Lefsrud, L.M.** 2016. *Hazard Control Implementation for Contaminated Water Recycling in the Mining & Energy Sectors / Aplicación de control de riesgo para el agua contaminada de reciclaje en los sectores de minería y energía*. Congreso Colombiano de Mineria. Medellin Colombia, May 24, 2016.

C70. Jamieson, M. & **Lefsrud, L.M.** 2016. *Evolving Regulations to Support Sustainable Design / Evolución de las reglamentaciones para apoyar el diseño sostenible*. Congreso Colombiano de Mineria. Medellin Colombia, May 23, 2016.

C71. **Lefsrud, L.M.**, Oberg, A. & Meyer, R. 2016. Organizational Emotionality in the Discursive Field of Climate Change. 12th Workshop on New Institutionalism in Organization Theory, Lucerne, March 31-April 01, 2016.

C72. Hoffman, A.J., & **Lefsrud, L.M.** 2015. *Paradox and Sustainability: Moving Beyond the Business Case. ONE Research and Practice in the Era of the Anthropocene*. Academy of Management Annual meeting, Vancouver, August 10, 2015.

C73. Hoffman, A.J., Jennings, D.J., & **Lefsrud, L.M.** 2015. *Climate change in the era of the Anthropocene – An institutional analysis.* Subtheme 23: Climate (In)action: Understanding Corporate and Institutional Inertia, 31st EGOS Colloquium, Athens, July 2-4, 2015.

C74. **Lefsrud, L.M.,** Phillips, N. & Westbury, C. 2015. *Categorization and Framing as Legitimacy Work: The Struggle over the Canadian Oil Sands*. Sub-theme 62: Take a Walk on the Wild Side: Social Ontologies and Post-Legitimacy Theorizing about Social Structure, 31st EGOS Colloquium, Athens, July 2-4, 2015.

C75. **Lefsrud, L.M.**, Graves, H. & Phillips, N. 2015. Picture the Feeling: Theorizing the Role of Emotion in Legitimacy Work. European Theory Development Workshop, Cardiff UK, June 25-26, 2015.

C76. **Lefsrud, L.M.** & Vaara. E. 2015. *Framing Fairness: The Case of Alberta Oil Sands*. Alberta Institutions Conference, Banff, June 12-14, 2015.

C77. **Lefsrud, L.M.** *When Worlds Collide*? 2014. In Showcase Symposium: *Bridging Institutional Analysis with Cultural Dynamics in Explaining Environmental Sustainability*. Academy of Management, ONE, SIM and OMT Divisions, Philadelphia, August 1-5, 2014.

C78. **Lefsrud, L.M.**, Graves, H. & Phillips, N. 2014. A Theory of Visual Rhetoric in Legitimacy Struggles. Sub-theme 07: (SWG) Visualizing Institutions and Knowledge, 30th EGOS Colloquium, Jul. 3–5, 2014, Rotterdam.

C79. Gehman, J., **Lefsrud, L.M.**, Lounsbury, M. & Lu, C. 2014. Perspectives on Energy and Environment Risks**.** Helmholtz-Alberta Initiative Energy and Environment (HAI-E&E) Annual Science Forum. Edmonton, AB, Canada, September 29, 2014, Edmonton.

C80. **Lefsrud, L.M.** & Vaara, E. 2014. *Relational Legitimacy through Justice: The Case of Alberta Oil Sands*. 3rd European Theory Development Workshop, Jun. 27-28, 2014, Amsterdam.

C81. **Lefsrud, L.M.**, Graves, H., & Phillips, N. 2014. *Dirty Oil, Ethical Oil, Legitimate or Not? The Struggle to Categorize the Alberta Oil Sands.* Alliance for Research on Corporate Sustainability (ARCS) Conference, Cornell University, May 7-9, 2014, Ithaca.

C82. **Lefsrud, L.M.**, Graves, H. & Phillips, N. 2013. *Dirty Oil, Ethical Oil: Categorical Illegitimacy and the Struggle over the Alberta Oil Sands*. Emotions and Institutions Workshop, York University, Dec. 11-12, 2013, Toronto.

C83. **Lefsrud, L.M.**, Graves, H. & Phillips, N. 2013. *Dirty Oil, Ethical Oil: Categorical Illegitimacy and the Struggle over the Alberta Oil Sands*. Sub-theme 48: The Emergence of Categories, Identities, Fields and Organizational Forms, 29th EGOS Colloquium, Jul. 4–6, 2013, Montreal.

C84. **Lefsrud, L.M.**, Fox, K.A., Cooper, D.J., & Taminiau, Y. 2013. *Veils of Ambiguity: Professionals' Categorization of Oil and Gas Reserves.* Sub-theme 30: Strategic and Institutional Environments. Sub-theme 48: The Emergence of Categories, Identities, Fields and Organizational Forms, 29th EGOS Colloquium, Jul. 4-6, 2013, Montreal.

C85. Misutka, P. & **Lefsrud, L.M.** 2013. *At the Gateway of Social Injustice?* An International Conference on Inequality, Institutions and Organizations, June 6-8, 2013, Segal Graduate School of Business, Simon Fraser University, Vancouver.

C86. **Lefsrud, L.M.** & Suddaby, R. 2013. Golden Goose or Ugly Duckling. *Connecting Rigor and Relevance in Institutional Analysis*, Doctoral Consortium, Harvard University, June 2-4, 2013.

C87. **Lefsrud, L.M.,** Graves, H., & Phillips, N. 2013. *Dirty Oil, Ethical Oil: Categorical Illegitimacy and the Struggle over the Alberta Oil Sands*. Sustainability, Ethics, and Entrepreneurship (SEE) Conference, Apr. 11-12, 2013, University of Denver, Colorado.

C88. **Lefsrud, L.M.** & Meyer, R.E. 2012. *Science or Science Fiction? Experts' Discursive Construction of Climate Change.* Academy of Management, OMT Division, Boston, Aug. 3-7, 2012. Finalist for Best International Paper, OMT.

C89. **Lefsrud, L.M.**, Graves, H. & Phillips, N. 2012. *Dirty Oil, Snake Oil: The Categorical Illegitimacy of Alberta's Oilsands.* Sub-theme 24: Organizations as Phenomena of Language Use: Interconnecting Discourse and Communication, 28th EGOS Colloquium, Jul. 5–7, 2012, Helsinki. Awarded *Best Paper* of the Conference.

C90. Graves, H., **Lefsrud, L.M.**, & Phillips, N. 2012. *Dirty Oil/Ethical Oil/Snake Oil: Discursive Positioning in Environmental Rhetoric.* Canadian Association for the Study of Discourse & Writing, Wilfred Laurier University, May 26-28, 2012, Kitchener-Waterloo.

C91. **Lefsrud, L.M.**, Graves, H. & Phillips, N. 2012. *Dirty Oil, Snake Oil: Illegitimacy of Alberta's Oilsands.* 8th New Institutionalism Workshop, 15 – 16 Mar. 2012, ESADE Ramon Llull University, Barcelona.

C92. **Lefsrud, L.M.** & Suddaby, R. 2011. *Co-Constructing the Meaning of Oil: Stakeholders' Definition and Valuation of Resources in Alberta's Oil Sands.* Energy, Organizations, and Society (EOS) workshop, Oct. 14-15, 2011, University of California, Davis.

C93. **Lefsrud, L.M.** & Suddaby, R. 2011. *Co-Constructing the Meaning of Oil: Stakeholders' Definition and Valuation of Resources in Alberta's Oil Sands.* Organizing Institutions: Studying the Emergence of New Practices, Sep. 30-Oct. 1, 2011, Harvard Business School, Boston.

C94. **Lefsrud, L.M.** & Emerson, C.J. 2011. *Putting Fuel in the Tank: Best Practices in Promoting Diversity and Innovation*. Fueling the Future: International Conference for Women in Oil & Gas, Mar. 8-9, 2011, St. John's, Newfoundland and Labrador.

C95. **Lefsrud, L.M.** & Meyer, R.E. 2011. *Science or Science Fiction? Experts' Discursive Construction of Climate Change.* ETH PhD-Academy on Sustainability and Technology: Climate Change Mitigation and Adaptation: An Organizational Science Perspective, Jan. 16-21, 2011, ETH Zurich Centro Stefano Franscini.

C96. **Lefsrud, L.M.** & Suddaby, R. 2010. *Oil & Water: Stakeholders' Framing of Resources in Alberta's Oil Sands*, Unwrap the Research Conference, Oct. 22-24, 2010, Ft McMurray.

C97. **Lefsrud, L.M.** & Suddaby, R. 2010. *Oil & Water: Framing of Resources in Alberta's Oil Sands*. OCIS: PDW on Materiality in Organizational Studies: Mapping the Territory, Aug. 6-10, 2010, Academy of Management, Montreal.

C98. **Lefsrud, L.M.** & Suddaby, R. 2010. *After the Gold Rush: The Role of Professionals in Emergence/Configuration of Organizational Fields*. Symposium on Entrepreneurship in Professional Services, Aug. 6-10, 2010 Academy of Management, Montreal.

C99. **Lefsrud, L.M.** & Meyer, R.E. 2010. *Science or Science Fiction? Experts' Discursive Construction of Climate Change.* Sub-theme 46: Global Fears – Local Consequences: Discourses, Disguises and Productive Change, EGOS, Jun. 28-Jul. 3, 2010, Lisbon.

C100. **Lefsrud, L.M.** & Suddaby, R. 2010. *During the Gold Rush: Field-Level Regulation of Alberta's Oil Sands in Definition and Valuation of Resources.* Organizing Institutions: Agency and Interpretive Approaches, May 21-22, 2010, Copenhagen Business School, Copenhagen.

C101. **Lefsrud, L.M.** & Suddaby, R. 2010. *Oil & Water: Stakeholders' Framing of Resources in Alberta's Oil Sands.* Annual conference for International Association for Business and Society, Banff, Mar. 25-28, 2010.

C102. **Lefsrud, L.M.** & Meyer, R.E. 2009. *Considering the Materiality of Climate Change through Professionals' Logics, Framing and Agency*. EGOS, Sub-theme 08: Institutions and knowledge: The role of materiality, Jul. 2-4, 2009, Barcelona.

C103. Taminiau, Y., **Lefsrud, L.M.**, & Suddaby, R. 2009. *Mind the Gap: Exploring the Regulator-Profession Interface in the Oil and Gas Industry*. EGOS, Sub-theme 09: Energizing energy markets: Institutions, devices and experiments, Jul. 2-4, 2009, Barcelona.

C104. **Lefsrud, L.M.** 2009. *After the Goldrush: Creating Order from Chaos. Three studies on professionals' expertise claims, definition of resources, and agency*. EGOS, PhD Pre-Colloquium Workshop, Jun. 29 – Jul. 1, 2009, Barcelona.

C105. **Lefsrud, L.M.** & Hughes, K. 2009. *Maintaining the Iron Cage: Reinforcing Professional Self-Regulation to Enable Innovation.* 5th Workshop on New Institutionalism in Organization Theory, Mar. 26-27, 2009, Naples.

C106. **Lefsrud, L.M.** 2008. *Convenient Truths? Multiple Logics in the Petroleum Industry.* PhD Sustainability Academy – Building Sustainable Value Cross-Enterprise Leadership Centre, Ivey School of Business, University of Western Ontario, Sept. 26-30, 2008, London.

C107. **Lefsrud, L.M.** & Suddaby, R. 2008. *Changing Logics of Self-Regulation in Professional Fields.* EGOS, Sub-theme 22 Institutional Work: Understanding How Actors Create, Maintain and Disrupt Institutions, Jul. 10-12, 2008, Amsterdam.

C108. **Lefsrud, L.M.** & Suddaby, R. 2008. *Who Is Regulating Whom and How? Establishing Sites of Regulation for Outsourced Engineering*. Offshoring & Outsourcing: The Organizational and Geographical Relocation of High-Value Company Functions, SDA Bocconi School of Management, Apr. 23-24, 2008, Milan.

C109. **Lefsrud, L.M.** 2008. *Convenient Truths? Multiple Logics in the Petroleum Industry*. 5th Annual Sprott Doctoral Symposium, Carleton University, Apr. 10-11, 2008, Ottawa. Runner-up best paper.

KEYNOTES – EXECUTIVE, PRACTITIONER AND PUBLIC PRESENTATIONS

KN1. Salazar, L.*, & Leung, J., & **Lefsrud, L.M**. 2025. *How Can Bow-Tie and LOPA Frameworks Be Adapted into a Practical, Formation-Specific Risk Management Tool for Induced Seismicity?* Center for Chemical Process Safety, regional meeting, Calgary, 11 September 2025.

KN2. Venkatesan, K.*, Sattari, F., **Lefsrud, L.M**. 2025. *Advancing Hospital Energy Systems: A QRA-Based Framework for Safe Hydrogen Combined Heat & Power (CHP) System Deployment.* Center for Chemical Process Safety, regional meeting, Calgary, 11 September 2025.

KN3. Lefsrud, L.M., Sattari, F., Charuvil, R.M.*, 2025. *Using AIML to identify missing leading indicators for Serious Incidents and Fatalities*. International Society of Automation (ISA), Automation Expo and Conference AEC2025, Edmonton, 9 April 2025.

KN4. Charuvil, R.M.*, Bahrami, M.*, Sattari, F., Lefsrud, L.M., Gue, B. 2024. *Reducing Serious Injuries and Fatalities in Industrial Construction- Application of Machine Learning to Analyze Emotional Intelligence and Psychosocial Factors*. International Society of Automation (ISA), Edmonton Section, 28 October 2024.

KN5. Lefsrud, L.M., 2024. *CSChE Process Safety Management Division Activities and Collaboration Opportunities*. Center for Chemical Process Safety, regional meeting, Calgary, 10 September 2024.

KN6. Charuvil, R.M.*, Bahrami, M.*, Sattari, F., Lefsrud, L.M., Gue, B. 2024. *Reducing Serious Injuries and Fatalities in Industrial Construction- Application of Machine Learning to Analyze Emotional Intelligence and Psychosocial Factors*. Center for Chemical Process Safety, regional meeting, Calgary, 10 September 2024.

KN7. Joshi, A.*, Sattari, F., Lefsrud, L.M., and Khan, M.A. 2024. *Risk-based approach for safe terminal operation and route planning of on-road hydrogen distribution network*. Center for Chemical Process Safety, regional meeting, Calgary, 10 September 2024.

KN8. **Lefsrud, L.M**. & Valupadas, M.*, 2024. *Tools that Work: Enhancing Diversity, Equity and Inclusion*. Consulting Engineers of Alberta, May 16, 2024.

KN9. **Lefsrud, L.M.,** Sattari, F., & Joshi, A. 2024. *Codes, Standards, Regulations (CSR) and Insurance Gap Analysis for Hydrogen value chain development in Alberta*, Chemical Industry Association of Canada webinar, 16 April 2024.

KN10. **Lefsrud, L.M**., Ali, H.*, Gutierrez Gutierrez, C.A.*, Gehman, J., Barbosa, D., and Stroulia, E. *Energy to Contest? Emotional and Multimodal Contestation of Energy Markets*. Alberta School of Business, March 1, 2024.

KN11. **Lefsrud, L.M**., Eckert, H., Zhao, L. & Gehman, J. 2024. *Getting Creative: Using Creative Sentencing to Enhance Workplace Safety*. WorkSafeBC. 4 March 2024.

KN12. **Lefsrud, L.M.** 2023. *From risk to reward: Addressing social and economic impacts of energy transition.* Panelist, Global Sustainable Development Congress, King Abdullah University of Science & Technology, University of Alberta event - Global issues in energy transitions, May 29, 2023.

KN13. **Lefsrud, L.M.** 2023. *Continuously Improving You and Your Organization.* Consulting Engineers of Alberta, Young Professionals Conference 2023, April 28, 2023.

KN14. **Lefsrud, L.M.** 2023. *Principles to Depolarize Energy Conversations.* APEGA, March 8, 2023.

KN15. **Lefsrud, L.M.** 2023. *Visualizing Risk.* Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Canadian Chemical Engineering Conference (CCEC 2023).

KN16. **Lefsrud, L.M.** 2023. *Principles to Depolarize Energy Conversations.* Canadian Society for Senior Engineers (CSSE), January 19, 2023.

KN17. **Lefsrud, L.M**. 2022. *Innovating for Sustainability and Systems-Level Change*, Institut für Mittelstandsforschung (IFM), Mannheim University, 7 November 2022.

KN18. **Lefsrud, L.M**. 2022. *Safe and Responsible Resource Development: The role of the Technical Engineer as a Regulator*. Panelist with Dr. Graeme Norval, *Canadian Standards Association (CSA) Z767 tech committee;* George Stoyanov, *Canadian Nuclear Safety Commission (CNSC);* Alex Bolton, *Alberta Energy Regulator (AER);* Murray Elliott, *CEO Energy Safety Canada (ESC)*Alberta Energy Regulator, Engineering Community 2022 Annual Networking and Technical Presentations, 19 October 2022.

KN19. Eckert, H., **Lefsrud, L.M**., Zhao, L. & Gehman, J. 2022 *Creative Sentencing and Workplace Safety*. Institute for Work and Health. 26 October 2022.

KN20. **Lefsrud, L.M**. 2022. *Principles to Depolarize Energy Conversations.* Gussow Lecture, Canadian Society of Professional Geologists (CSPG), 12 May 2022.

KN21. **Lefsrud, L.M.** 2022. *Twitter Analytics Tool.* Energy and Climate – West Coast Edition, Canadian Energy and Climate Nexus, 7 April, Vancouver and Online.

KN22. **Lefsrud, L.M**. 2022. *Dams as a System.* New Zealand Society of Large Dams (NZSOLD) Symposium, 22 March 2022.

KN23. **Lefsrud, L.M**. 2022. *Promoting Energy Transitions.* Advisory meetings with Deputy, Associate Deputy, and Assistant Deputy Ministers of Energy, Government of Alberta, February 2022.

KN24. **Lefsrud, L.M**., Hussain, A.*, Gholizadeh, N.*, Sattari, F.*, Musilek, P., Liang, H. 2021. *Creating System Resilience in Power Generation and Delivery*, Alberta Power Industry Consortium (APIC) workshop, 8 November 2021.

KN25. Gibson, G., Vandenberghe, J. & **Lefsrud, L.M.** (moderator). 2021. *Engineering Community Benefit Agreements*. Sustainability Council Public Lecture Series, online 13 October 2021.

KN26. **Lefsrud, L.M.** 2021. *Creative Sentencing: My Experience with Companies*. Occupational Health Psychology Summer Institute, Saint Mary's University, Halifax NS and online, June 23-25, 2021.

KN27. **Lefsrud L.M.** & Sattari, F. 2021. *Using Artificial Intelligence, Machine Learning, and Data Fusion to Improve the Process Safety and Risk Management in Oil & Gas Industry*. Energy Safety Canada, May 27, 2021.

KN28. **Lefsrud L.M.** 2021. *Harnessing data to drive safety performance.* Innovation in Construction Forum through the Construction Innovation Centre. Construction Owners Association of Alberta (COAA), Virtual Best Practices Conference on May 18-19, 2021.

KN29. **Lefsrud L.M.** 2021. *DSIG Failure Modes Webinar: Visualizing Safety Management Systems*. CEATI International, online, 4 May 2021. The Centre for Energy Advancement through Technological Innovation (CEATI) is a user-driven organization committed to providing technology solutions to its electrical utility participants, who are brought together to collaborate and act jointly to advance the industry through the sharing and developing of practical and applicable knowledge. The Dam Safety Interest Group (DSIG) is composed of dam owners who jointly sponsor research & development projects designed to help assess and improve the safety of dams. Today, the DSIG is represented internationally by participants from Canada, the United States, Australia, New Zealand, Sweden, France, the United Kingdom, and Germany.

KN30. **Lefsrud L.M.** 2021. *Innovation and Sustainability*. Aalto University, Helsinki Finland, PHYS-E0582 Art of Nanotechnology in Energy Conversion & Storage (3 ECTS). 31 March 2021.

KN31. **Lefsrud, L.M.** 2021 *Hidden Hazards and Blind Spots Workshop*. Canadian Society of Safety Engineers (CSSE), online workshop, 17 March 2021. CSSE is Canada's largest national and most established professional organization for health and safety practitioners. It has over 4,000 members across Canada, the United States, and around the world working together to enhance the health, safety, and environmental profession.

KN32. Eckert, H. & **Lefsrud, L.M.** 2021 *Improving OHS performance with OHS and environmental creative sentencing spillovers.* Alberta Occupational Health and Safety Futures Webinar. 4 March 2021.

KN33. Belas, G. & **Lefsrud, L.M.** (moderator). *Bridging The Gender Gap with Design: How UN Development Does It.* Sustainability Council Public Lecture Series, online 24 February 2021.

KN34. **Lefsrud, L.M.** 2020. *Resource and energy conversations.* Keynote speaker for Saskatchewan Women in Mining, Women in Nuclear (WIM-WiN), meeting online September 25, 2020.

KN35. **Lefsrud, L.M.** 2020. *Power and Influence: Expanding our understanding and use of these.* Keynote speaker for Canadian Engineering Education Association **(**CEEA) -ACEG Sustainable Engineering Leadership and Management, meeting online September 17, 2020.

KN36. **Lefsrud LM.** 2020. *Heated Atmosphere: Organizational Emotions and the Field Structuring in Online Climate Change Debate.* Public Lecture, School of Engineering, University of California, Merced, online September 11, 2020.

KN37. **Lefsrud, L.M.** 2020 *Mapping energy conversations.* University of Alberta representative to the Ministers' Round Table in Energy for Canada-Alberta Collaboration on Oil and Gas Innovation, with Sonya Savage (Alberta Minister of Energy) and Seamus O'Regan (Minister of Natural Resources Canada), along with 50+ CEOs/VPs in the energy industry, 13 February, Calgary, Alberta.

KN38. **Lefsrud, L.M.** 2020. *SDG 7: Clean and Renewable Energy – Taking a Systems Approach to Geothermal Energy*. Public Presentation for University of Alberta's International Week, Edmonton, February 3, 2020.

KN39. **Lefsrud, L.M.** 2019. *Communicating Risks to Support Sustainability Discussions: Challenges in A Post-Truth Era*. Keynote, Canadian Heavy Oil Association, Fall Conference, Calgary, November 7, 2019.
KN40. **Lefsrud, L.M.** 2019. *Enhancing Regulatory Effectiveness to Improve Corporate Performance.* Keynote to Legal Circle, monthly meeting of Provincial, Court of Queen's Bench, and Appeal Court judges, October 17, 2019.
KN41. **Lefsrud, L.M.** 2019. *Communicating Risks*. Keynote, National Conference of the Canadian Dam Association, Calgary, October 9, 2019.
KN42. **Lefsrud, L.M.** 2019. *Advanced technologies to depolarize energy dialogues*. Keynote, Energy Futures Lab: Energy.AI3, Calgary, October 1, 2019.
KN43. **Lefsrud, L.M.** 2019. *Cutting-Edge Linguistic Methods*. Academy of Management, invited panelist Paper Development Workshop, Boston, August 12, 2019.
KN44. **Lefsrud, L.M.** 2019. *Creative Sentencing: My Experience with Companies*. Alberta Justice Senior Leadership Retreat with prosecutors and investigators for OHS and Environmental Offenses, Edmonton, June 25, 2019.
KN45. **Lefsrud, L.M.** 2019. *Safety Moment.* Suncor Senior Management Contractor Safety Roundtable (40 CEOs and VPs for Suncor and their contractors/suppliers), Ft. McMurray, May 27, 2019.
KN46. **Lefsrud, L.M.** 2019. *Hidden Hazards and Blind Spots.* Workshop, Construction Owners' Association of Alberta (COAA) Best Practices Conference, Edmonton, May 9-10, 2019.
KN47. **Lefsrud, L.M.** 2019. *Role of AI in Humanities and Ethics*, Invited Panelist, Canadian Conference in Electrical and Computer Engineering, Edmonton, May 6, 2019.
KN48. **Lefsrud, L.M.** 2019. *Sustainable Development and Risks Management for Geothermal Energy Development.* Alexis Nakota Sioux Band Council, Alexis Nakota Sioux Nation, May 1, 2019.
KN49. **Lefsrud, L.M.** 2019. *Sustainable Development and Risks Management for Geothermal Energy Development.* Ross River Dene Council, Ross River Yukon, April 2, 2019.
KN50. **Lefsrud, L.M.** 2019. *Communicating Risks to Support Sustainability Discussions: Challenges in a Post-Truth Era.* Dow Elements of Sustainability Series. Available online at: https://consumer.dow.com/en-us/who-we-are/sustainability/elements-of-sustainability-2019.html
KN51. **Lefsrud, L.M.** 2019. *Just don't call it climate change.* Keynote, Alberta Institute of Agrologists, Annual Conference, Banff Centre for Leadership, March 29, 2019.
KN52. **Lefsrud, L.M.** 2019. *The Information Environment: Media framing of agriculture and climate change.* A Workshop on Climate Change Mitigation in Canadian Agriculture: Integrating recent farm behaviour research into policy, Canadian Agricultural Economists Society, Ottawa, February 13, 2019.
KN53. **Lefsrud, L.M.** 2019. *Keynote.* Student Sustainability Summit, University of Alberta, Edmonton, February 2, 2019.
KN54. **Lefsrud, L.M.** 2019. *The Diversity Challenge.* Consulting Engineers of Alberta Executive Meeting, Edmonton, January 23, 2019.
KN55. **Lefsrud, L.M.** 2019. *How can we better equip organizations to 'see', prioritize, and proactively manage risks?* University of Alberta Risk Symposium, Lister Hall, University of Alberta, Edmonton, January 15, 2018.
KN56. **Lefsrud, L.M.** 2018. *The Diversity Challenge.* University of Alberta Alumni Association, Lister Hall, University of Alberta, Edmonton, December 12, 2018.
KN57. Pope, G., **Lefsrud, L.M.**, & Oliver, M. 2018. *Canadian Workplace Culture: Human Rights Issue or Essential Competency?* APEGA Board of Examiners meeting, Edmonton, December 7, 2018.
KN58. **Lefsrud, L.M.** 2018. Panel speaker, *NextGen Speaker Series – Women at Work: How to Get In and Stay Ahead.* Edmonton City Hall, November 3, 2018.
KN59. **Lefsrud, L.M**, Baker, K., Zettl, J., Macciotta, R., & Hendry, R. 2018 Communicating risks across organizations and to contractors. Environment, Health & Safety, Risk Management Services, University of Alberta. 26 September 2018.

KN60. **Lefsrud, L.M.**, Baker, K.E.,* & Zettl, J.,* 2018. *Protecting workers From Ground Hazards by Enhancing Hazard Identification and Management tools.* Enform Petroleum Safety Conference, Banff, May 1-3, 2018.

KN61. **Lefsrud, L.M.,** 2017. *Re-focusing on risk. How can we better equip companies to 'see', prioritize, and proactively manage risks?* Confederation of Alberta Faculty Associations (CAFA) Distinguished Academic Early Career Award, Gala Presentation, September 14, Edmonton.

KN62. Meyer, R.M., Oberg, A., & **Lefsrud, L.M**. 2017. *Heated Atmosphere: Organizational Emotions and Field Structuring in Online Climate Change Debates.* Scandinavian Consortium for Organizational Research (SCANCOR) / Stanford University Symposium on Institutional Analysis 2017, Public Morning Lectures, September 11, Vienna.

KN63. Lefsrud, L.M., Farjoo, A*, Pennetta de Oliveira, L.*, Caldera, A.,* & Esmaeeli, N.* 2017. *Safety Maturity Curve: Findings from Industry Perception Survey.* Construction Owners Association of Alberta, Best Practices Conference, Edmonton Alberta, May 9-10, 2017.

KN64. **Lefsrud, L.M.** 2017. *Re-imagining Energy: How emotion has shifted energy conversations.* Keynote speaker, Fuse Collective Gala student fundraiser, Calgary Alberta, January 26, 2017.

KN65. **Lefsrud, L.M.** & Winkel, G. 2016. *Risk Management in a large industrial work place: Occupational health and safety in the oil sands*. National Research Council and Transport Canada Risk Engineering Workshop, Application of Risk Engineering for Transportation and Industries Managing Linear Infrastructure. National Research Council Canada, November 8, 2016.

KN66. **Lefsrud, L.M.**, Gehman, J., & Umme, M.* 2016. *Analyzing WCB data to assess the effectiveness of education initiatives and financial incentives in reducing future claims rates.* Safety Committee Meeting, Construction Owners Association of Alberta. Edmonton, October 5, 2016.

KN67. **Lefsrud, L.M.**, Gehman, J., & Umme, M.* 2016. *The value of shame: Research that supports the concept of shaming and the need to include a rehabilitation story.* Creative Sentencing Workshop, Alberta Justice. Edmonton, September 29, 2016.

KN68. **Lefsrud, L.M.** & Gehman, J. 2016. *Risk Worth Taking? Revisiting how 'Acceptable Risk' Becomes Defined.* Oil Sands & Heavy-Oil Workshop: Furthering the Collaborations & Sharing the Learnings. CSPG/AAPG, Calgary, June 19, 2016.

KN69. **Lefsrud, L.M.**, Westbury, C. & Hollis, G. 2016. *Acceptable risks? The role of traditional and social media in resource conversations.* Consulting Engineers of Alberta AGM, Calgary, May 18, 2016.

KN70. **Lefsrud, L.M.**, Westbury, C. & Hollis, G. 2016. *Acceptable risks? The role of traditional and social media in resource conversations.* Association of Alberta Forest Management Professionals, Rocky Mountain House and Edmonton, April 11 & 13, 2016.

KN71. **Lefsrud, L.M.**, Westbury, C. & Hollis, G. 2016. *Acceptable risks? The role of traditional and social media in resource conversations.* Strategy and Market Access, Alberta Energy, February 25, 2016.

KN72. **Lefsrud, L.M.**, Westbury, C. & Hollis, G. 2016. *Acceptable risks? The role of traditional and social media in resource conversations.* Enbridge Research in Action Seminar, Calgary, April 7, 2016.

KN73. **Lefsrud, L.M.**, Westbury, C. & Hollis, G. 2016. *Creating a Basis for Genuine Dialogue: Phase I Report.* Guest Speaker, Alberta Chamber of Resources, Board of Directors meeting, Calgary, October 15, 2015.

KN74. **Lefsrud, L.M.**, Westbury, C. & Hollis, G. 2015. *A basis for genuine dialogue: Developing a Science-Based Understanding of Public/Industry Communication.* Alberta Chamber of Resources, Semi-Annual General Meeting, Calgary, June 18, 2015.

KN75. **Lefsrud, L.M.**, Westbury, C. Hollis, G., Keith, J.* 2015. *Creating a Basis for Genuine Dialogue.* Guest Speaker, Alberta Chamber of Resources, Board of Directors meeting, Edmonton, April. 14, 2015.

KN76. **Lefsrud, L.M.** 2013. *Ugly Duckling or Golden Goose? Knowledge to Succeed in a Changing Dialog.* Guest Speaker, Alberta Innovates and Climate Change Emissions Management Corporation, Board of Directors meeting, Edmonton, Feb. 19, 2013.
KN77. **Lefsrud, L.M.** 2012. *Ugly Duckling or Golden Goose? Knowledge to Succeed in a Changing Dialog.* Keynote Speaker, Syncrude Research Conference, Edmonton and Ft. McMurray, Nov. 7 & 14, 2012.
KN78. **Lefsrud, L.M.** 2012. *Graduate Student Panel Discussion*, Student Sustainability Summit, Sustain SU and the Office of Sustainability, University of Alberta, Jan. 28, 2012.
KN79. **Lefsrud, L.M.** 2011. *Redefining the Bottom Line: Corporate Social Responsibility.* Invited panel member with Tyler Wry, Assistant Professor, Wharton School of Business, and Gord Winkel, Professor Industrial Safety and Loss Management and previous VP Syncrude. Engineers Without Borders, University of Alberta Chapter, Edmonton, Mar. 3, 2011.

TEACHING AND WORKSHOPS

Executive Education Primer for Leadership in Risk Management, Finning International, 14 April, 2026.
Quantitative Risk Assessment Methods. Transport Canada – Dangerous Goods groups, Ottawa, March 9-11, 2026 (20 attendees)
How to more effectively engage stakeholders in sustainability conversations, SEP 710 International Governance and Environmental Policy, McMaster University, 2 April 2026 (26 attendees).
Power and Influence, Guelph Engineering Leadership Seminar, 14 January 2026 (45 participants).
ENGG 404 Leadership in Safety and Risk Management. Fourth year course. Instructor, W2026 (178 students).
CME 694 / 494 / Eng M 680 / HGEO 581. Sustainable Design. Interdisciplinary graduate course. Instructor, W2026 (21 students).
Bowtie Hazard Assessment for Serious Incident and Fatality (SIF) prevention, Alberta Construction Safety Association Annual Conference, Calgary, November 6, 2025 (60 attendees).
Visualization of Critical Controls to Prevent Serious Incidents and Fatalities (SIFs) for Trenching and Excavating, Manufacturers Health and Safety Association, Red Deer, October 30, 2025 (40 attendees).
CME 694 / 494 / Eng M 680 / HGEO 581. Sustainable Design. Interdisciplinary graduate course. Instructor, W2024 (23 students).
Engg 404 Leadership in Safety and Risk Management. Fourth year course. Instructor, W2024 (178 students).
Enhancing Creative Sentencing and Improving Victim Supports. Policymaker workshop, Edmonton, October 3 and 4, 2024 (65 attendees).
COMMRC 1147 THE RHETORIC OF SCIENCE: Science Denial and The Impact on Institutions and Organizations. A Comparative Perspective Between Europe and North America, University of Pittsburgh, February 21 and 23, 2024.
CME 694 / EngM 680 Sustainable Design. Instructor, winter term 2024 (20 students).
CME 483 Colloquium II Technical Presentations, winter term 2024 (28 students).
Using Critical Controls to Reduce Serious Incidents and Fatalities (SIFs). Industry workshop, Fort McMurray, November 21, 2023 (120 attendees).
Building Resilience to Serious Incidents and Fatalities (SIFs). Industry workshop, Calgary, September 21, 2023 (40 attendees).
ENGG 404 Leadership in Safety and Risk Management. Fourth year course. Instructor, fall term 2023 (126 students).
ENGG 200 Special Topics, winter term 2022 (36 students). (Overall the instructor was excellent 4.9/5.0, Faculty median = 4.34).
CME 694/494 Advanced Topics in Quantitative Risk Assessment. Graduate Course, fall term 2021 (42 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.9/5.0).
ENGG 200 Special Topics, winter term 2021 (36 students). (Overall the instructor was excellent 4.8/5.0).

CME 483 Colloquium – Technical presentations. Fourth year course, winter term 2020 (29 students). Chemical and Materials Engineering. (Overall the instructor was excellent 5.0/5.0).
CME 694/494 Advanced Topics in Quantitative Risk Assessment. Graduate Course, fall term 2020 (81 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.9/5.0).
ENGG 200 Special Topics, winter term 2020 (63 students). (Overall the instructor was excellent 4.8/5.0).
ENGG 490 Engineering Leadership Lab, fourth year undergraduate course for those with Business minor, winter term 2020 (7 students). Faculty of Engineering.
CME 694/494 Advanced Topics in Quantitative Risk Assessment. Graduate Course, fall term 2019 (31 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.3/5.0).
CME 481 Colloquium – Fourth year course, winter term 2019 (24 students). Chemical and Materials Engineering.
CME 483 Colloquium – Technical presentations. Fourth year course, winter term 2019 (21 students). Chemical and Materials Engineering.
CHE 312 Fluid Mechanics, third year undergraduate course, fall term 2018 (24 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.0/5.0).
CME 694 Advanced Topics in Engineering Safety and Risk Management. Graduate Course, winter term 2018 (32 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.8/5.0).
CME 481 Colloquium – Fourth year course, fall term 2017 (24 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.8/5.0).
ENGG 404 Engineering Safety and Risk Management. Fourth year course. Co-instructor, fall term 2017 (220 students in three sections), Chemical and Materials Engineering.
CME 694 Advanced Topics in Engineering Safety and Risk Management. Graduate Course, fall term 2016 (25 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.8/5.0).
Sustainable Mining Workshop, Congreso Colombiano de Mineria. Medellin, Colombia, 23-24 May 2016.
CME 483 Colloquium – Technical presentations. Fourth year course, winter term 2016 (25 students). Chemical and Materials Engineering. (Overall the instructor was excellent 4.8/5.0).
ENGG 404 Engineering Safety and Risk Management. Fourth year course. Co-instructor, fall term 2015 (186 students in two sections), Chemical and Materials Engineering.
SMO 441 Strategy: Cooperation and Competition, fourth year strategy capstone course. Lecturer, fall term 2011 (16 students), Alberta School of Business. (Overall the instructor was excellent 4.6/5.0).
SMO 301 Introduction to Strategic Management and Organization Design, third year undergraduate course. Lecturer, winter term 2010 (36 students), Alberta School of Business. (Overall the instructor was excellent 4.5/5.0).

STUDENT SUPERVISION

Name, *Thesis Title*	Year Admitted	Year Graduated	Degree	% Supervision / Joint with	Present Position
Shuai Liu, *Developing a Competency Management System in Construction*	Jan-26		PDF	100%	Mitacs internship at Carry Steel
Amir Abdolmaleki, *AIML analytics*	Jan-26		PDF	100%	Chief data scientist, Insight Risk Systems
Mai Ghazal	Jan-23		PDF	80% with Ahmed Hammad	PostDoc Sustainable Construction
Fereshteh Sattari, *Process Safety Management Systems, Bayesian Network Analysis, Safety Culture*	Sep-19	Sep-21	PDF	100%	Promoted to Director Research in my group
Afrooz Farjoo, *COAA Safety Culture Survey*	Jan-17	Apr-17	PDF	100%	Clean Technologies Industry Development

					Officer - Alberta Jobs, Economy and Innovation, Govt of AB
Post Doctoral Fellows = 5					
Abbas Abaei Kashan, *AIML analytics*	May-24		PhD	100%	Enrolled full-time.
Jim Kanerva, *Developing a Competency Assurance Program for Industrial Construction Workers*	Jan-24		PhD	50% with Yasser Mohamad, CivE	Enrolled part-time, general manager Carry Steel
Mohammadreza Bahrami, *AIML Analytics*	Jan-24		PhD	100%	Enrolled full-time.
Rose Parvaneh, *Decision-Support Framework for Sustainable Power Generation: From Single Project Technology Selection to Portfolio Optimization*	Jan-22		PhD	80% with Ahmed Hammad	Enrolled full-time.
Haroun Elyasir, *Sustainable Construction*	Sep-22		PhD	20% with Farook Hamzeh CivE	Enrolled part-time, senior policy analyst, regulatory affairs, Alberta Energy & Minerals
Mona Abbas	Sep-25		PhD	20% with Yasser Mohamad, CivE	Enrolled full-time,
Mohammadreza Karimi Dehkordi, *AI/ML for Process Safety of Electricity Distribution Systems*	Sep-22	Sep-26	PhD	100%	Fire Engineer, Rotaflow
Samantha Jones, *Enhancing Team Self-Efficacy and Learning*	Sep-22	Nov 24	PhD Psychology	10% with Tom O'Neill, UCalgary	Continuing as a Post-Doc UCalgary
Abbey Abella Nosa, *AIML methods to examine incident reports and leading indicators*. Best student paper award, construction specialty conference, CSCE May 2023	Jan-22	Jun-26	PhD	20% with Yasser Mohamed, CivE	Construction engineering manager
Hamidreza Mohammadhossseinzadeh Golabchi, *AIML methods to examine incident reports and leading indicators*	Sep-21	Aug-25	PhD	20% with Yasser Mohamed, CivE	Post Doc internship with Construction Innovation Centre
Mona Ahmadira Rad, *Examining Human Factors in Rail Research: Implications for rail regulation in Canada*. Mona won the Art Worth Memorial Scholarship in Engineering	Jan-20	Mar-25	PhD	50% / with Michael Hendry, CivE	System Safety Specialist | Railway Safety & Human Factors, WSP Engineering
Jian Tang, *WCB claims data analysis*	Sep-19	Apr-20	PhD	80% / with Joel Gehman, Business	She withdrew from the PhD program. VP Strategy, Aviva Canada
Michelle Naef, *Taming the entropy of organizations: Designing process hazard information systems for sustainable process facilities*. Michelle won a national award from Engineers Canada	Jan-19	Aug-23	PhD	90% / with Dave Shook, ShookIOT	Assistant Professor, Energy, Concordia University

Hadiseh Ebrahimi, *Human Factors associated with railroad incidents*. Hadis won the Art Worth Memorial Scholarship in Engineering	Jan-19	Dec-22	PhD	50% / with Renato Macciotta, CivE	Senior Process Safety Engineer, American Bureau of Shipping
Lei Emma Jing, *Using Competency Management to Enhance Safety Culture in Industrial Construction*	Sept-18	Dec-22	PhD	20% / with Ian Gellatly, Business	NEOMA Business School, France
Vivian Giang, *New Approaches to communities, communication, and consultation: Building future energy systems in Canada in the age of reconciliation.* Vivian has won 20+ scholarships, including a Bombardier, National Geographic & Fulbright Fellowship.	Sep-18		PhD	50% / with Andie Palmer, Anthropology	Assistant Professor, Communication, MacEwan University
Cindy Dong, *Using BP Neural Networks to Prioritize Risk Management Approaches for China's Unconventional Shale Gas Industry*	May-17	Jun-17	PhD	80% for research project / with Joel Gehman, Business	Arizona State University
Yuanyuan Ning, *Examining the effectiveness of creative sentences on reducing WCB claims rates*	Apr-16	Aug-16	PhD / GRA	50% with Heather Eckert, Econ	Withdrew from the PhD program. Project Engineer Patsnap
Nicholas Bak, *Industry-University collaboration networks for Microbially Influenced Corrosion*	Sep-16	Jan-20	PhD	50% / with John Wolodko, ALES	Withdrew from the PhD, Technical Supervisor, OEM Remanufacturing
PhD students = 19					
Simone Cherry Delisle	Sept-25		MSc Engineering Management		Enrolled fulltime
Derek Mazeppa, *Examining Line of Fire Incidents in piping construction and maintenance*	May-24		MSc Engineering Management	10% with Stanislav Karapetrovic	Enrolled fulltime
Mahsa Honari Kalateh, *Decision Support System for Wood Waste Management in Deconstruction Projects*	Sep-24	Sep-26	MSc Construction Engineering	80% with Ahmed Hammad	Intern with Construction Innovation Centre
Mahdis Mahzari, *Quantifying integration of project management systems*	Sep-24		MSc Construction Engineering	80% with Ahmed Hammad	Enrolled fulltime
Kiera Greenaway, development and delivery of *Sustainable Design* graduate course	May-24	Feb-26	MSc Environmental Engineering	MSc/GRA/TA	Sessional lecturer Sustainability Centre
Laura Guera Salazar, *Conceptual analysis of induced seismicity risks associated with Hydraulic Fracturing and Wastewater disposal in Caldomin Formation: risk assessment framework*	Sep-24	Sep-25	MSc Chemical Engineering	50% with Juliana Leung	ConoccoPhillips, Calgary
Lucca Carrasco Filippo, *Hazard identification and risk management for synbio*	Jan-24		MSc Engineering Management	50% with Michael Lipsett	Sparfell, Luxembourg
Hunter Yaworski, *Trojan Horses and Rowboats: What do metaphors reveal about conflicts*	Jan-23	Sep-25	MA Geography	10% with Gwen Blue, UCalgary	Research Assistant, University of Calgary

over environmental jurisdiction in Canada's impact assessment landscape?					
Joshua Atsegbua, *Data fusion of Construction Incident and Project Management data*	Jan-22	Dec-23	MSc Chemical Engineering	100%	Data analyst, Scale AI
Elizabeth Rose Marie Charuvil, *Visualizing what's missing: Using deep learning to identify and visualize missing leading indicators*	Sep-20	Aug-24	MSc Chemical Engineering	100%	Continuing as research associate and employee of Insight Risk Systems
Candelario Gutierrez Gutierrez, *Canadian Energy Climate Nexus*	May-20	Dec-21	MSc/GRA	100% for research project	DevOps Engineer, NeuroSoph
Andrea Whittaker, *Canadian Energy Climate Nexus*	May-20	Dec-21	MSc/GRA	100% for research project	Data Modernization Consultant, Longview Systems
Anuar Caldera, *COAA Safety Culture Survey*	Jan-17	May-17	MSc/ GRA	100% for research project	Inter Pipeline
Leonardo Pennetta de Oliviera, *COAA Safety Culture Survey*	Jan-17	May-17	MSc/ GRA	100% for research project	Kerry Brazil
Neil Anderson, *Blended Learning for Engg 404*	May-16	Aug-18	MSc/ GRA	100% for this project	EVRAZ North America
Jeff Keith, *Mapping Energy Conversations*	May-15	Sep-15	MSc/ GRA	50% / with Chris Westbury Psych	Consulting Psychologist
Parth Rana, *Evaluating Automated Machine Vision Inspection Systems (AMVIS) in Railways*	Jan-22	Jun-23	MSc	50% / with Michael Hendry	Suncor
Amanda Sistilli, *Integrating Management Systems: Process Safety with Enterprise Risk Management*	Jan-19	Sep-23	MSc	100%	Enbridge pipelines
Nafiseh Esmaeeli, *Modelling release scenarios of special dangerous goods from railway operations*	Jan-19	Dec-22	MSc	50% / with Renato Macciotta	Continuing as research assistant
Daniel Schiffner, *Re-purposing Old Oil and Gas Wells for Geothermal: Turning a Liability into an Asset*	Sep-18	Oct-20	MSc	50% / with Vic Adamowicz ALES	Nichols Applied Management
Daniel Kurian, *Using Machine Learning and Keyword Analysis to Analyze Incident Reports and Reduce Risk in Oil Sands Operations*	May-18	Mar-20	MSc	95% / with Yongsheng Ma MecE	Senior data analyst, Alberta Health Services
Kathleen Baker, *Protecting Worker Safety in Alberta by Enhancing Field Level Hazard Assessments and Training for Ground Hazards Associated with Tailings Facilities, Dams, and Systems*	Sep-16	Mar-19	MSc	100%	Suncor
Munira Umme, *Effect of Regulatory Prosecution to Improve Workplace Safety in Alberta*	Jan-16	Oct-18	MSc	100%	Alberta Energy Regulator
MSc / RA and MSc students = 22					
Zirui Wang, Techno-economic and environmental feasibility of replacing PET plastic with PEF	May-25	Nov-25	MEng, Chemical Engineering	100%	Intern, Chengdu Baishide Chemical Co. Ltd.

plastic in large-scale chemical production					
Kanishkar Venkatesan, *Smart Energy Management for Hospitals with Hydrogen Combined Heat and Power System: A Machine Learning-Driven Economic Optimization Approach*	May-24	Apr-25	MEng, Chemical Engineering	50% with Mohd Adnan Khan	Research associate and employee of Insight Risk Systems
Lucy Bai, *Sustainable Pipeline Construction*	Mar-23	Jun-24	MEng, Mechanical Engineering	30% with Ahmed Hamman and Leixuan Zhong	Project Coordinator, Blue City Construction
Anirudha Joshi, *Quantitative Risk Analysis of hydrogen generation, transport, fueling, and use to support risk-informed regulatory gap analysis*	Feb-23	Aug-24	MEng, Engineering Management	100%	Research associate and employee of Insight Risk Systems
Yuxuan (Carlos) Xue, *Quantitative Analysis Method for Ecological-Health Risks Caused by Rainfall-induced Soil Erosion at the LaRonde Mine*	Jan-23	Apr-24	MEng, Chemical Engineering	100%	PhD student in Civil Engineering
Neal Hannem, *Improving Near Miss Reporting in Industrial Construction: Enhancing Identification and Mitigation of High Impact, Low Probability Incidents Using Near Miss Reporting Systems*	Jan-23	Aug-23	MEng, Engineering Management	100%	SMA Consulting
Layal Alabour, *Importance of following Management of Change (MOC) process when conducting Maintenance Activities in Petrochemical Refineries to Improve Reliability & Safety*	Feb-21	Mar-23	MEng, Engineering Management	100%	Process Engineer, Suncor
Anusha Priya, *Inherently Safer Design of a Hydrogen Fuel Cell*	Apr-22	Dec-22	MEng, Engineering Management	100%	HSE and CI specialist, Balcan Innovations Inc
Eliza Dhukal, *Psychological hazards in remote work environments and strategies to control them*	Jan-22	Nov-22	MEng, Engineering Management	100%	Project Manager, IFS
Ibrahim Moraich, *Occupational health and safety hazards in wastewater treatment plants*	Dec-21	Sep-22	MEng, Chemical Engineering	100%	Turnaround technical lead, Suncor
Noémie Grammatico, *Comparative analysis of Process Safety Management (PSM) in North America and Europe*	Dec-21	May-22	MEng, Chemical Engineering	100%	Formulation Work Package Owner - Novo Nordisk Fill&Finish Expansions
Humna Irshad, *Automated Machine Vision Inspection Systems (AMVIS) in Railways – Reliability Assessment Study*	Dec-21	May-22	MEng, Chemical Engineering	100%	Manager Planning and Performance, Sofina Foods
Dennis Li, *Mandates for Machines: The Demand for Regulation of Artificial Intelligence*	May-21	Dec-21	MEng, Chemical Engineering	100%	Marketing Manager, F2 Furnishings

Joseph Chuwa, *Management Commitment to Safety Culture*	May-21	Dec-21	MEng, Chemical Engineering	100%	Bechtel Construction
Rami Ghazali, *Process Hazard Analysis (PHA) method selection for different levels and phases of pipeline projects: Proactive measures for safer designs*	May-21	Dec-21	MEng Engineering Management	100%	Senior Project Engineer, TC Energy
Rami Alameddine. *Conducting Feature Importance and Investigating the Correlation between Weather Features and Power Outages*	Feb-21	Jul-21	MEng Engineering Management	100%	Project Engineer, Federation Engineering
Brian (Bochao) Zeng, *Application of Inherent Safe Design principles for Brownfield Projects within Refining and Petrochemical Industry*	Feb-21	Jul-21	MEng Chemical Engineering	100%	Process Engineer, Suncor
Ramya Sree Botla, *Applying Process Safety Management approaches to enhancing fall protection*	Jan-21	Dec-22	MEng Chemical Engineering	100%	Process Engineer, Rio Tinto
Arpit Patel, *Machine Learning and maintenance data*	Jan-21	Dec-22	MEng Chemical Engineering	100%	Process Safety Engineer, RiskTec Solutions
Matthew Schribar, *How can the latent causes and controls of low probability, high consequence events be best identified to characterize the associated risks?*	Sep-21	Sept-22	MEng, Chemical Engineering	100%	Automation specialist, Spartan Controls
Ariel Krista Couture, *Effectiveness of Controls in Limiting Occupational Exposure to Crystalline Silica as Quartz Within the Road Construction Industry*	Sep-20	Jul-21	MEng Engineering Management	100%	Project Manager, Conwest Contracting
Alice Gu, *Impacts of project size, use of contractor vs. employee, and work location on safety, communication, and alcohol & drug abuse in industrial construction*	Feb-21	Jul-21	MEng Engineering Management	100%	Major Projects Engineer, City of Pitt Meadows
Chunchi (Justin) Guo, *Improvement of Construction Safety from Aspects of Communication, Risk Management, and Work Planning: A Literature Review*	Sep-20	Jul-21	MEng Engineering Management	100%	Senior Sales Engineer, Zhuhai Kechuang Power Electronics Co., Ltd
Harshali Parab, *Enhancing Oil and Gas Industry Safety Through Asset Integrity Management.*	Sep-20	Jul-21	MEng Chemical Engineering	100%	Associate Process Engineer, Saltworks Technologies
Nyssa Moore, *The gaps in the current Canadian SMS regulations and operating rules*	Sep-20	Jul-21	MEng Chemical Engineering	100%	Summit Inspection Services
Joby Chacko, *Enhanced Process Safety in Hydrocracker Units In Oil Refineries*	Sep-20	Apr-21	MEng Chemical Engineering	100%	Refinery Operations Leader, Becht; Bapco Refining
Ryan Cusveller, *Increasing Industrial Construction Safety*	Sep-20	Jul-21	MEng Engineering Management	100%	Project leader, SMA Consulting

Performance Using Leading Indicators					
Tahami Hasan, *Oil and Gas Clean Technology Program Performance Study Framework Evaluations*	Sep-20	Jul-21	MEng	100%	Project Control Specialist, Enbridge Pipelines
Shruti Singh, *Enhancing Safety Culture of an Organization Through Focus on Communication and Psychological Safety*	Jan-20	Apr-20	MEng	100%	Project Manager, Burns & McDonnell
Yewei (Janet) Ni, *Conducting a Comparative Study to Improve Process Safety Management Performance in Strathcona County*	Jan-20	Apr-20	MEng	100%	Quality Engineer, Aspen Technologies.
Aadil Khan, *Examining the evaluation of cumulative effects in land use planning and emergency response in Strathcona County*	Jan-20	Dec-20	MEng	100%	FourQuest Energy
Sanah Dar, *Process Hazard Assessment of Urea Storage Tank*	May-19	Oct-19	MEng	100%	Program Manager, Alberta Innovates
Honey Bhatia, *Quantitative risk analysis for road driving using fuzzy logic and the implementation of a layer of protection analysis (LOPA) integrated with "vision- zero" quality management strategy*	Jan-18	Aug-18	MEng	90% / with Stanislav Karapetrovic, MecE	Quality Engineer Coordinator, Magna International
Abhishek Karole, *Flare Dispersion Analysis of Flare Gas during Flame Out Situation and Flue Gas after Combustion*	Jan-18	Aug-18	MEng	100%	Process Engineer, Greenfire Resources
Ifema Odeluga, *Process Safety Management: Creating Quantitative Risk Assessment Scenarios*	Jan-17	Dec-17	MEng	100%	City of Edmonton
Anne Nkoro, *Implementing Enhanced Performance Based Safety Management System: A Canadian Railway Industry Perspective*	Jan-18	Apr-19	MEng	90% / with Stanislav Karapetrovic, MecE	Project Manager
Dhaval Shah, *Safety Aspects of Floating LNG: Preliminary Inherent Safer Design of Critical Processes of Floating LNG*	Jan-17	May-17	MEng	100%	Process Engineer, Bantrel
Varun Sharma, *Quantitative risk assessment guidelines for gasoline & ammonia*	May-17	Aug-17	MEng	90% / with John Doucette	Manager Service Design, Canadian National Railway
Aysha Hannan, *Impact of organizational safety culture and individual safety behavior on safety management for the railway industry in Canada*	Jan-17	Dec-17	MEng	100%	KuwaitJobs
Amélie Shawcross, *Improving Workplace Safety in the Alberta Healthcare Industry through High Reliability Organization and Safety Culture Principles*	Jan-16	Aug-16	MEng	100%	PhD in Environmental Engineering, University of Ottawa

MEng students = 39					
Qasim Karjatwala, *Using natural language processing to companies' incident report descriptions to identify precursors*	May-23	Aug-23	BSc	100%	Process engineer, BC pulp mill
Ysabelle Kmiec, *Using natural language processing to companies' incident report descriptions to identify precursors*	May-23	Aug-23	Coop student	100%	Data analyst
Grace Moore, *Examining corporate sentencing for the characteristics of companies, industries, and sentence decisions that influence corporate learning and rehabilitation*	May-23	Dec-24	Research assistant	100%	Accountant, MNP
Katherine Mae Patenio, *Mapping Energy Conversations*	May-21	Aug-21	BSc	100%	Senior Software Specialist, Mozilla
Sua Lee, *Equipping organizations to see unforeseen hazards by enhancing safety culture*, Dean's Research Award	Jan-20	Apr-20	BSc	100%	Regulatory Specialist, Nutrien
Kabir Nadkarni, *Energy Transitions for Oil to Geothermal.* Kabir won 20+ scholarships, including the APEGA medal for citizenship and an Aga Khan International Fellowship.	May-19	Apr-20	BSc	80% / with Jonathan Banks in EAS	Lead analyst, National Grid
Hersharon Sandhu, Climate Survey for equity, diversity and inclusion of engineering undergraduate programming	Sep-17	Apr-19	BSc	50% with Ania Ulrich	Advancement, School of Public Health
Shweta Saksena, Examining climate effects on tailings incidents	Sep-17	Dec-17	BSc	100%	Project Manager, PCL Construction
Yu Zhu, *Mapping Conversations about Alberta's Resource Industries*	May-17	Aug-17	BSc	100%	Software Engineer, Amazon
Andrea Miller, *Farmers' Climate Change Practices*	May-18	Sep-18	BSc	100%	Project Lead, Municipal Climate change Action Centre
Daanish Hamid, *Field Level Hazard Assessments and Training for Ground Hazards Associated with Tailings*	May-17	May-18	BSc	100%	Consultant, AtkinsRéalis
Meghana Valupadas, *URI Diversity in Engineering*	Sep-17	Dec-19	BSc	50% / with Ania Ulrich	Belonging, Equity, Accessibility, and Diversity (BEAD) Specialist, City of Airdrie
Megha Sharma, *URI Diversity in Engineering*	Sep-17	Dec-17	BSc	50% / with Ania Ulrich	APEGA
Juliana Dobbie, *Dean's Research Award Diversity in Engineering*	Jan-17	Apr-17	BSc	50% / with Ania Ulrich	Quality Engineer, Enbridge Pipelines

Natasha Pye, *Dean's Research Award Diversity in Engineering*	Jan-17	Apr-17	BSc	50% / with Ania Ulrich	Strategy & Commercialization manager, Deloitte
Kostyantyn Guzhva, *Mapping Energy Conversations*	Jan-16	Aug-16	BSc	50% / with Chris Westbury	MSc in Comp Science, U. of Alberta
Udey Rishi, *Mapping Energy Conversations*	Nov-15	Apr-16	BSc	50% / with Chris Westbury	Founding Engineer Kindred, previously Shopify
Allison Moore, *Mapping Online Climate Change Debate*	Nov-15	Sep-16	BSc	100%	Occupational Therapist, Homewood
Ana Kovic, *Mapping Online Climate Change Debate*	Nov-15	Sep-16	BSc	100%	Medical Student, University of Pavia
Janel Comeau, *Mapping Energy Conversations*	May-15	Aug-15	BSc	50% / with Chris Westbury	Veterinary Nurse
BSc students = 20					
Vinny Zimmerman, *Modeling the construction of a multistory apartment building*	July-26	Aug-26	WISEST Summer Research Program	100%	
Gabrielle Margareth Escueta, *Using machine learning techniques to analyze to companies' incident report descriptions to identify precursors*	Jul-24	Aug-24	WISEST Summer Research Program	100%	Enrolled in science, UBC
Abigail Karbonik, *Using machine learning techniques to analyze to companies' incident report descriptions to identify precursors*	Jul-23	Aug-23	WISEST Summer Research Program	100%	Enrolled in Mechanical engineering, UAlberta
Yasmin Albeny, *Mapping Energy Conversations*	Jul-22	Aug-22	WISEST Summer Research Program	100%	Enrolled in Mechanical Engineering, UAlberta
High school students = 4					

ADDITIONAL INFORMATION ON CONTRIBUTIONS AND TRAINING

Complex socio-technical problems require inter-disciplinarity, collaboration, and communication across engineering- policy- public divides. Thus, all HQP are trained in core skills to ensure they are well rounded and competitive: fundamental knowledge in engineering safety and risk management; key performance indicators associated with various management systems; quantitative and qualitative data collection and analysis methods, modelling, and visualization; effective written and verbal communication such as drafting proposals, research ethics applications, conference and workshop presentations, chairing meetings/sessions, writing executive summaries, and media communication; and effectively engaging in field / industry research. HQP are also trained in various languages and analysis/modelling software (Python, PHAST MATLAB, NVivo, SPSS, STATA, R) and other visualization software (VOSviewer, Gephi). HQPs involved with industrial partners spend time within their operations.

We need diverse and inclusive teams to address the wicked problems facing our society. Despite the benefits of diversity, women drop out of science and engineering at a greater rate than men (Hewlett et al., 2008), given 'chilly' organizational climates (Hunt, 2016; Silbey, 2016). Implicit biases aggregate to create intersectional systems of discrimination, such that women of colour and non-binary individuals face even greater challenges (Charleston et al., 2014). Despite strategies to improve diversity, of enrolled postsecondary students in 2017-2018, women represented only 20.2% of students in engineering and engineering technology

(Statistics Canada, 2020). First Nations, Métis, Indigenous, people of colour, LGBTQ2S+, and neurodiverse individuals face even greater barriers and lower attraction, retention, and promotion rates. If we are to make progress in attracting, retaining, and promoting diverse individuals, we must move beyond measuring surface-level diversity and create inclusive workplaces where everyone can flourish. As a testament of my inclusive climate, leadership, and practices, 54/105 HQP identify as women.

As Director Outreach for Chemical and Materials, I have also been working with other Directors to attract, retain, and promote diverse individuals and enhance the inclusion our department and faculty.

- Reflect EDI principles in the faculty's strategy by serving on the Strategic Priorities Committee and Governance Review Committee to refresh the Terms of Reference for all faculty committees (faculty evaluation, hiring, appeals, academic planning, etc.).
- Update EDI training, awareness, and understanding the benefits at all levels. Mandatory implicit bias training and internal 'diversity czars' often create backlash, which requires that we continually counter misconceptions about equity and inclusion initiatives.
- Include EDI hiring practices such as recruiting a diverse pool of candidates, addressing bias in the interview process with set interview questions, testing ability, and asking about prior experience.
- Resource EDI groups (including male allies) and zero tolerance harassment policies/practices.
- Host inclusive social activities.
- Demonstrate leadership commitment to EDI and input/output measures in performance reviews.
- Complete exit interviews to determine root causes for turnover and implement fixes.
- Publish and present on this topic to enhance scholarly profile and practitioner engagement on EDI. **Total Scholarly and Practitioner Outputs = 21**

Scholarly outputs				Practitioner outputs			
Journal articles – published and in review	Conference proceedings	Conference presentations	Book chapters	Books	Interviews	Research Reports	Keynotes & Public/Practitioner
5	**2**	**2**	**0**	**0**	**3**	**1**	**8**

EXAMINING COMMITTEES

1. Shaivya Anand, *Multi-objective optimization of chemical recycling pathways for plastic waste to produce HDPE in a circular economy*, PhD candidacy exam, 15 April 2026.
2. Shuai Liu, *A Human-Centric Framework for Workforce Empowerment in the Construction Industry*, PhD Final Defense, Construction Engineering, 6 February 2026
3. Abbey Abella Nosa, *Enhancing Job Hazard Analysis: Integrating Large Language Models and Knowledge Management in Construction Safety.* PhD Candidacy Exam, Construction Engineering, 9 May 2025
4. Mohammadreza Bahrami, *System Fragility or Resiliency? Improving companies' safety dashboarding by identifying unsafe actions and corresponding critical controls assurance with machine learning* PhD Candidacy Exam, Chemical Engineering, 17 April 2025
5. Jurgen Kaan Ozdurak, *Long-term viability of coffee production – farmer prosperity and corporate approaches to change*, Examiner for MSc final examination, Rural Sociology, Department of Resource Economics and Environmental Sociology, University of Alberta, 2 October 2024.

6. Kalan Parker Kucera, *Equivalences in Material Structures*, Chair for PhD final examination, Materials Science and Engineering, Department of Chemical and Materials Engineering, University of Alberta, 23 September 2024.
7. Hamidreza Mohammadhossseinzadeh Golabchi, *Developing a Safety Management Decision Support System Using Causation Models,* PhD Candidacy Exam, Construction Engineering, University of Alberta, 3 July 2024.
8. Hassnain Ali, *SoDa-TAP v2: Social Data Analysis Made Simple,* MSc Defense, Computer Science, University of Alberta, 10 June 2024.
9. Angeline Letourneau, *Masculinity, labor, and Indigeneity: identity negotiation on the path to a just transition*, PhD in Environmental Sociology, University of Alberta, 29 May 2024.
10. Sama Manzoor, *Investigating the Microwave Behavior of Solid Carbon in Natural Gas Pyrolysis under Microwave Irradiation*, Arms length examiner for Master of Science in Chemical Engineering, University of Alberta, 25 January 2024.
11. Myzael Valdivia, *Uncertainty in Probabilistic Open Pit Slope Stability Analyses: Implications for Reliability-Based Designs.* Arms length examiner for Master of Science in Geotechnical Engineering, University of Alberta, 10 January 2024.
12. Kuldeep Singh, *Characterization of Complex Reacting Mixtures in a Dynamic Environment*. Arms length examiner, Candidacy Examine for PhD in Chemical Engineering, 29 November 2023.
13. Vamsi Krishna Puli, *Enhanced Probabilistic Slow Feature Analysis - Dealing with Complexities in Industrial Process Data.* Arms length examiner for PhD in Computer Process Control, Chemical Engineering, University of Alberta, 22 September 2023.
14. Geoff Salomons, *Alberta Advantage? An examination of the long-term challenges of Alberta's non-renewable resource wealth governance*. Arms length examiner for PhD in Political Science, University of Alberta, 8 August 2023.
15. Sara Nekounamghardirli, *The Role of Knowledge Mobilization in Developing Community Engagement among Renewable Energy Cooperatives: Case study of Canmore, Alberta.* Arms Length examiner for thesis proposal, Master of Arts Community Engagement, School of Public Health, University of Alberta, 16 June 2023.
16. Rodrigo Valadeo, *Fishing via Meaning Infrastructure: Entrepreneurial Search and Possibility Development in the Emergent AI & ML Field*, Arms Length Examiner, PhD in Strategy, Entrepreneurship & Management, University of Alberta, 24 April 2023.
17. Marwa Al-Mohamad, *Incorporating Uncertainty into Dam Closure Risk Assessments*, MSc in Geo-Environmental Engineering, University of Alberta, 5 April 2023.
18. Gwyneth Liske, *CO_2 Capture from Dilute Sources*, Candidacy Exam, PhD in Chemical Engineering, University of Alberta, 24 February 2023.
19. Angeline Letourneau, *Masculinity in the shadow of resource extraction: identity negotiation on the path to a just transition*, Candidacy Exam, PhD in Environmental Sociology, University of Alberta, 14 October 2022.
20. Candelario Gutierrez Gutierrzez, *SoDa-TAP: A Data Platform for Social Media Analysis*, MSc in Computer Science, 9 May 2022.
21. Angeline Letourneau, *Social Media, Identity, and Environmentalism*, Specialization Exam, PhD in Environmental Sociology, University of Alberta, 8 October 2021.
22. Andrea Miller, *Building Futures: Indigenous-led Energy Transitions in Alberta*, MSc in Rural and Environmental Sociology, University of Alberta, 29 September 2021.
23. Rodrigo Valadeo, *Data Science, Artificial Intelligence, and Other Tales: How Novel Organizations Promote Their Innovations Through Categories as Dynamic Accomplishments*, Candidacy Exam, PhD in Strategy, Entrepreneurship & Management, University of Alberta, 19 July 2021.
24. Haley Schaffer, *Risk Management for Tailings Dam Safety: Considerations for Long-term and Post-Closure Timelines*, Candidacy Exam, PhD in Geotechnical Engineering, University of Alberta, 3 March 2021.

25. Jordan Phillips, *Public Perception of Hydraulic Fracturing and the Oil and Gas Industry in Western Canada: What the Frack is Going On?* MSc in Physics, University of Alberta, 13 January 2021.
26. Anagha Kiran, *Investigation of the hydrocarbons in the naphthenic and paraffinic froth treatment tailings*, MSc Chemical Engineering, University of Alberta, 29 June 2020.
27. Jonathan Backs, *Improving train detectability to reduce collisions with wildlife,* Interdisciplinary PhD in Materials Engineering and Ecology, University of Alberta, External Reviewer for Final Defense Committee, 24 January 2020.
28. Laura Lucier, *A Human Reliability Assessment Approach to Software Feature Elicitation and Valuation: Automation of NASA's Robotics Mission Design Process*, PhD Mechanical Engineering, University of Calgary, External Reviewer Final Defense Committee, 26 November 2019.
29. Huanan Li, *Incorporating climate change uncertainty into transportation infrastructure investment decisions*, MSc Civil Engineering, University of Alberta, Final Defense Committee, 13 September 2019.
30. Eder Villa Coronel, *Performance evaluation of siding materials subjected to radiant heat loads: Structural protection in the Wildland Urban Interface*, MSc Mechanical Engineering, University of Alberta, Final Defense Committee, 27 August 2019
31. Fereshteh Satttari, *Understanding the Chemistry of Conversion of Model Compounds and Biomass by Hydrous Pyrolysis Based on Spectroscopic Data Using Data Fusion, Data Mining, and Chemometrics*, PhD Chemical Engineering, University of Alberta, Final Defense Committee, 4 June 2018.
32. Fereshteh Satttari, PhD Chemical Engineering, University of Alberta, Candidacy Committee, 22 January 2018.
33. Mohammad Raoufi, *Fuzzy Agent-Based Modeling of Construction Crew Motivation and Performance*, PhD Construction Management, University of Alberta, Final Defense Committee, 16 January 2018.
34. Sally Mattar, *Real Options Decision Framework for Research and Development: A Case Study on a Small Canadian High-Technology Start-Up*, MSc Engineering Management, University of Alberta, Final Defense Committee, 28 August 2017.
35. Lina Yanez Jaramillo, PhD Chemical and Materials Engineering, University of Alberta, Candidacy Exam, 9 May 2017.
36. Ozgur Bozan, *Framing Climate Change Discourse in Turkish Media*, MSc Rural Sociology, University of Alberta, Final Defense Committee. 16 January 2017.
37. Rosalynn Loerke, *Pressure Filtration of Oil Sands Mature Fine Tailings*, MSc Chemical and Materials Engineering, Final Defense Committee. 29 November 2016.
38. Lawrence Ejike, *Role of Fine Solids in Solvent Recovery from Reconstituted Alberta Oil Sands Gangue*, MSc Chemical and Materials Engineering, University of Alberta, Final Defense Committee, 31 August 2016.
39. Christina Seidel, *The Application of Life-Cycle Assessment within a Public Policy Framework - Theory and Reality*, PhD Engineering Management, University of Alberta, Final Defense Committee, 14 December 2015.
40. Andrew Herbst, *A New Work Package Based Project Engineering Management Method and its Integration with AWP, PMBOK, and ISO 9001*, PhD Engineering Management, University of Alberta, Candidacy Committee, 5 November 2015.

ACADEMIC ASSOCIATIONS AND ACTIVITIES

Editorial Board: *Organization Studies*, 2023 –

Co-chair: Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Annual Conference, Process Safety and Risk Management Division, Calgary, October 2023.

Hiring Committee Member AI CIFAR Chair in Process Engineering, Chemical & Materials Engineering, University of Alberta, 2023

Attendee, Executive Education in Regulatory Analysis and Decision Making, Penn Program on Regulation, University of Pennsylvania, May 2023.

Member, Strategic Priorities, Faculty of Engineering, University of Alberta, May 2021-April 2022. The purpose of this committee is to recommend to the Dean, a short list of faculty-level priority actions aligned with the five objectives identified in the Faculty Strategy document by: developing and implementing a process that engages staff and faculty to provide insight, information and ideas; analyzing the information and categorizing it according to the five objectives; developing appropriate criteria by which to identify the actions most likely to advance the strategy objectives; selecting the actions that meet the criteria.

Co-chair, Governance Review Committee, Faculty of Engineering, University of Alberta, May 2020-2023. The Governance Review Committee is an ad hoc committee established by the Engineering Faculty Council (EFC) to review the structures and processes of academic governance in the Faculty of Engineering, including the review and revision of the EFC Standards and Procedures documents, and recommend reforms that will ensure EFC and its committees are structured and managed to be efficient and effective at addressing issues of significance to the Faculty of Engineering, while also being true to the principles of academic governance.

Hiring Committee Member, Geotechnical Faculty Position, Civil and Environmental Engineering, University of Alberta, 2022.

Hiring Committee Member, Sustainable Energy Systems Faculty Position, Chemical & Materials Engineering, University of Alberta, 2022.

Editor, *Industry and Innovation* (impact factor = 3.424), special issue on "Leveraging Culture to Cultivate Green Innovation Across and Within Organisations".

Advisor to the Peter Lougheed Leadership College, August 2021 - present. The purpose of the Advisory Committee is to: provide strategic advice, contribute ideas, identify and refine opportunities for leadership programming; advocate for the PLLC and provide advice on enhancing the reputation and reach of the PLLC; and offer guidance, insight and support in the effort to ensure the PLLC's long term financial sustainability. Advisory committee members use their unique expertise to guide PLLC toward better decisions in providing leadership programming to the PLLC's many diverse students and audiences.

Editorial Board: *Journal of Loss Prevention in the Process Industries*, June 2021 - .

Department Representative: Faculty of Engineering Executive Coordinating Committee (ECC) and Academic Appeals Committee, July 1, 2019 - June 30, 2022.

Member: University of Alberta Sustainability Council's Research Steering Committee, June 30 2019-2022.

Reviewer: United States National Science Foundation, 2019 - .

Co-Chair: International Sociology Association, XIX World Congress of Sociology, RC24 Environment and Society Session, July 15 - 25, 2018, Toronto.

Chair: Canadian Society of Chemical Engineers (CSChE) and Canadian Institute of Chemistry (CIC) Annual Conference, Process Safety and Risk Management Division, Edmonton, October 22 - 25, 2017.

Member: Canadian Society of Chemical Engineers (CSChE) and American Society of Engineering Educators (ASEE), 2016 -, Canadian Institute of Mining.

Member: Association of Academic Staff University of Alberta, Equity Committee, August 2016 - .

Organizer: Academy of Management Annual Meeting 2014, "Visuality: Beyond the Power of Words" Paper Development Workshop, OMT and CMS Divisions; and "Researching the Organization of Energy: Dirty, Clean and In-Between" Paper Development Workshop, ONE, OMT and BPS Divisions, Philadelphia, Aug. 1 - 5, 2014.

Member: Academy of Management (AOM) since 2007. Organization and Management Theory (OMT) Division, Business Policy and Strategy (BPS), and Organizations and Natural Environment (ONE) Division. European Group of Organizational Studies (EGOS), since 2007. Administrative Sciences

Association of Canada (ASAC), since 2007. Network for Business Sustainability (NBS), Society of Business Ethics (SBE), and Academy of International Business (AIB).

Reviewer: Administrative Science Quarterly, Academy of Management Journal, Academy of Management Review, Organization Studies, Organization, Journal of Management Studies, since 2010.

Reviewer: Academy of Management conference for Organization and Management Theory (OMT) Division, Organizations and Natural Environment (ONE) Division, and Social Issues in Management (SIM) Division since 2007. Awarded 'Best Reviewer' in SIM Division for 2011.

Reviewer: ASAC Organizational Theory (OT) Division.

Advisor: Recognized opportunity and assisted the Alberta School of Business' executive education team with the development of *Business Leadership for Technical Professionals* programme in 2010.

School of Business Nominee: Organizational Management Theory and Management and Organizational Cognition Doctoral Consortium, San Antonio, Aug. 11 - 12, 2011; Social Issues in Management Doctoral Consortium, Academy of Management Conference, Montreal, Aug. 5 - 6, 2010; Organizations and Natural Environment Doctoral Consortium, Academy of Management Conference, Aug. 8 - 9, 2008, Anaheim.

Selected Participant: ETH PhD-Academy on *Sustainability and Technology, Climate Change Mitigation and Adaptation: An Organizational Science Perspective*, Zurich, Jan. 16 - 21, 2011 (only 16 doctoral students chosen internationally).

Selected Participant: PhD Sustainability Academy - Building Sustainable Value Cross-Enterprise Leadership Centre, Ivey School of Business, University of Western Ontario, Sept. 26 - 30, 2008.

PROFESSIONAL ACTIVITIES AND GOVERNANCE

Regulation of the Professions

Alternative Warden, Camp 6 Calling of the Iron Ring, 2024-

Public Member: Registration Committee for the Institute of Chartered Accountants of Alberta (ICAA), two terms, 2005 - 2009.

Professional Engineer with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) since 1997.

Sustainability and Diversity

Technical Committee Member: Canadian Standards Association (CSA) for Process, Operations and Safety Management (POSM) of Transit and Passenger Railway Systems [S2100], August 2023-December 2023

Coach: Avatar Innovations, Nature-based solutions stream, January-March 2022. My team won their stream. Accelerator to support energy transitions, patterned after Richard Branson's X-Prize. https://www.avatarinnovations.energy/

Scientific Committee Member: GRONEN Research Group, an international network of scholars researching various dimensions of management and the natural environment, who aim at contributing to societal progress in a world of rapid, complex, and non-linear environmental change, May 2020 - .

Hosted NSERC Discovery EDI workshops: 1) for Engineering on 26 October 2020, 2) for the Faculties of Science & Engineering on 19 February 2021, 3) Faculties of Science, Engineering & ALES on 13 September 2021, 4) Faculties of Science, Engineering & ALES on 30 August 2026

Advisor to the Board: Ontario Power Generation (OPG) to enhance their dam safety program and enterprise risk management more broadly since January 2021. OPG operates 241 hydroelectric dams and structures and two nuclear power stations.

Advisor to Government of Alberta's *Bill 36: Geothermal Resource Development Act (GRDA)* (promulgated December 2020) and the associated *Geothermal Resource Development Regulations* and *Directives*

Coach: Avatar Innovations, Geothermal stream, January-March 2021. Accelerator to support energy transitions, patterned after Richard Branson's X-Prize. https://www.avatarinnovations.energy/

Internal Reviewer: CFRF Grant Applications, University of Alberta.

Advisor: Giant Mine Oversight Board. Advisor: Alberta Chamber of Resources, Dam Integrity Advisory Committee.

Member: Construction Owners Association of Alberta, Safety Committee, 2015-2020.

Co-chair: Canadian Coalition of Women in Engineering Science, Trades and Technology (CCWESTT) 2018, Biennial Conference, Edmonton, May 31-June 2, 2018. The conference brought together national and international experts, employers, CEOs/presidents, government representatives, and women in STEM at all phases of their career lifecycle to share knowledge and experience around diversity and inclusion. We had a total of 579 conference attendees. For this we won an APEGA Summit Award.

Task Force Member: Alberta Environment, Institute of Chartered Accountants of Alberta, and APEGA – to review the Specified Gas Emitter Regulations (that regulate greenhouse gas emissions in Alberta) to improve rigour of emission verification and auditing, report recommendations in December 2011, revise guidance document in 2012, and consider specialist certification in 2013.

Advisor: Diversity in Engineering – student led task force 2016 -

Invited Participant: Trottier Energy Transformation Project, July 2016, Calgary. Defining Regulatory Excellence, Alberta Energy Regulator, May-November 2015. Oilsands Metrics Thought Leader Forum on Oilsands Performance Metrics: Audiences and Design Principles, May 2-3, 2011, Calgary, Alberta.

Advisor: Engineers Canada (national accreditor of engineering) to develop a national senior undergraduate/ graduate level course in climate change adaptation and mitigation. By changing the emphasis, this course can be adapted for undergraduate/graduate students in other technical professions and in business. Advisor: APEGA to manage the Environment Committee and the Climate Change Adaptation Subcommittee, 2010-2011.

Member: Women's Executive Network (WXN) and Alberta Women Entrepreneurs (AWE), 2007-2015. Executive Member: Association of Women in Engineering and Science (AWES) Edmonton Chapter, 1993-2002. Alberta Women's Science Network (AWSN) 1997-2002.

Invited Participant: Pembina Institute's Thought Leader Forum on Environmental NGO-Industry Collaboration, Nov. 14, 2006, Kananaskis, Alberta.

Vice-President: Canadian Coalition of Women in Engineering Science, Trades, and Technology (CCWESTT) 2008-2012, representing 20,000 individuals and 27 member organizations, regular board member since 2012. Vice President Canadian Centre for Women in Science Engineering Trades and Technology (WinSETT) 2010-2013. Received $100,000 in federal and provincial funding in 2008, $30,000 industry funding in 2009, $180,000 in federal funding in 2010, $60,000 industry funding and $42,000 Killam Cornerstone Research Grant in 2012, and $194,000 SSHRC partnership development grant in 2013. The WinSETT Centre is working in partnership with industry, government, academe, and community organizations to attract, retain, and promote women in SETT.

Chair: Public and Professional Affairs Committee, Women in Scholarship Engineering, Science and Technology (WISEST) and Advisory Board Member, 2007-2009. Led science experiments and activities at WISEST conferences for school girls 1991-2008.

Organizing Committee Member: 11th National Conference for the Advancement of Women in Engineering, Science, Trades and Technology, June 2006, Calgary.

Representative: APEGA at national meetings of Engineers Canada's Women in Engineering Advisory Group (WIEAG) and CCWESTT, 2002-2007.