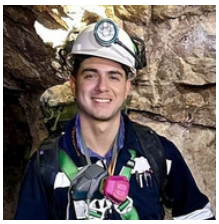
DIRECTOR'S REPORT

It has been another busy year for CESME as we have continued to build relationships with new and old partners and worked to promote the wonders of NW Ontario's geology. Probably the highlight of the year was the approval of the NOHFC Industrial Research Chair in Mineral Exploration. Thanks to our industry partner, Kinross Gold Corporation, this five-year Chair will support research into the origins of gold mineralisation at the Great Bear Gold Project near Red Lake, Ontario.

The generous support of $440,000 from FedNor, the $1,000,000 commitment from NOHFC and $500,000 from Kinross will not only support the Chair but will allow us significantly upgrade the analytical facilities within the Department of Geology with the purchase of an optical cathodoluminescence (CL) system, a Micro-XRF system and a confocal Raman microscope. This equipment will be in place early 2026 and will significantly enhance our research capabilities.

The first MSc student working on the project, Ariel Corrales, moved from Mexico this January and will be investigating the pyrite chemistry around the property.



Ariel Corrales

The CESME team has also been involved in outreach activities across northern Ontario participating in the Thunder Bay Science Carnival and visiting the Northern Ontario Sportfishing Center, Sioux Narrows/Nestor Falls and Pelican Falls First Nations High School.

These activities have allowed us to promote mining and geoscience to over 4,000 individuals across Northern Ontario.

NEW EQUIPMENT

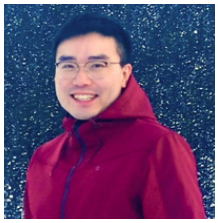
In addition to the new Raman, CL and micro XRF, the Geology Department has recently acquired a new Laser-induced breakdown spectroscopy (LIBS) system, thanks to a generous Research Capacity Grant from the Nuclear Waste Management Organization (NWMO)

Manufactured by Keyence this VHX-X1 Digital Microscope system equipped with an EA-300 Laser-based Elemental Analyser will be a great tool for both research and teaching and is already being put to work by Honours student, Michael Bilboe.

Michael Bilboe with the laser-induced breakdown spectroscopy (LIBS) system

NEW FACULTY

Two new faculty joined the department in the last year.



Dr. Zhiquan Li started in the Fall of 2025, replacing Dr. Phil Fralick. Zhiquan earned his PhD from China University of Geosciences (Beijing) and was a postdoctoral researcher at the University of Alberta and the University of Regina from 2021 to 2024. His research focuses on the insights sedimentary rocks provide into the evolution of Earth's surface over time. A key area of his work involves investigating banded iron formations (BIFs). He is also interested in how ancient sediments were deposited, modified through diagenesis, and transformed into economic ore deposits, emphasizing both depositional and post-depositional processes.

Dr. Tobias Stephan was appointed as an Assistant Professor in the Department of Geology in December 2025. He received his PhD from Technische Universität Berg-akademie Freiberg (Germany) in 2019 and subsequently held postdoctoral positions at Friedrich-Alexander-Universität Erlangen-Nürnberg (Germany) and as a DFG Research Fellow at the University of Calgary (Canada). He joined Lakehead University in 2022 as a Postdoctoral Research Associate to study shear zone-hosted gold deposits. His research focuses on the relationship between rock deformation and plate tectonic motion, particularly supercontinent cycles and Early Earth tectonics, and their implications for mineral deposits, integrating methods from thin-section to lithospheric scales.

Supporting the Future of Sustainable Mining

THANK YOU

Your generous support of CESME helps launch exceptional careers and advances research, education, and outreach on mineral exploration and extraction in Northern Ontario.

2025–26 AWARD RECIPIENTS

These annual awards equip graduate students with the expertise and practical experience needed to make meaningful contributions to the mining industry.

BERNIE SCHNIEDERS MEMORIAL AWARD

Hannah Titto, MSc (Geology)
"I am very grateful to be a recipient of this award. This opportunity has allowed me to completely focus on my studies, while not having to worry about expenses during the school year. It was especially helpful during the first year of my graduate studies, which was largely devoted to class work and data collection for my master's thesis."

Jason Dyer, MSc (Geology)
"This award has provided me with the opportunity to continue my focus on the fascinating geology of gold deposits in northern Ontario. This support has enabled me to delve deeply into my M.Sc. research, and it means the world to me to know that my passion for understanding rocks can help advance our collective knowledge in economic geology, even in a small way."

DR. MELVILLE BARTLEY MEMORIAL CESME AWARD

Colin Hunter, PhD (Civil Engineering)
"This award positively affected my studies by allowing me to remain focused on my studies, as financial stability has historically impacted my studies. My financial position has shifted over time and I have since begun working at an engineering firm which has slowed the progress in my studies. The award was very helpful in giving me more time to focus on my research."

Kevin Mexia Duran, MSc (Geology)
"The CESME award supported the completion of my Master's degree and inspired me to pursue a deeper understanding of the complex world of mineral deposits."

ROBERT MIDDLETON GRADUATE AWARD IN GEOLOGY

Nafiu Sulyman, MSc (Geology)
"Receiving this award was a tremendous honor that profoundly impacted my life. It not only recognized my dedication to the field of geology but also alleviated financial pressures that allowed me to focus more fully on my research and studies. Your support gave me both the resources and the motivation to push forward in my academic and professional goals."

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