

MERC Short Course, October 1, 2024, Timmins, Ontario  
Northeastern Ontario Mines and Minerals Symposium (NEOMMS)

**New Insights into Crustal-Scale Influences on Gold and Base Metal  
Endowment in the Superior Craton and the Abitibi Greenstone Belt**

This one-day pre-symposium short course will highlight new results from Laurentian University's Metal Earth program where in excess of 1,000 km of reflection seismic, magnetotelluric and gravity surveys have provided some of the highest resolution imaging across transects with differing mineral endowment in granite-greenstone terranes across the southern Superior Province.

The presentations will include large-scale crustal architecture and metallogenic comparisons of endowed versus less endowed areas and focused studies on deposits, structural and geochemical controls. The contributions will emphasize the integration of field and laboratory geological, geochemical and geophysical studies providing new insights into the geological and metallogenic framework of endowed terranes, and the architecture of the structural conduits controlling the upward migration of melts and mineralizing hydrothermal fluids. It will also include presentations on Mineral Potential Mapping techniques using AI to help focus mineral exploration.

## Program

1. Ross Sherlock; Mapping fertile fault systems in the Superior Craton
2. John Ayer; Architecture and Endowment of the Timmins - Matheson camp
3. Jack Simmons; Archean gold Deposits Associated with Structurally Controlled Metasedimentary Belts of the Superior Craton
4. Györgyi Tuba; Who let the gold out? A generalized model for hydrothermal Fluid Evolution and Gold mineralization in Orogenic Deposits
5. Taus Jørgensen; VMS endowment of Abitibi Greenstone Belt Stratigraphic Assemblages
6. Stefanie Brueckner; The Many Faces of VMS deposits: Exploration, Lithochemistry and Critical Metals
7. Ahmad Reza Mokhtari; Mineral Prospectivity Mapping: Differential Metal Endowment of the Matheson and Dryden areas
8. Samuel Tetteh; Kamiskotia Area VMS potential from Lithochemistry and Mineral Potential Mapping

To register and purchase tickets, visit: <https://www.porcupineprospectors.com/ticket-sales>