



The sixth KREEM Network Event of the 2017-18 season has been scheduled for Tuesday March 13th, 2018. With that said, we at KREEM, along with our patron sponsor Pasinex Resources Limited hereby invite and look forward to you attending an evening of networking and socializing with Professional Geoscientists, Geological Engineers, Metallurgists and others working in earth sciences in support of mineral exploration, mine development, environmental monitoring and protection, government agencies, academia, and with those interested in advancements in geoscience.

WHEN AND WHERE

- Tuesday Mar 13th, 2018
- 18:30-21:30 Kings Crossing Tap and Grill (second floor meeting rooms)
- 197 George Street, Peterborough (next to the old train station just north of the Holiday Inn)

GUEST SPEAKER

- Dr. Ian Power. P. Geo. of Trent University who will be speaking on - *CO2 Sequestration within Ultramafic Mine Waste.*
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PRESENTATION ABSTRACT

Ultramafic mine wastes react spontaneously with atmospheric carbon dioxide (CO₂), a key greenhouse gas (GHG), to sequester carbon as solid and benign carbonate minerals. This process occurs through weathering and carbonation of ultramafic rock and has been documented in natural systems including hydromagnesite–magnesite playas, which demonstrate that CO₂ can be stored in magnesium carbonate minerals for millennia. Passive, or unintentional, carbonation can sequester ~10% of the annual GHG emissions at certain mines. Rates of CO₂ sequestration are highly variable in ultramafic mine wastes and are controlled by a variety of factors including: (1) tailings mineralogy, (2) mineral processing and mine design, (3) tailings handling and storage, and (4) local climate. In experimental studies, the rate of carbonation can be accelerated by orders of magnitude by targeting rate-limitations including CO₂ supply and mineral dissolution, providing the potential to offset GHG emissions by ~50% at certain mines. Acceleration on this scale is feasible with modest intervention and using existing technologies. Choice of acceleration technology depends on the controlling factors, the rate-limitation, and the carbon pricing regime that will dictate economic feasibility.

FUTURE SCHEDULED GUEST SPEAKERS

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| Apr 3, 2018 | Al Workman, P. Geo. Vice President of Watts Griffis and McQuat Limited who will be speaking on – <i>Rocks that Bleed; Invisible Zinc</i> |
| May 1, 2018 | Dr. Jean Richardson, C. Chem. Director of Science and Business Programme at the University of Waterloo, and Bob Davie P. Geo of RnD Technical who will be speaking on – <i>A Photographic Expedition to the Canadian High Arctic; A Geologist's Perspective.</i> |

Graham, Zen, Alex and I look forward to seeing you on Mar 13th.

[Please RSVP by Sunday Mar 11th, 2018](#)

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