



**UM** | Clayton H. Riddell Faculty of  
Environment, Earth, and Resources

Department of Earth Sciences  
240 Wallace Building, 125 Dysart Road  
Winnipeg, Manitoba

**The Department of Earth Sciences welcomes you  
to their Seminar Series featuring:**

**Dr. Feiyue (Fei) Wang**

**Professor and Canada Research Chair (Tier 1)  
Centre for Earth Observation Science, University of Manitoba**

**Sea ice geochemistry and mineralogy**

**February 26, 2026 223 Wallace Building 1:00 PM**

Willy Weeks (1929-2017) once stated that “*sea ice is the one igneous rock that crystallizes from its melt at temperatures that humans can almost tolerate*”; the crystallization process also occurs in places and at rates that can be readily observed by humans. Under freezing temperatures, the highly saline sea-ice brine creates a unique environment where a series of minerals can be precipitated and crystallized rapidly, yet the occurrence of these minerals in sea ice and their significance have only recently begun to be appreciated. Here, I will provide a synopsis of recent progress in sea ice geochemistry and mineralogy, and demonstrate how the University of Manitoba’s Sea-ice Environmental Research Facility (SERF) and Churchill Marine Observatory (CMO) can be used for such studies. I especially look forward to discussions on how such a readily observable crystallization process may lend insight into the study of geochemistry and mineralogy in general.