Award Details

Gold deportment study of the Ming copper-gold mine

Research Details

Competition Year:	2018	**Fiscal Year:**	2018-2019
Project Lead Name:	Layne, Graham	**Institution:**	Memorial University of Newfoundland
Department:	Earth Sciences	**Province:**	Newfoundland and Labrador
Award Amount:	25,000	**Installment:**	1 - 1
Program:	Engage Grants Program	**Selection Committee:**	Atlantic Internal Decision Committee
Research Subject:	Mineral processing	**Area of Application:**	Mineral resources (prospecting, exploration, mining, extraction, processing)
Co-Researchers:	No Co-Researcher	**Partners:**	Rambler Metals and Mining Canada Limited

Award Summary

Rambler Metals & Mining (RMM) currently operates the Ming Mine and ore processing plant on the Baie**Verte Peninsula of Newfoundland and Labrador. The Ming Mine produces both copper and gold. The**objective of this proposed study is to gain information through geometallurgical analysis of current process**stream materials, via advanced and innovative instrumental Mineral Liberation Analysis (MLA). The findings**will then inform changes to processing to increase gold recovery in a cost-effective manner.**Mineral Liberation Analysis (MLA) is based on high resolution Scanning Electron Microscopy (SEM). Our**planned approach will include improved integration of efficient automated MLA mapping, using an SEM**equipped with a Field Emission Gun (FEG) electron beam source that provides superior spatial resolution for**this application, with follow-up Backscattered Electron Imaging - Energy Dispersive X-Ray Spectroscopy**(SEM-BSE-EDX) analysis to characterize individual gold-bearing mineral grains.