Rifkhan Nayeem, Dalhousie University, Halifax, NS, Canada, for his project: *Potential for Rare Earth Element (REE) extraction from Diamond Mine Tailings (Processed Kimberlite)*.

Rifkhan is a third-year PhD candidate in the Department of Earth and Environmental Sciences at Dalhousie University, working under the supervision of Dr. Yana Fedortchouk. In the first phase of his research, Rifkhan analyzed kimberlite core and tailings from the diamond mines of Snap Lake (Canada) and Voorspoed (South Africa). This work led to a publication in the Journal titled "Rare Earth Elements (REE) Mineralization in Snap Lake Kimberlite and Tailings: A Case Study for Recovery of REE from Diamond Mine Tailings".

Currently, Rifkhan is investigating experimental REE release from primary host minerals (such as perovskite, monazite, and apatite) and their redistribution into secondary minerals during hydrothermal alteration and enhanced carbonation. This work has implications for both REE recovery and CO_2 sequestration in kimberlite tailings.

With the support from the Howard and Jean Lipman Foundation, Rifkhan will conduct detailed analytical work, including scanning electron microscopy (SEM) and inductively coupled plasma mass spectrometry (ICP-MS), to advance his experimental studies.

Rifkhan is originally from Sri Lanka where he earned a bachelor's degree in Mineral Resources and Technology from Uva Wellassa University and a master's degree in Earth Sciences from the University of Peradeniya. Before starting his PhD, he was a researcher at the Gem and Jewellery Research and Training Institute of Sri Lanka, working for four years. Rifkhan also serves as secretary for both the Dawson Graduate Student Society and the Society of Economic Geologists student chapter at Dalhousie University.