| Faculty Name: |
|----------------------|
| Dr. D. R. Nagaraj |
| Faculty Email: |
| drn2112@columbia.edu |
| Lab: |

S₃M

Project Title:

Mine Tailings: Critical Minerals Recovery and Recycling of Mine Tailings

Description:

Work with graduate students and post-docs to assist in the development of an integrated framework to maximize the recovery of reusable (critical) metals and minerals from mine tailings and primary ore processing residues while recycling the mine tailings. The goal is to create a circular economy in primary ore processing by integrating holistic characterization and treatment strategy of process residues. In this project, cutting-edge process monitoring techniques will be used to characterize primary ore processing residues rapidly and comprehensively. Comprehensive chemical and physical characterization of the residues using conventional methods will be supplemented with emerging spectroscopic and microscopic techniques.

Location of Research:

Hybrid

of hrs/week:

30

Department/Program:

Earth and Environmental Engineering

Eligibility:

BS, Fourth Year, MS

To apply, please contact:

Behzad Vaziri >> bv2314@columbia.edu