MINERAL PROCESSING LABORATORY

Experimental Mine Building-G5
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Mineral processing laboratories (MPLs) are research and education laboratories that serve the needs of mining engineering courses and research at undergraduate and graduate levels. The mission of MPLs is to produce high quality trained mining engineers by providing hands-on laboratory experience and developing practical skills. The practical skills involve basic test techniques for mineral sampling and characterization, mineral classification and physical beneficiation, and basic hydrometallurgy. Graduate students at MS and PhD levels use these facilities to carry on research projects in the field of mineral processing and extractive metallurgy. Mineral processing equipment include bench scale jaw crusher, cone crusher, laboratory ball and rod mills, hydrocyclone classifier, shaking table, spiral concentrator, optical microscope, sieve sets and shakers, mortar grinders, pH meter, analytical balances, vacuum filter, and different bench scale flotation cells. Laboratory equipment also include Zetasizer Nano ZS (Malvern, UK) which is used to measure particle size, translational diffusion, electrophoretic mobility, zeta potential viscosity, and viscoelasticity of mineral suspensions. MPLs serve the needs of the following mining engineering courses:

MI ENG 2412, MI ENG 4412, MI ENG 4212, MI ENG 5423, MI ENG 5424