University of Pretoria Yearbook 2017

Hydrometallurgy 322 (NHM 322)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	16.00
Programmes	BEng Metallurgical Engineering
	BEng Metallurgical Engineering ENGAGE
Prerequisites	(NPT 220) and (NEC 310)
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	Module is presented in English
Academic organisation	Materials Science and Metallur
Period of presentation	Semester 2

Module content

Merits of hydrometallurgy relative to other extraction methods. Unit processes in hydrometallurgy. Chemical principles of hydrometallurgy. Chemistry of important metals and lixiviants. Application of chemical principles to: leaching; purification and upgrading of leach solutions (precipitation, solvent extraction, ion exchange, activated carbon); product recovery from solution (precipitation, reduction). Relevant analytical methods.