University of Pretoria Yearbook 2016

Hydrometallurgy 322 (NHM 322)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	16.00
Programmes	BEng Metallurgical Engineering
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Prerequisites	(NPT 220) and (NEC 310)
Contact time	3 lectures per week, 3 practicals per week
Language of tuition	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.