University of Pretoria Yearbook 2016

Pyrometallurgy 700 (NPM 700)

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	32.00
Programmes	BEngHons Metallurgical Engineering
	BScHons Applied Science Applied Science: Metallurgy
Prerequisites	No prerequisites.
Contact time	48 contact hours per semester
Language of tuition	English
Academic organisation	Materials Science and Metallur
Period of presentation	Year

Module content

We aim to provide you with practice in using fundamental principles to analyse pyrometallurgical processes – to be able to go from understanding to process improvement. To this end, the necessary fundamentals of reaction equilibria (including activity descriptions), reaction kinetics, and mass and energy balances are reviewed. Practical examples illustrate the use of these principles. In the final block, we analyse a number of practical processes in more detail. Throughout, the emphasis is on quantification, and at least half of the contact time is devoted to computer-based calculations.