

JKSimMet™ USERS' TRAINING COURSE

Mineral Processing Plant Simulation, Optimisation & Design using JKSimMet™ Mineral Processing Simulator

15TH – 19TH FEBRUARY 2016
SHAMBA LODGE, KITWE, ZAMBIA



What is JKSimMet™

JKSimMet is a computerised simulation package used to model and optimise comminution circuits. It is based upon the best currently available models of each component of a circuit and a database of hundreds of experimental plant tests. It includes mass balancing, circuit simulation, circuit modelling and presentation quality data output and graphing capabilities. This forms a powerful tool for the plant metallurgist to analyse and optimise the configuration of a current circuit. It is also used for new plant design, allowing any number of plant configurations to be compared rapidly. This course covers the latest C++ Version 6.1 of JKSimMet

Course Topics

- Overview of JKSimMet and modelling of mineral processing unit operations
- Computerised simulation fundamentals
- Mass balancing as a tool for plant design, optimisation, metallurgical accounting and general data analysis
- Review of JKSimMet models, including cyclones, ball mills, SAG/AG mills, crushers and screens
- Incorporating laboratory breakage test results and pilot data into simulations aimed at new plant design or existing plant upgrades.
- Application of the JKSimMet models to plant design and optimisation

Who Should Attend

This is aimed at Metallurgists, Met Managers and equipment supplier engineers who are serious users of modelling and simulation software. It is also for rusty users and those who used the V5 version who need a refresher course on detailed modelling and simulation.

Objectives of the Course

- Learn to use the C++ V6.1 of JKSimMet
- Navigate around the program
- Learn the tools, facilities, and power of the simulator.
- Construct flowsheets
- Data input
- Assess data integrity and usability
- Mass balance plant data
- Conduct simulations
- Plant optimisation studies
 - Objectives
 - Constraints
 - Manipulating flowsheet layout
- Optimisation examples
- Utilising JKSimMet output in reports
- Introduction to the principles of model fitting
- Understand the basics of the comminution and classification models
- Model scope, limitations, and usability

Course Instructors

Jenni Sweet manages MPTech, the technology transfer division of the CMR (Centre for Minerals Research) of UCT. She is a Senior Research Officer of the CMR with interests in both comminution and flotation modelling and simulation. She has 12 years' experience in the application of the JKSimMet simulator for optimisation and design.

MPTech is the Southern African reseller for JKTech products and services.

Course Structure

Sessions will run from 08h30 am to 17h30 with a one hour lunch break at 12:30 and two coffee breaks. Catering is provided.

Hands-on Computer Training

It is recommended that the candidates' own laptop computers and JKSimMet dongles are used so that they can get used to their own setup and work outside course hours on the tutorials. Dongles will be available on loan, for the course duration, for candidates who do not have their own. Computers will NOT be provided by the venue therefore each candidate must supply their own.

Venue

The course will be held in Kitwe, Zambia, at Shamba Lodge. Registrants must make their own travel and lodging arrangements.

Course Materials

MANUAL: All registrants will receive a current JKSimMet manual, and a complete set of course notes in electronic format. Attendees are encouraged to bring data from their own comminution circuits.

Fees & Registration

Full Fee: R 20 000 **Paid up maintenance holders** R 18 000 **All fees exclude VAT**

- 5% discount for registration of 4 or more candidates registering at the same time.
- The fee includes: JKSimMet notes and all refreshments
- Registration fee must be received by 1st February 2016
- PAYMENT method: EFT or cheque deposit. Proof of payment must be submitted.
- **LATE** Registration Fee: R 25 000 + VAT
- **EARLY BIRD** registration closes 30th December 2015

CANCELLATION: Registrations cancelled before 22nd January 2016 will be refunded (less administration costs of R500). No refunds will be made after this date, however substitutions will be accepted.

Course organisers reserve the right to cancel the course (with full refund) if registration numbers are insufficient.

Further information

COURSE INFORMATION

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REGISTRATION INFORMATION

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