JKSimMet™ USERS’ TRAINING COURSE
Mineral Processing Plant Simulation, Optimisation & Design
using JKSImMet™ Mineral Processing Simulator

9TH MARCH – 15TH MARCH 2016
ATLANTIC IMBIZO CONFERENCE CENTRE, WATERFRONT, CAPE TOWN

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

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.

The course will be held in Cape Town at the Atlantic Imbizo Conference Centre, situated in the V&A Waterfront. Registrants must make their own travel and lodging arrangements.

**Suggested hotel accommodation within walking distance:**
- Breakwater Lodge, Waterfront +27 (0)21 406 1911
- Commodore Hotel +27 (0)21 415 1000
- City Lodge, Waterfront +27 (0)21 419 9450
- Portwood Hotel +27 (0)21 418 3281

**Booking Agency** for cut rates +27 (0)82 782 3142

**Waterfront apartments can be found on the following websites:**
- www.waterfrontvillage.com
- www.mountainmarina.com
- www.capestay.co.za
- www.wherestostay.co.za has many smaller B&B establishments close to the V & A venue

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

**Fees & Registration**

- **Full Fee:** R 15 500  
  - **Paid up maintenance holders:** R 14 090  
  - **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 24th February 2016
- PAYMENT method: EFT or cheque deposit. Proof of payment must be submitted.
- **LATE** Registration Fee: R 18 000 + VAT (after 10th February 2016)
- **EARLY BIRD** registration closes 10th February 2016

**CANCELLATION:** Registrations cancelled before 24th February 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.

- “...interactive way the course is run with a good blend of theory and practice.”
- “The course covers industry related issues and examples.
- “It gives you a really good understanding about the strengths and weaknesses of the software and where it can really be used.”
- “…excellent skills of the lecturers, regarding how to approach the reality of a plant operation with the simulator.”

**Further Information**

**COURSE INFORMATION**
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**REGISTRATION INFORMATION**
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