

Langer Heinrich Uranium

Harmony Gold mining company – South Uranium  
plant, ion-exchange plant

18 August 2026 – Workshop

Time: 08:30-16:30

Registration Fees:

Member: R4 500

Non-member: 5 500

Student: 1 000

ECSA and SACNASP Validated CPD  
Activity Credits = 0.1 per hour attended

## WORKSHOP



Workshop Sponsored by CM Solutions



# Modelling with Cycad Process®

## BACKGROUND

The objective of this workshop is to introduce participants to developing mass and energy balances using Cycad Process®. During this workshop we will consider the typical elements that make up a steady-state balance such as comminution circuits, reactor trains, solvent extraction, ion-exchange and solid-liquid separation; and how to bring them together when developing a balance. Where appropriate, Excel and Python will also be used in the discussion of specific topics.

Through the workshop we will build a typical uranium processing plant from milling through to yellow cake. This will include discussions on incorporating mineralogy data and test work results into the balance.

Cycad Process® ([www.cycadprocess.com](http://www.cycadprocess.com)) is a process simulation package with sophisticated drawing capabilities enabling users to produce detailed engineering diagrams and reports. The package allows you to draw the process flow diagram or process block diagram and calculate the mass and energy balance.

Users will be provided with a 6-month license for Cycad Process® along with an extensive set of tutorials and worked examples to help develop their modelling capabilities further after the workshop.

[Click here to register](#)

## About the Facilitator



Nicholas du Preez  
Director, CM Solutions

Nicholas has more than 20 years' experience and is currently a director at CM Solutions, a metallurgical consultancy and test work laboratory in Johannesburg. After completing his MSc in Chemical Engineering, he joined Mintek's Measurement and Control Division where he designed and implemented advanced process control systems for several milling and flotation plants in Africa, Latin America, and India. He joined CM Solutions in 2010 where he has since worked with various clients across the world on a wide variety of projects ranging from process development & modelling to onsite process optimisation for various base metals and PGM operations. He is interested in all aspects of extractive metallurgy, but his particular focus areas are process modelling, capacity assessments, flowsheet development, and the leveraging of operational process data for plant improvement.

## FOR FURTHER INFORMATION, CONTACT:

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