Resource Estimation and Evaluation and Introduction to Advance Estimation techniques for post processing

This workshop will give attendees a clear understanding of the resource estimation process from interpretation through to classification as well as exploring advanced estimation techniques – recoverable resources. Each attendee will receive a free temporary Supervisor software licence.

Key topics covered in this workshop include:

- How to create a robust resource estimate with industry standard software and techniques
- How to explore your data and combine geology and geostatistics to build more robust estimates
- Data quality – Understand and apply the principles of sampling and QAQC for quality assurance
- Domaining and data preparation – the how and why of boundaries, coding, and compositing
- Statistics – exploring and describing good and bad datasets, de-clustering, and top cutting / capping (Exploratory Data Analysis (EDA))
- Variography – understanding grade continuity, modelling variograms, moving from the variogram to the estimate
- Estimation – understanding kriging, exploring multiple indicator kriging, inverse distance and 2D estimation, kriging neighbourhood analysis (KNA)
- Model validation – tools and techniques
- Cut-off grade sensitivity analysis (Grade/Tonnage curves)
- Classification and reporting – understand and follow reporting codes (JORC, NI 43-101, SK-1300) and practical guidelines for resource classification.
- What is non-linear estimation and when is it useful?
- Post-processing – understanding change of support and recoverable resources.
- What is a recoverable resource? Recoverable resource techniques.
- The differences between global and local changes of support
- The dispersion variance and Change of support:
    - Overview – why?
    - Global methods – Affine/Indirect LN/Discrete Gaussian
    - Local methods – UC/MIK/CS.
- How we predict the mining tonnage-grade curve from sample data – global change of support
- How we predict the tonnage-grade curves of mining blocks from large block estimates.