Advances in 3D Geological Modeling for the Minerals Industry

Short course venues & dates

Belo Horizonte, Brazil: 27th - 28th November 2014
Santiago, Chile: 4th - 5th December 2014
Vancouver, Canada: 11th - 12th December 2014
Advances in 3D Geological Modeling for the Minerals Industry

Belo Horizonte, Santiago and Vancouver

“Leapfrog, Moving From Bubbles to Highly Geologically Constrained Resource Models.”

The use of Leapfrog Mining Software to build complex wireframe models for resource domaining is becoming widely accepted and common amongst many large mining companies worldwide. This two day short course presented by SRK Consulting is designed to give geologists involved in resource estimation exposure to the use of Leapfrog Mining and Geo Software to produce rapid wireframe models for use in constrained resource domain modeling. Traditionally such wireframing was done by manual, sectional methods which often were time consuming and laborious. Leapfrog employs new implicit modeling technology to overcome these issues in a highly controlled and auditable workflow environment. In this course SRK propose to show resource geologists how improved results can be achieved in a fraction of the time normally associated with wireframe modeling the traditional way and how multiple realisations of a model can be achieved to assess the level of risk.

During the course SRK will emphasise the use of appropriate geological constraints on the models, how such models fit in with geostatistical theory, sampling theory and how to avoid costly mistakes in resource model construction.

THE COURSE

SRK’s short course lever off recent developments in 3D modeling technology that make the generation of resource models quicker and more cost effective. The course will provide hands on experience of the software on a variety of different deposit styles ranging from Archean gold veins to porphyry coppers. Over the course of the day the advantages of these new methods will be highlighted. In addition SRK will provide the geologist with hands on experience in constructing these models. It is hoped to provide the resource geologist with the background to move from simple first pass isotropic surfaces (bubbles) in Leapfrog to comprehensive fully constrained wireframes suitable for use in resource estimation.

In addition recent developments in Leapfrog have included the provision to perform robust grade estimates that better incorporate geology compared to traditional methods. These methods are based on traditional geostatistical approaches with the advantage of speed, simplicity and adherence to real geological trends.

SRK’s experience in this field has been used on many different commodity types ranging from gold, base metals, iron ore through to uranium. Several different case studies will be presented during the course. SRK offers the chance for industry professionals to become familiar with Leapfrog Mining and Geo and also learn how these new methods can be applied into real mine or resource situations. The course also shows how these new approaches can be integrated into current mining software packages already in widespread use in the industry.
WHO SHOULD ATTEND?

The course is designed primarily for mining and resource geologists who wish to take advantage of the latest geological software technology to produce robust wireframes for use in resource estimation. Commodities and deposit styles covered include:

- Gold vein style
- Copper porphyries
- Uranium roll fronts
- Base metals stratiform
- Iron ore stratiform

No prior knowledge of 3D software is required. The course will demonstrate through hands on work the applicability of the Leapfrog methods on a variety of deposit types for the purposes of:

- Resource domaining Resource estimation
- General geological domaining
- Near mine exploration Grade control

REGISTRATION

To reserve your place please contact either Peter Gleeson or Leanne Brock via email at pgleeson@srk.co.uk or lbrock@srk.co.uk

FEES

Course fee USD $800 per attendee. Lunch and refreshments provided.

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ADDITIONAL INFORMATION:

Please bring your own laptop (ensure you have a 3d graphics card installed). Training software will be provided.