

Short Course on Implicit Modelling in Leapfrog Geo

Course summary

Implicit Modelling techniques have become the industry standard for geological modelling over the last decade. Improved time efficiency, more realistic shapes of geological features and revolutionary user-friendly interfaces are among the reasons for the success and rapid take-up of implicit modelling.

This 1-day practical workshop focuses on developing a basic understanding of the key principles and algorithms that underlie implicit modelling. The course describes the technology behind Implicit Modelling and aims at developing the necessary skills to build complex geological models that serve as a robust basis for a spectrum of mining-related studies.

This workshop is largely practical and will consist of short presentations and supervised practical exercises carried out by the participants. Hidden pitfalls and challenges associated with the implicit modelling applications will be addressed and resolved.

A Leapfrog Geo license is required for this course. If informed with sufficient advance time (before October 15), SRK can arrange 1-day licenses at no fee for participants who do not bring their own license.

The course will be presented in English.

Who is it intended for: This course is intended for exploration, resource and mine geologists who would benefit from learning practical ways to visualize and model geological and geochemical data. Previous experience with Leapfrog Geo is not necessary.

Course structure

1. First four-hours session (morning)
 - a. Basic principles of implicit geological modeling (contacts, intrusions, grades...)
 - b. Three main modelling methods
 - c. Building surfaces and their combinations (deposit, erosion, topographic surfaces, veins, dikes, and faults)
2. Second four-hours session (afternoon)
 - a. Volume points – fully adjustable automatic method of joining drillholes intersections
 - b. Grade interpolants – visualize your metal within the domain limits
 - c. Conclusions and more practical exercises (depends on group performance)

Presenter: The course will be presented by Alexander Mitrofanov, PhD, PGeo – Senior Resource Geologist, SRK Consulting (Canada)

Alexander Mitrofanov, PhD, PGeo is a resource geologist in SRK Consulting (Toronto) with 8 years employment in the geological sectors. Alexander joined SRK in 2013 following four years working in mineral exploration industry. His experience includes Russian and international companies as well as academia. Since joining SRK Alexander's responsibilities have included geological and structural modelling, mineral resource estimation, QA/QC, 43-101 technical reports, scoping studies, and many other geological activities. Alexander's field of professional interests includes geostatistics and geological modelling using a variety of software platforms as well as implicit modelling in Leapfrog. He is fluent in English language and native Russian speaker.