POST-DOCTORAL RESEARCH FELLOW POSITIONS IN
Geostatistics and Stochastic Simulations

Post-doctoral research fellow positions are available at the COSMO research group at McGill University (http://cosmo.mcgill.ca). COSMO is a collaborative laboratory dedicated to the development of new orebody modelling and optimization frameworks for production planning needed to create value across the entire mining-mineral value chain. The related industrial environment requires particular focus on 'high-order' and 'multi-point' spatial mathematical models of geological uncertainty, which generate inputs for optimization frameworks and other applications. Research is funded by the National Sciences and Engineering Research Council of Canada (NSERC) and a consortium of major mining companies: AngloGold Ashanti, Barrick Gold, BHP, De Beers, Kinross Gold, Newmont Mining, and Vale.

Job description
Successful candidates will work on one (or more) of related research areas:
- New data-driven, high-order and multi-point simulations
- High-order data analytics, related deep learning methods
- High-order simulation of multiple categorical variables
- Construction of data-based continuous training images
- Applications in modelling mining deposits
- Reservoir modelling and multiphase flow forecasting
- Geological CO_2 sequestration

Candidates will have the opportunity to apply their developments at sites worldwide, test newly developed methods on real-life applications and gain substantial experience with advanced digital technologies in industrial environments.

   In conjunction with their research, candidates are expected to interact with graduate students and industry professionals, and be involved in diverse projects led by the COSMO Laboratory, including global knowledge mobilization activities. The position based in the Department of Mining and Materials Engineering at McGill University, in close collaboration with related research groups such as GERAD, IVADO and McGill's CIM.

Building future career opportunities
Post-doctoral research fellows from our lab develop major career opportunities; for example, our last three moved on to BHP principal scientist (geostatistics and computing), DeepMind research engineer, and faculty at University of Calgary.

Requirements
Candidates are required to have completed (or being close to completion) a PhD in areas including: Applied mathematics, computer science, image processing, mining engineering or a related discipline. They should have excellent programming skills (C/C++) and a suitable academic and publications record.

Terms and conditions
This research fellow position is a full-time employed position for one year with possible extension. Salary is commensurate to qualifications.

Application
The position is available immediately. The application procedure will remain open until the position is filled. If interested, please contact Roussos Dimitrakopoulos at
E-mail: roussos.dimitrakopoulos@mcgill.ca or tel. 514 398-4986, and forward a detailed CV, including a list of publications, research interests, and the names of three referees.