



International Fault Slip Control Research Initiative (IFSCRI)
Experimental Design Workshop in Structural/Engineering Geology
Applications in Fault-slip Control

January 21, 2010 | Toronto, Ontario, Canada
Ontario Investment and Trade Centre, 250 Yonge St., 35th Fl., Galleria

07h30 - 08h00 BREAKFAST (Provided)

Introduction

08h00 - 08h30 Workshop objectives | **P. Kaiser, D. Duff**

08h30 - 08h45 Background: High Level summary of Microseismicity and Geophysics workshops | **D. Duff**

08h45 - 09h00 The Importance of Faulting and other Structural/Engineering Geology data/information within mine design | **T. Carter**

09h00 - 10h00 **3D structural characterization of the pre-mining geological environment**

- *The importance of having an understanding of the regional and local tectonic history*
- *Assessing the likely structure of a pre-mining block in the absence of sufficient data/information*

10h00 - 10h15 COFFEE BREAK

10h15 - 11h30 **3D Structural characterization of the pre-mining geological environment, cont.**

- *Making the proper observations and measurements*
- *The tools currently in use by structural geologists*
- *Rock mass and fault property/behaviour classification. Identifying fault-slip-prone structures*
- *Factors influencing fault behaviour*
- *Data interpretation and the importance of paleostress analysis*

11h30 - 12h00 **Fault/fracture growth and propagation within an evolving stress regime induced by mining**

- *Understanding how cracks/fractures/faults are initiated and then propagate*

12h00 - 12h45 LUNCH (Provided)

12h45 - 13h45 **Fault/fracture growth and propagation within an evolving stress regime, cont.**

- *The connectivity of fault systems and the interactions which can occur*
- *Slip/rupture tendency analysis*
- *Re-activation of old structures*
- *Creation of new structures*

13h45 - 14h15 **Integration of structural/engineering geology with geophysical imaging/microseismicity, numerical modeling and mine engineering research**

14h15 - 15h00 **Structural/engineering geology applications in fault-slip control - R&D needs**

- *Where does the focus need to be?*
- *Who are the researchers we should approach?*
- *What are the potential show stoppers?*

15h00 - 15h15 COFFEE BREAK

15h15 - 15h45 **Next steps** | **T. Carter, D. Duff**

15h45 - 16h00 **Concluding remarks** | **P. Kaiser**

