

Day 1
Monday September 19, 2011

07:30-08:00	Registration
08:00-08:30	(08:15) Slope Stability 2011 Opening Address – Evert Hoek
Session 1-1 Geo Risk, Uncertainty & Data Management	
08:30-09:00	<u>Keynote</u> - "Acceptable Risk" for Open Pit Slope Design <i>Oskar Steffen, SRK (South Africa)</i>
09:00-10:30	<p>Geotechnical Risk Management and Mitigation at Grasberg Open Pit, PT Freeport <i>A. Ginting, M. Stawski, R. Widiadi, <u>Santosa Gautama</u> (Indonesia)</i></p> <p>Integrated Geotechnical Feasibility Analysis for an Open Pit In the Canadian Arctic <i><u>Martin Grenon</u> (Canada), J. Hadjigeorgiou, J.Kabuya Mukendi, D. Leblanc, P. Matte</i></p> <p>The Value of Comprehensive Geotechnical Information: A Comparison of Pre-Feasibility and Feasibility Study Design Outcomes at the Weld Range Iron Ore Project <i>I.A. de Bruyn, <u>Diane Walker</u> (Australia)</i></p> <p>Application of GeoHazmap to the Pit Slope Design for the Detour Lake Project <i><u>Luiz Castro</u> (Canada), B. Cottrell, P. Barker, K. Sintim</i></p>
10:30-11:00	Coffee Break
11:00-12:30	<p>Uncertainty Propagation in Structural Modeling <i><u>Marc Elmoultie</u> (Australia), G.V. Poropat</i></p> <p>Error Quantification in Oriented-Core Data and its Influence on Rock Slope Design <i><u>S. Cylwik</u> (USA), T.M. Ryan, P.F. Cicchini</i></p> <p>Measuring Discontinuity Orientation in High Temperature Boreholes <i><u>Jerry Szymakowski</u> (Australia)</i></p> <p>Photogrammetric Discontinuity Mapping as Applied to Structural Interpretation and Drillhole Planning at Barrick's Williams Pit <i><u>James Mathis</u> (USA)</i></p>
12:30-13:30	Lunch
Session 1-2 Design of Large Open Pits	
13:30-14:00	<u>Keynote</u> - Slope Design in Large Open Pit Mines <i>Martyn Robotham, Rio Tinto (Australia)</i>
14:00-15:45	<p>Managing Pit Slope Stability at the Kemess South Mine - Changes Over Time <i>D.Y. Yang, <u>Robert Mercer</u> (Canada), K.J. Brouwer, C. Tomlinson</i></p> <p>High Rock Slope Cutback Geotechnics: A Case Study at Ok Tedi Mine <i><u>Norbert Baczynski</u> (Papua New Guinea), L.A. de Bruyn, J. Mylvaganam, D.J.H. Walker</i></p> <p>Geotechnical Design of the Jwaneng Mine Cut 8 <i><u>Abel Tunono</u> (Botswana), M. Ruest, L. Dimbungu, M. Brook</i></p> <p>Batu Hijau Pit Slope Design Based on Geotechnical Models and Past Performance <i><u>Raimundo Almenara</u> (Indonesia), T.S. Poespito, H.D. Lelono</i></p> <p>Slope Design for Maricunga Mine in Chile <i><u>Esteban Hormazabal</u> (Chile), C. Almarza, E. Pizarro</i></p>
15:45-18:30	Session 1-3 Teck Resources Poster Session & Social

Day 2
Tuesday September 20, 2011

07:30-08:30	Registration	
08:30-09:00	<u>Keynote</u> - Stress States in Rock Slopes <i>Phil Dight, Australian Centre for Geomechanics (Australia)</i>	
Session 2-1 Failure Mechanisms in Mining and Civil Rock Slopes		
09:00-10:30	<p>Extensional Deformation Triggers for Potential Composite Failure of Bedded Rock Slopes <i>John Simmons (Australia)</i></p> <p>Progressive Failure Mechanisms in a Slope Prone to Toppling <i>Derek Martin (Canada), A.K. Alzo'ubi, D. Cruden</i></p> <p>Failure Mechanisms and Rock Mass Damage of High Rock Slopes in Open Pit Mine <i>Enrique Zea (Peru), T.B. Celestino</i></p> <p>The Wallaby Mine: Maintaining Pit Wall Stability for Continued Underground Mining <i>Emma Jones (Australia), P. Andrews, S. Holley</i></p>	
10:30-11:00	Coffee Break	
	Session 2-2a – Analysis of Monitoring Data for Mining Slopes (Junior Ballroom C)	Session 2-2b – Rock Fall Experiences with Civil Slopes (Junior Ball Room D)
11:00-11:30	<u>Keynote</u> - Investigating the Effects of Mining-Induced Strain in Open Pit Slopes <i>Nick Rose, Piteau Associates Engineering (Canada)</i>	<u>Keynote</u> - Tornado Mountain: Analysis of Rock Fall Mechanics <i>Duncan Wyllie, Wyllie & Norrish Rock Engineering (Canada)</i>
11:30-12:30	<p>Use of Ground-Based Synthetic Aperture Radar to Investigate Complex 3-D Pit Slope Kinematics <i>Jordan Severin (Canada), E. Eberhardt, L. Leoni, S. Fortin</i></p> <p>Integrated Numerical Modelling and InSAR Monitoring of a Slow Moving Slope Instability at Bingham Canyon Mine <i>Tom Styles (UK), D. Stead, E. Eberhardt, B. Rabus, M. Gaida, J. Bloom</i></p> <p>Cedar Pit Highwall and Fault Monitoring with Photogrammetry at Elkview Mine <i>Elham Shamekhi (Canada), D.D. Tannant</i></p>	<p>Risk Management of Rockfall/Rockslide Hazard Based on Remote Sensing Techniques: The Example of Arvel Quarry (Switzerland) <i>A. Pedrazzini, Michel Jaboyedoff (Switzerland), T. Oppikofer, R. Chantry, E. Stampfli</i></p> <p>Combining Geology, Morphology and 3D Modelling to Understand the Rock Fall Distribution Along Railways in the Fraser River Valley, B.C. <i>Renato Macciotta (Canada), D.M. Cruden, C.D. Martin, N.R. Morgenstern</i></p> <p>Back-Calculation of Rockfalls Using an Empirical GIS Model <i>C. Fey, Christian Zangerl (Austria), V. Wichmann, C. Prager</i></p>
12:30-13:30	Lunch	

	Session 2-3a – Performance and Optimization of Mining Slopes (Junior Ballroom C)	Session 2-3b – Remote Sensing and Monitoring of Civil Slopes (Junior Ball Room D)
13:30-15:30	<p>De Beers Venetia Mine Cut 4 Slope Optimization <i>Josef Ekkerd (South Africa), M.R. Ruest, N.E. Rankhododo</i></p> <p>Optimisation of the East Wall of the Superpit; An Example of a Staged Capital-Delivered Geotechnical Design to Increase Project Value <i>Simon Hewson (Australia), R. Butcher, M. Dunn</i></p> <p>Ramp failure – A Case Study of Monitoring and Management for Controlled Instability <i>Shonagh Walker (Australia)</i></p> <p>Assessment, Monitoring and Ground Control Management of Rock Slope Stability at the Red Dog Open Pit Mine <i>Sonia D’Ambrā (Canada)</i></p> <p>Risk Based Geotechnical Slope Reconciliation at Rio Tinto Iron Ore, Pilbara Operations <i>Rebecca Dixon (Australia), T. Johnson, P.J.H. de Graaf, S.D.N Wessels, J. Venter</i></p> <p>Highwall Slope Stabilisation by the Softwall Method <i>Ian Kelso (Australia)</i></p>	<p>Applications of Advanced Laser Scanning Technology in Geology <i>Ananda Fowler (USA), J.I. France, M. Truong</i></p> <p>Accurate LIDAR Change Detection for Slope Stability and Rockfall Monitoring <i>John Kemeny (USA), J. Handy, D. Kraemer, B. Norton</i></p> <p>Advanced InSAR Techniques for Monitoring Slope Stability and Ground Movement <i>Giacomo Falorni (Canada), J. Morgan, A. Bohane, F. Novali</i></p> <p>Monitoring Underground Landslide Displacement: A New MMES Based Device <i>Andrea Segalini (Italy), C. Carini, L. Cristalli</i></p> <p>Towards a Low Cost 3D Early Warning System for Unstable Alpine Slopes – The Aggenalm Landslide Monitoring System <i>Kuroschi Thuro (Germany), J. Singer, J. Festl</i></p> <p>Slope Deformation Monitoring of Rock Excavations, Interstate 90, Snoqualmie Pass, Washington <i>Norm Norrish (USA), P.E. Mikkelsen, S.M. Lowell, T.C. Badger</i></p>
15:30-16:00	Coffee Break	
	Session 2-4a – Blasting and Bench Design for Mining Slopes (Junior Ballroom C)	Session 2-4b – Failure Mechanisms and Analysis of Civil Slopes (Junior Ball Room D)
16:00-17:30	<p>Application of Blasting Fundamentals to Argue a Case for Limit Blasting <i>Emrich Hamman (Australia)</i></p> <p>Three-Dimensional Rock Fall Simulation in the Mining Environment Using Hy_Stone <i>Joergen Pilz (USA), F. Agliardi, G.B. Crosta, Z.M. Zavodni</i></p> <p>In Situ Experiments of Rockfall in Open Pit Coal Mine <i>A. Giacomini, Klaus Thoenj (Australia), E. Kniest, C. Lambert</i></p> <p>Open Pit Bench Failure Volume Analysis and Berm Design – Is it Realistic? <i>Colin Jermy (South Africa), V. Kuppusamy, C.P. Fietze, P.K.D. Hornsby</i></p>	<p>Back Analysis of Landslides Triggered by Earthquakes – Some Implications for Future Practice <i>Bill Murphy (UK), R.N. Parker, G. Hancox</i></p> <p>Analysis of Natural Rock Slope Deformations Under Temperature Variation: A Case Study from Japan <i>Azania Mufundirwa (Japan), Y. Fujii, N. Kodama, J. Kodama</i></p> <p>Slope Instability in Jointed Rock and Design of Ground Support <i>Alan Thompson (Australia)</i></p> <p>Stochastic Mechanical Stability Analysis of a High Slope for a Hydropower Station <i>Y.H. Guo, Weishen Zhu (China), D.J. Yu, W.M. Yang, X.P. Li</i></p>
18:00-21:00	Social – Vancouver Aquarium at Stanley Park	

Day 3
Wednesday September 21, 2011

07:30-08:30	Registration
Session 3-1 Numerical Modelling & Slope Stability Analysis	
08:30-09:00	<u>Keynote</u> - State of Numerical Modelling of Large Open Pit Slopes <i>Loren Lorig, Itasca International (USA/Chile)</i>
09:00-10:30	Investigation, Design and Development of the Valley Pit Pushback at Teck Highland Valley Copper <i>Sebastien Fortin (Canada), N.D. Rose, A.T. Holmes</i> Large-Scale Slope Instability at the Gold Quarry Mine, Nevada <i>Daniel Yang (Canada), K.J. Brouwer, R.J. Sheets, R.M. St. Louis, S.J. Douglas</i> Numerical Simulations of Potential Rock Bridge Failure Within a Naturally Fractured Rock Mass <i>Davide Elmo (Canada), C. Clayton, S. Rogers, R. Beddoes, S. Greer</i> The Christensen Criterion – An Answer to True Representative Modelling of Intact Rock Yield/Failure? <i>Reginald Hammah (Canada), J.L. Carvalho</i>
10:30-11:00	Coffee Break
Session 3-2 Groundwater & Numerical Analysis	
11:00-11:30	<u>Keynote</u> - Water and Pit Slopes – How Much Do We Understand? <i>Geoff Beale, Schlumberger Water Services (USA)</i>
11:30-12:30	Integrated Geotechnical-Hydrogeological Field Programs in Open-Pit Mining – A Win-Win Situation? <i>James Bellin (UK), P. Mohr, A. Rex</i> Guidelines for Groundwater Modelling in Large Open Pit Mine Design <i>Jim Hazzard (Canada), B. Damjanac, L. Lorig, C. Detournay</i> Fully Coupled 3D Deformation and Hydrogeology Simulation of an Open Pit Slope in Arctic Conditions <i>Dave Beck (Australia), J. Mathis, J. Heimbach, F. Reusch</i>
12:30-13:30	Lunch
13:30-15:30	Comparison Between Russian Code of Practice and International Style Slope Stability Analysis <i>Xander Gwynn (UK), S. Ogorodnikov, M. Brown, A. McCracken, A. Mochalov, Y. Norvatov, M. Ilyinov, K. Morozov</i> Use of 3-D Distinct Element Numerical Modelling to Determine Ultimate Pit Slope Stability in Areas of Highly Dense Relict Underground Openings: Super Pit, Kalgoorlie <i>David Wines (Australia), S. Hewson</i> A Phased Modelling Approach to Identify Passive Drainage Requirements for Ensuring Stability of the Proposed West Wall Cutback at Ok Tedi Mine, Papua New Guinea <i>Ian de Bruyn (Australia), J. Mylvaganam, N.R.P. Baczynski</i> The Role of Depressurization in Stabilizing a Large Pit Slope in Northern Peru <i>V. Perez, Hector Robles (Chile), F. Soto, G. Beale, M. McGlone</i> Applicability of the 'Observational Method' to Manage Slope Depressurisation in a Large Open-Cut Mine, South East Prongs Pit, Tom Price, W. Australia <i>Christopher New (Australia), P.J.H. de Graaf, D. Lucas</i> A Review of Key Factors Effecting Mine Dewatering and Slope Depressurization <i>Jeremy Dowling (USA), J. Reidel, G. Beale</i>
15:30-16:00	Coffee Break
16:00-17:00	Panel Discussion: Open Pit Hydrogeology
17:00-17:15	Slope Stability 2011 Closing Remarks – Chuck Brawner

