AUSTRALIAN CENTRE FOR GEOMECHANICS

CSIRO | The University of Western Australia | Joint Venture

Instrumentation and Slope Monitoring Seminar & Management of Moving and Unstable Slopes Workshop

2–4 May 2017 | Novotel Perth Langley | Perth, Western Australia

REGISTRATION BROCHURE

The ACG is committed to supporting the development of modern, efficient and profitable mining operations throughout the world. To this end, the ACG presents worldwide training courses and events, the objective of which is to rapidly develop capacity through technology transfer and teaching best practice that enhances profitability of mining organisations and minimises future environmental impacts from their mining operations.

Instrumentation and Slope Monitoring Seminar

Tuesday 2 – Wednesday 3 May 2017

The ACG is proud to host a two-day seminar that is targeted to supporting the continued development and application of advanced monitoring systems to all types of mine sites and their waste landforms.

Ground-based Real Aperture Radars (RAR) and Synthetic Aperture Radars (SAR), as well as Satellite-based SAR (InSAR), are popular tools for geotechnical and environmental monitoring of mines. These, together with satellite based high resolution optical imagery, are now the primary remote sensing methods. The use of repeat imaging of a mine site can provide wide area coverage with very high resolution measurements of ground movement and erosion. Additionally, companies undertaking this work have made considerable progress in providing value added services to InSAR data and optical imaging. Examples of these services include land cover determination, feature extraction, persistent change detection and monitoring, terrain slope characterisation, soils modelling and saturated ground detection.

In addition to RAR, InSAR and SAR, considerable advances have been made in remote sensing by using a wide variety of different types of unmanned aerial/piloted vehicles (UAVs), commonly known as drones and also referred to as remotely piloted aircraft (RPA), in monitoring mine sites.

Seminar Facilitator:

Professor Phil Dight
Professor of Geotechnical Engineering
Australian Centre for Geomechanics

Management of Moving and Unstable Slopes Workshop

Thursday 4 May 2017

Effective management of moving and unstable slopes is an inherent part of the modern open pit mining practice.

This workshop provides a theoretical and practical framework for the understanding and management of moving and unstable slopes. The workshop deals with the actions and approaches appropriate for personnel and managers to resolve these adverse situations in a positive manner.

Underpinning all slope design is a geotechnical model for each slope. The workshop will provide an overview of geotechnical models and common failure mechanisms.

Critical for management of unstable slopes is an understanding of the slope modification options, including cutbacks, unloading, buttressing and depressurisation or a combination thereof that best suits the conditions at hand. The workshop will also provide guidance on how analysis can assist in evaluating the type and extent of remediation required.

Finally a number of case studies are presented covering a spectrum of failure models and remedial strategies.

Workshop Facilitator:

Mark Fowler
Managing Director
Pells Sullivan Meynink

See inside for Instrumentation and Slope Monitoring Seminar and Management of Moving and Unstable Slopes Workshop programmes

Instrumentation and Slope Monitoring Seminar Programme*

Day 1
Tuesday 2 May 2017

INSTRUMENTATION AND SLOPE MONITORING SEMINAR PROGRAMME*	
08:00	REGISTRATION
08:20	Welcome and introduction *Professor Phil Dight, Australian Centre for Geomechanics*
08:30	Slope monitoring in Evolution Mining *Michael Dunn, Evolution Mining*
09:15	Geotechnical monitoring systems at Telfer and Lihir Mines *Sam Nicoll, Newcrest Mining Limited*
10:00	MORNING BREAK
10:30	Issues with prism monitoring of open pits *Alex Duran, Pells Sullivan Meynink*
11:15	Radar monitoring techniques: a review of weaknesses and strengths of each radar technique *Albert Cabrejo, GroundProbe Pty Ltd*
12:00	LUNCH
13:00	Dynamic calibration of an embankment stability model using effective slope monitoring techniques *Sanjive Narendranathan, Earth Resources Regulation (State Government Victoria)*
13:45	Slope failure monitoring using terrestrial laser scanning in open pit mining *Carlos Gonzales, 3D Laser Mapping Ltd*
14:30	AFTERNOON BREAK
15:00	Kanmantoo copper mine steep wall mining risk management – Maptek laser scanning experiences *Bruce Hutchison, Hillgrove Resources*
15:45	Discussion
17:00	DAY ONE CLOSE

Day 2
Wednesday 3 May 2017

INSTRUMENTATION AND SLOPE MONITORING SEMINAR PROGRAMME*	
09:00	Slope management strategy at Wallaby: slips, trips and falls *Jo Graaf, Gold Fields Australia Pty Ltd*
09:45	Connectivity and automation in the mine of the future *Brad Dalton, Sitech (WA) Pty Ltd*
10:30	MORNING BREAK
11:00	The success of slope monitoring radar technology used in the surface mining industry *Neal Harries, Hexagon Mining*
11:45	Safety in numbers – how is data management affecting your monitoring efficiency and efficacy? *Peter Scott, Geomotion Australia*
12:30	LUNCH
13:30	Installation of inclinometer casing *Colin Viska, Durham Geo Slope Indicator*
14:15	Production critical prism monitoring *Bernie Malone, Softrock Solutions Pty Ltd*
15:00	AFTERNOON BREAK
15:30	Surface and subsurface monitoring *Professor Phil Dight, Australian Centre for Geomechanics*
16:15	InSAR and slope stability: Review of recent advances with examples *Vicky Hsiao, TRE ALTAMIRA Inc.*
17:00	SEMINAR CLOSE

*Programme correct at time of printing, subject to change.

Click here to view received abstracts!

CALLING FOR SPONSORSHIP
INSTRUMENTATION AND SLOPE MONITORING SEMINAR

The ACG is a non-profit organisation focussing on academic research, technical training and international events to enhance profitability, maximise safety and minimise environmental impact for the mining industry. Sponsoring this event will allow you to show your support, create brand awareness and promote your product or service to the right people.

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Management of Moving and Unstable Slopes Workshop Preliminary Programme*

Day 3
Thursday 4 May 2017

MANAGEMENT OF MOVING AND UNSTABLE SLOPES WORKSHOP PROGRAMME*	
08:00	REGISTRATION
08:20	Welcome and introduction *Mark Fowler, Pells Sullivan Meynink (PSM)*
08:30	Geotechnical model *Mark Eggers, PSM*
10:00	MORNING BREAK
10:30	Monitoring *Mark Fowler, PSM*
11:00	Remediation toolbox *Mark Fowler, PSM*
11:45	Depressurisation and slope stability *Tim Sullivan, PSM*
13:00	LUNCH
13:30	Analytical methods *Mark Fowler, PSM*
14:15	Rockfall *Adam Morrison, Geobrugg*
15:00	AFTERNOON BREAK
15:30	Communication and the human element *Tim Sullivan & Mark Fowler, PSM*
15:30	Case studies – presentations include: • Swiss Cheese *Tim Johnson, Rio Tinto* • Ekati wedge stabilisation, Macraes highwall failure, others
17:20	Closing remarks *Mark Fowler, PSM*
17:30	DAY THREE CLOSE

*Programme correct at time of printing, subject to change.

Event venue

Novotel Perth Langley Hotel

221 Adelaide Terrace

Perth WA 6000

Tel: +61 8 9221 1200

Email: h1764@accor.com

www.novotelperthlangley.com.au

Accommodation

Please contact the Novotel Perth Reservations Department on +61 8 9221 1200 / h1764@accor.com and quote the booking code "**191208 AGC Instrumentation & Slope Monitoring Seminar**" to receive a discounted accommodation rate of **$200.00 Room Only** per night. This rate is valid for all standard room types (available with queen or twin bedding) for the dates 1–4 May 2017.

Instrumentation and Slope Monitoring Seminar & Management of Moving and Unstable Slopes Workshop

2–4 May 2017 | Novotel Perth Langley, Western Australia

REGISTRATION FORM

CONTACT DETAILS

*Please print. *denotes mandatory fields.*

*Title (Mr, Mrs, Miss, Ms, Dr, Prof., other) _____

*Family Name _____

*First Name _____

Preferred Name _____

*Position _____

*Organisation _____

Mine/Dept _____

*Address _____

_____

Phone _____

Fax _____

Mobile _____

*Email _____

*All confirmations/event updates will be sent via email

Registrant contact details are intended to be published in the events authorised attendee list made available to event attendees and sponsors, who may contact you, including electronically, to promote their products and services.

- ☐ I give permission for my details to be included in the events attendee lists.
- ☐ I give permission for the ACG to forward me research, training and/or education information advice, including electronic communications.
- ☐ I require an invitation letter for visa purposes (please forward a copy of your passport information page). For more information regarding Australian visas, please visit http://acg.uwa.edu.au/about-events-and-courses/

Instrumentation and Slope Monitoring Seminar (1730)
2–3 May 2017 | Silver Room | Novotel Perth Langley

	Standard Paid after 27 March 2017
Standard	☐ 1,980
ACG Affiliate†	☐ 1,760
Student^	☐ 660

Management of Moving and Unstable Slopes Workshop (1740) | 4 May 2017 | Langley Room | Novotel Perth Langley

	Standard Paid after 27 March 2017
Standard	☐ 990
ACG Affiliate†	☐ 770
Student^	☐ 440

All full registrations will receive event notes on USB, luncheons and refreshments.

† Please visit www.acg.uwa.edu.au/corp_affiliates to view the list of ACG Corporate Affiliates.

^ Students are required to provide proof of full-time enrolment.

DELEGATE CANCELLATIONS

Up to 8 days before event(s) commencement: an administration fee of AUD 150 will be charged. 7 or less days before: no refund. Non-attendance: no refund. Substitutions will be accepted at any time. The ACG reserves the right to cancel the event if insufficient registrations are received.

PAYMENT DETAILS

Payment to accompany registration – credit card or EFT. Please contact the ACG for bank details. All prices include GST.
ABN 37 882 817 280

Total payment AUD _____

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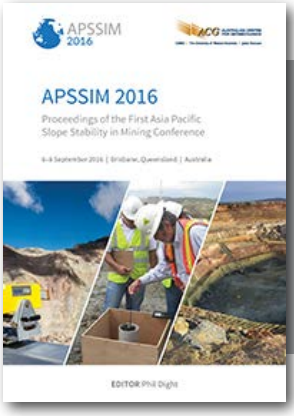

APSSIM 2016 Conference Proceedings

For this and other open pit publications view acg.uwa.edu.au/shop

How to register: Australian Centre for Geomechanics, The University of Western Australia, 35 Stirling Highway (M600), Crawley WA 6009 | +61 8 6488 3300 | +61 8 6488 1130 | info-acg@uwa.edu.au | www.acg.uwa.edu.au