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for event  
programme

# Deep Mining 2012

## Sixth International Seminar on Deep and High Stress Mining

28-30 March 2012, Novotel Perth Langley Hotel, Western Australia

The ACG is delighted to host the Sixth International Seminar on Deep and High Stress Mining in Perth, Western Australia. This follows previous International Deep and High Stress Mining Seminars held in Santiago in 2010; Perth in 2007; Quebec City in 2006; Johannesburg in 2004; and Perth in 2002. The main objective of this seminar series is to document and disseminate the latest experiences and state-of-the-art technologies in the challenging and evolving area of deep and high stress mining.

### Opening Address



**Mark Cutifani, CEO, AngloGold Ashanti, South Africa**

*A perspective on high stress and deep mining in AngloGold Ashanti*

Mark is CEO and on the Board of AngloGold Ashanti (AGA) with considerable experience in the mining industry since 1976. Mark has led AGA in its separation from Anglo American and its most significant business restructuring since its inception, posting amongst the most significant improvements in business performance across the global mining industry over that period. He was COO at CVRD Inco in Toronto and COO of Inco Ltd in Canada. Mark is very active in industry associations and is VP-SA Chamber of Mines, executive member of Business Leadership South Africa (and the designated spokesperson for health reform in SA) and on advisory committees with University of Pretoria (SA), UCT (SA), FDC (Brazil) and Kellogg (US).

### Keynote Speakers

**Emeritus Professor Ted Brown AC, Golder Associates Pty Ltd, Australia**

*Progress and challenges for geomechanics in some areas of deep mining*

**Professor John Hadjigeorgiou, Lasonde Institute of Mining, University of Toronto, Canada**

*Where do the data come from?*

**Peter Hills, BCD Resources (Operations) NL, Australia**

*Managing seismicity at the Tasmania Mine*

### Non-ACG Events

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07:30 REGISTRATION

### WELCOME AND INTRODUCTION

SESSION CHAIR



**Winthrop Professor Yves Potvin, director, Australian Centre for Geomechanics, Australia**

Yves commenced his position as research coordinator with the ACG in 1998. In 2000 he was appointed director of the ACG. From 1995 to 1998 he was the mining research manager with Mount Isa Mines, managing the mine's technical services in rock mechanics, blasting research, fill research, mine geophysics, mine automation and mine survey. He is also an Adjunct Professor at the Laval University. From 1988 to 1995 he was manager rock mechanics and mine design with the Noranda Technology Centre; and from 1981 to 1982 he was mine planning engineer with Noranda Mines, Gaspé Division.

08:30 WELCOME: Yves Potvin, Australian Centre for Geomechanics, Australia

08:45 OPENING ADDRESS: A perspective on high stress and deep mining in AngloGold Ashanti Mark Cutifani, AngloGold Ashanti, South Africa

09:15 KEYNOTE ADDRESS: Progress and challenges in some areas of deep mining E.T. Brown, Golder Associates Pty Ltd, Australia

10:00 MORNING BREAK

### GROUND SUPPORT (1)

Session Sponsor

SESSION CHAIR



**Chris Stone, study director, BHP Billiton Nickel West, Australia**

Chris commenced work in Kambalda, Otter–Juan mine as a graduate mining engineer in 1992. He then moved to Laverton, Beasley Creek open pit and Lancefield underground mine in 1994. Chris returned to Kambalda in 1995 and held mine manager positions at Revenge and Junction Mines. He joined Central Norseman Gold in 1999 as manager mining and business development. In 2000 he took up the mine manager role at Perseverance mine, Leinster. In 2003, Chris undertook increasingly corporate roles; evolving from principal engineer/study manager to project manager/director on major projects with BHP Billiton Nickel West. He has completed two Masters degrees in Business Administration and Project Management.

10:30 Validating a support performance database based on passive monitoring data P. Morissette, J. Hadjigeorgiou, L'assonde Institute of Mining, University of Toronto, Canada; D. Thibodeau, Mines and Mill Technical Services, Vale Ltd., Canada

11:00 Functional specifications for in-stope support based on seismic and rockburst observations in South African mines R.J. Durrheim, CSIR Centre for Mining Innovation; and University of the Witwatersrand, South Africa

11:30 Performance of dynamic support system in highly burst-prone ground conditions at Vale's Copper Cliff Mine - a case study D.R. Chinnasane, M. Yao, D. Landry, P. Paradis-Sokoloski, Vale, Canada

12:00 Progress with empirical performance charting for confident selection of ground support in seismic conditions P.A. Mikula, Mikula Geotechnics Pty Ltd, Australia

12:30 LUNCH

### SEISMIC MONITORING (1)

SESSION CHAIR

**Dr Richard Lynch, managing director, Institute of Mine Seismology, South Africa**

Richard graduated from the University of the Witwatersrand in 1999 with a PhD for his work on quantum chaos and joined ISS International in a research capacity. Since then he has worked on the problems of high resolution seismic monitoring, continuous seismic records, seismic monitoring in coal mines, seismic sensors, seismic monitoring of open pit slopes and active seismic monitoring. From 2003 he was responsible for the development of new markets and applications for micro-seismic monitoring technology, and in 2009 Richard served as ISSI Operations Manager. In 2010, ISSI became the Institute of Mine Seismology and Richard was appointed managing director.

13:30 Beyond coloured balls - making sense of large volumes of microseismic data with diverse source mechanisms W. de Beer, Golder Associates (NZ) Ltd, New Zealand; J.A. Ardito, MINSUR S.A., Peru; J-P. Mercier, Golder Associates Ltd, Canada; and Advanced Geosciences Imaging Solutions Ltd., Canada; V. Falmagne, Golder Associates Ltd, Canada

14:00 Discrimination of blasts in mine seismology D. Malovichko, Institute of Mine Seismology, Australia

14:30 Kanowna Belle - evolution of seismicity with increasing depth in an ageing mine R. Varden, H. Esterhuizen, Barrick Kanowna Ltd, Australia

15:00 AFTERNOON BREAK

### STRESS AND STRUCTURES

SESSION CHAIR



**Emeritus Professor Ted Brown AC, Golder Associates Pty Ltd, Australia**

Ted is an engineering graduate of the Universities of Melbourne (BE 1960, MEngSc 1964), Queensland (PhD 1969) and London (DSc(Eng) 1985). He has 45 years' of international experience as a consultant, teacher, researcher and writer on rock mechanics and its application in the mining, civil engineering and energy resource industries. His major career appointments have been as Professor of Rock Mechanics at Imperial College, London, and as senior deputy vice-chancellor of the University of Queensland, Australia. Since 2001, he has been a senior consultant to Golder Associates, Brisbane. He served as president of the International Society for Rock Mechanics from 1983 to 1987 and, among several other awards, received the ISRM's Müller Award in 2007. In 2001 he was appointed a Companion in the Order of Australia (AC).

15:30 An investigation of the effects of joint roughness on the stability of underground openings subjected to dynamic loading A. Mortazavi, Department of Mining and Metallurgical Engineering, Amirkabir University of Technology, Iran

16:00 Hydraulic fracturing for in situ stress measurements - a simulation and experimental study V. Rasouli, Department of Petroleum Engineering, Curtin University, Australia

16:30 High-resolution fracture recognition from seismic data - applying oil and gas technology to mining R.H.J. Oppermann, OPtimal Exploration & Development Pty Ltd, Australia

17:00 Day one close

### Seminar Venue

Novotel Perth Langley Hotel  
221 Adelaide Terrace, Perth, WA 6000  
Ph: +61 9221 1200 | Fax: +61 9221 2830 | Email: h1764@accor.com  
The ACG has reserved rooms at the Novotel Hotel for attendees. Quote ACG12 when booking your accommodation at the hotel.

### Seminar Dinner

Swan River Cruise  
Thursday 29 March 2012  
Crystal Swan, Jetty 6, Barrack Square, Perth  
Boarding: 18:00; Departure: 18.30; Return: 21.30  
Dress: Smart casual

### PLANNING AND DESIGN

Session Sponsor

SESSION CHAIR



**Vadimir Louchnikov, team leader and associate mining geotechnical engineer, Coffey Mining Pty Ltd, Australia**

Vadimir has more than 17 years of engineering practice spanning across different industries including mining, defence, manufacturing, consulting and research. He has 10 years of underground mining operating experience at Australian mines including Mt Lyell, Broken Hill, Agnew and Golden Grove where he was employed in a number of geotechnical engineering roles. Vadim's speciality is the application of geomechanics principles to hard-rock underground mining with a primary focus on ground control, excavation stability, stope extraction sequence, mine seismicity and engineered backfill.

08:30 **KEYNOTE ADDRESS: Where do the data come from?** J. Hadjigeorgiou, Lassonde Institute of Mining, University of Toronto, Canada

09:00 **The design and construction of water impounding plugs using sprayed concrete** U. Singh, Stratacrete Pty Ltd, Australia; P. Abraham, E. Bellamy, A. Swart, Newcrest Mining Ltd, Australia

09:30 **Challenges in multiple sill pillar mining at Vale's Coleman Mine** O.N.S. Beruar, M. Yao, A. Sampson-Forsythe, Vale Canada, Canada

10:00 **MORNING BREAK**



### FUNDAMENTAL ROCK MECHANICS

SESSION CHAIR



**Dr Peter Mikula, director, Mikula Geotechnics Pty Ltd, Australia**

A graduate of the University of New South Wales in Sydney, Australia in 1980, Peter worked for ACIRL Ltd, Coffey Partners International, and Mt Charlotte Gold Mine, Kalgoorlie. At Mt Charlotte for 12 years, Peter became very conversant with the issues of seismicity, and large underground stope stability. He was also a key player in mine safety, accident investigation, and risk management. In 2005 Peter formed Mikula Geotechnics Pty Ltd, a geotechnical consultancy working in underground hard rock mines.

10:30 **Absolute, relative and intrinsic rock brittleness at compression** B.G. Tarasov, Centre for Offshore Foundation Systems, The University of Western Australia, Australia; Y. Potvin, Australian Centre for Geomechanics, The University of Western Australia, Australia

11:00 **System of trustworthy deformational precursors of highly stressed rock samples failure** V.V. Makarov, L.S. Ksendzenko, V.V. Gnitenko, A.M. Golosov, N.A. Opanasiuk, A.A. Opanasiuk, Far Eastern Federal University, Russia

11:30 **Non-euclidean model for description of rock** M.A. Guzev, Institute for Applied Mathematics, Far Eastern Branch of the Russian Academy of Sciences; Far Eastern Federal University, Russia

12:00 **LUNCH**

### NUMERICAL MODELLING (1)

SESSION CHAIR



**Uday Singh, principal geotechnical engineer, Shotcrete Plus Pty Ltd, Australia**

Uday is a geotechnical engineer with 20 years of experience in the civil and mining industry. He has worked in hand held narrow vein, open stope, sublevel cave and open pit mines. He is experienced in cave-pit interactions, high stress and seismically active conditions. He has also worked on civil buildings, sewer pipelines, pre-stressed bridges and civil tunnelling projects.

13:00 **Visualisation of elastic numerical modelling results for effective mine planning and design** K. du Plooy, SRK Consulting, Australia; F. Basson, Newmont Asia Pacific, Australia

13:30 **Numerical analysis of alternative mining sequences to minimise the potential for fault slip rockbursting** J. Sjöberg, F. Perman, Itasca Consultants AB, Sweden; C. Quinteiro, L. Malmgren, C. Dahnér-Lindkvist, M. Boskovic, LKAB, Sweden

14:00 **Numerical analysis of stress field distribution and blasting-induced rockburst at Hongtoushan Copper Mine** X.D. Zhao, College of Resources and Civil Engineering, Northeastern University, China; and State Key Laboratory for Geomechanics and Deep Underground Engineering, China University of Mining and Technology, China; J. Liu, College of Resources and Civil Engineering, Northeastern University, China

### CAVING METHODS

Session Sponsor

SESSION CHAIR

**Graham Fairbairn, manager life of mine planning, Barrick Gold Australia Pacific Ltd, Australia**

14:30 **How does a caved rock mass behave under confined gravity flow?** M.A. Fuenzalida, R.L. Castro, Mining Engineering Department and Advanced Mining Technology Center, University of Chile, Chile

15:00 **Finding zones of stress concentrations and seismic events in deep ore mining affected by high horizontal stresses** V.A. Eremenko, A.A. Eremenko, L.N. Gakhova, I.V. Klishin, Institute of Mining, Siberian Branch, Russian Academy of Sciences, Russia

15:30 **AFTERNOON BREAK**



### VENTILATION

SESSION CHAIR



**Dr Ray Durrheim, research chair, CSIR Centre for Mining Information and University of the Witwatersrand, South Africa**

Ray is a graduate of the Universities of Stellenbosch (BSc), Pretoria (MSc) and the Witwatersrand (BScHons, PhD). He started his career as an exploration geophysicist with General Mining, and moved on to teaching and research positions at University of the Witwatersrand and CSIR. He was manager of the DeepMine Collaborative research programme from 1998-2002. In 2007 he was awarded the South African research chair in exploration, earthquake and mining seismology. He is currently a PI of the Japanese-South African collaborative project 'Observational studies to mitigate seismic risks in mines' and co-director of the Africa Array research and capacity building programme which operates a 43 station geophysical network that spans sub-Saharan Africa.

16:00 **Energy management of refrigeration systems within deep mines in South Africa** R. Wilson, S. Bluhm, L. van den Berg, BBE Consulting, South Africa

16:30 **Refrigeration and cooling system design - a case study** W. Marx, M. Bezuidenhout, BBE Consulting, South Africa; L. van den Berg, BBE Consulting, South Africa; and Snowden Mining Industry Consultants, Australia; P. Botha, G. Meredith, Palabora Mining Company Ltd, South Africa

17:00 **Day two close**

18:00 **SEMINAR DINNER**

### SEISMIC MONITORING (2)

Session Sponsor

SESSION CHAIR



**Dr David Beck, general manager, Beck Engineering Pty Ltd, Australia**

David received his BE(Hons.) Mining and PhD in Rock Mechanics from The University of Queensland. He is currently general manager of Beck Engineering Pty Ltd, which is a rock mechanics and mining engineering consultancy specialising in simulation aided engineering for underground and surface mining. David is also vice-president Australasia, International Society of Rock Mechanics.

08:30 **KEYNOTE ADDRESS: Managing seismicity at the Tasmania Mine P.B. Hills, BCD Resources (Operations) NL, Australia**

09:00 **Establishment of SATREPS experimental sites in South African gold mines to monitor phenomena associated with earthquake nucleation and rupture** R.J. Durrheim, SATREPS, CSIR Centre for Mining Innovation; and University of the Witwatersrand, South Africa; H. Ogasawara, SATREPS, Ritsumeikan University, Japan; M. Nakatani, SATREPS, Earthquake Research Institute, Tokyo University, Japan; Y. Yabe, SATREPS, Tohoku University, Japan, H. Kawakata, SATREPS, Ritsumeikan University, Japan; M. Naoi, SATREPS, Tokyo University, Japan; A.K. Ward, First Uranium, South Africa; S.K. Murphy, AngloGold Ashanti, South Africa; J. Wienand, KDC Goldfields, South Africa; P. Lenegan, Goldfields, South Africa; A.M. Milev, SATREPS, CSIR Centre for Mining Innovation, South Africa; O. Murakami, SATREPS, Ritsumeikan University, Japan; N. Yoshimitsu, Ritsumeikan University, Japan; T. Kgarume, SATREPS, CSIR Centre for Mining Innovation, South Africa; A. Cichowicz, SATREPS, Council for Geoscience, South Africa



09:30 **Shear slip indication at Big Gossan Mine H. Arbi, E. Riyanto, R. Rabbani, L. Meiharrik, PT Freeport Indonesia, Indonesia**

10:00 **Active seismic monitoring** R.A. Lynch, Institute of Mine Seismology, Australia

10:30 **MORNING BREAK**

### GROUND SUPPORT (2)

SESSION CHAIR



**Dr Iain Thin, principal geotechnical engineer/director, KSCA Geomechanical Pty Ltd, Australia**

Between 1998 and 2005 Iain worked at the Mount Isa Mines Lead Mine, Hilton/George Fisher Mine and the X41 Copper Mine, where he held the positions as the rock mechanics superintendent for the Isa mining lease, the Copper Mines planning superintendent, and rock mechanics superintendent for the Mount Isa Zinc Lead Operations. Iain then joined WMC Resources/BHP Billiton Nickel West as principal geotechnical engineer working on the Perseverance Deeps Project (pre-feasibility and definition phase), Leinster Life Extension Project and Leinster Nickel Operations Cave Induced Subsidence Study. In November 2010, Iain established the geotechnical consultancy 'KSCA Geomechanical Pty Ltd', specialising in underground geomechanics.

11:00 **Mechanisms of rockbolt support in jointed rock masses** T. Moyo, University of the Witwatersrand, South Africa; and Xstrata Zinc, Australia; T.R. Stacey, University of the Witwatersrand, South Africa

11:30 **A study of the behaviour of fully grouted rockbolts subjected to dynamic loading in underground mining** A. Mortazavi, F. Tabatabae Alavi, Department of Mining and Metallurgical Engineering, Amirkabir University of Technology, Iran

12:00 **Use of Yield-Lok bolts as conveyor belt hanging system in seismic areas** Y.K. Wu, Barrick Gold Corp., Canada; R. Gagnon, Jenmar of Canada Inc., Canada

12:30 **LUNCH**

### NUMERICAL MODELLING (2)

SESSION CHAIR



**Dr Jonny Sjöberg, general manager, Itasca Consultants AB, Sweden; Adjunct Professor in Rock Mechanics and Rock Engineering, Luleå University of Technology, Sweden**

Jonny is currently the general manager of the new Itasca office in Sweden, opened in 2011. Prior to joining Itasca he worked for the LKAB mining company in Sweden as a rock mechanics specialist. He also held positions with the consulting branch of Vattenfall in Sweden, as well as the Boliden Mineral AB mining company, also in Sweden. He holds a PhD in the area of open pit slope stability, and has worked on projects dealing with both underground and surface mining rock mechanics, civil engineering tunneling projects, and rock stress measurements. In 2007 he was appointed Adjunct Professor in Rock Mechanics and Rock Engineering at the Luleå University of Technology - his alma mater since his first degree (MSc) in 1988.

13:30 **Explicit discontinuum simulation for probabilistic forecasting of fault slip and rock mass seismic potential** D. Beck, Beck Engineering Pty Ltd, Australia; V. Levkovitch, Beck Engineering, Germany; B. Simser, Xstrata Nickel Ltd., Canada

14:00 **Application of the limit equilibrium strength to the seismic assessment of shear related seismicity** J. Jarufe Troncoso, Codelco VP Chile, Chile; and The University of Western Australia, Australian; Y. Potvin, J. Wesseloo, Australian Centre for Geomechanics, The University of Western Australia, Australia

14:30 **Determination of rock mass failure and rock mass damage criteria for the felsic norites at Nickel Rim South Mine** E. Karampinos, Lassonde Institute of Mining, University of Toronto, Canada; B. Simser, Xstrata Nickel Ltd., Canada; J. Hadjigeorgiou, Lassonde Institute of Mining, University of Toronto, Canada

15:00 **AFTERNOON BREAK**

### DRILLING TECHNOLOGY

SESSION CHAIR



**Winthrop Professor Phil Dight, Australian Centre for Geomechanics, Australia**

Phil has been involved with the development and design of ground support for mining applications since 1975. He was a partner in BFP Consultants until BFP was acquired by Coffey Mining. Phil has extensive consulting experience in the geotechnical aspects of the mining industry, and has worked on open pit and underground metalliferous mining problems. In 1985 he was awarded the Manuel Rocha Medal by the International Society of Rock Mechanics for his work in open pit mining and use of ground support to improve pit stability. His ground support algorithm has been adopted by Rocscience in its evaluation of ground support in phases. With Peter Fuller he undertook research into ground support in a number of AMIRA sponsored projects. Much of that early research work has now been formalised in the literature by others. Phil joined the ACG in 2008 and has since been working on stress memory effects in rocks, influence of deformation anisotropy on stability of underground openings ground support applications and slope stability problems.

15:30 **Adapting oil and gas downhole motors for deep mineral exploration drilling** A. Mokaramian, V. Rasouli, Department of Petroleum Engineering, Curtin University, Australia; and Deep Exploration Technologies CRC, Australia; G. Cavanough, CSIRO, Queensland Centre for Advanced Technologies, Australia; and Deep Exploration Technologies CRC, Australia

16:00 **A feasibility study on adopting coiled tubing drilling technology for deep mining explorations** A. Mokaramian, V. Rasouli, Department of Petroleum Engineering, Curtin University, Australia; and Deep Exploration Technologies CRC, Australia; G. Cavanough, CSIRO, Queensland Centre for Advanced Technologies, Australia; and Deep Exploration Technologies CRC, Australia

16:30 **SEMINAR CLOSE AND FAREWELL**

# ACG Sixth International Seminar on Deep and High Stress Mining

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# ACG Stress Measurement Workshop

Saturday 31 March 2012

Novotel Perth Langley Hotel, Western Australia

Stress measurement should be an integral component of the data collection for mine design and operation. It is seductive to suggest that using numerical methods to assess mine design and sensitivity analysis related to the expected in situ stress can obviate the need for stress measurement. There are probably regional and local tectonic influences on the current in situ stress; these should be understood in the context of a regional and local geological/structural environment.

This workshop features presentations from practitioners in the field, it will discuss the limitations of the methods and provide an up-to-date guide on which technique/s are suitable for your project.

The workshop proceedings are only available to the workshop delegates and are not available for purchase.

## Programme\*

07:30	ONSITE WORKSHOP REGISTRATION
08:25	Welcome and introduction <b>Phil Dight, ACG</b>
08:30	Procedures for estimating and specifications for measuring rock stresses, and application of rock stress measurements to mine design <b>Max Lee, AMC Consultants Pty Ltd</b>
09:30	A modified CCBO technique optimised for regular geological drilling procedures in South African gold mines <b>Hiroshi Ogasawara, Ritsumeikan University, Japan</b>
10:00	MORNING BREAK
10:30	Stress measurement and tectonic strain <b>Ian Gray, Sigra Pty Ltd</b>
11:00	Real stress field heterogeneity and how most measurements aren't actually wrong as people sometimes assume <b>David Beck, Beck Engineering Pty Ltd</b>
11:30	The HI cell and 40 years of observations in rock stress measurement <b>Rob Walton, Top Rock Technologies Pty Ltd</b>
12:00	LUNCH
13:00	Stress measurements and related design work - a Scandinavian perspective <b>Jonny Sjöberg, Itasca Consultants AB, Sweden</b>
13:30	Experience in rock stress measurement using different techniques <b>Ian Hulls, Mining One Pty Ltd</b>
14:30	New techniques in rock stress monitoring <b>Chris Coseski, Environmental Systems and Services</b>
15:00	Three decades of measuring in situ stresses and monitoring stress changes with the ANZI strain cell <b>Ken Mills, SCT Operations Pty Ltd</b>
15:30	AFTERNOON BREAK
16:00	The evaluations of AE and DRA methods in rock based on experimental results <b>Ariel Chung-Min Hsieh, The University of Western Australia</b>
16:30	The practical considerations of insitu stress measurements and field observation to calibrate mine models <b>Chris Pritchard, Xstrata Nickel, Canada</b>
17:00	Workshop breakout session and questions
17:30	WORKSHOP CLOSE

\*The workshop programme was correct at time of printing.  
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## Deep Mining 2012

Sixth International Seminar on Deep and High Stress Mining

28-30 March 2012, Novotel Perth Langley Hotel, Western Australia

### Contact details

\*denotes mandatory fields

\*Title (Mr, Mrs, Miss, Ms, Dr, Prof., Other) \_\_\_\_\_

\*Family Name \_\_\_\_\_

\*First Name \_\_\_\_\_ Preferred Name \_\_\_\_\_

\*Job Title \_\_\_\_\_

\*Organisation \_\_\_\_\_

\*Mine/Dept \_\_\_\_\_

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Register online — [www.deepmining2012.com/register](http://www.deepmining2012.com/register)

### Corporate Affiliate members

- AngloGold Ashanti Ltd
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- Snowden Group
- SRK Consulting Australia

**Disclaimer:** Please note only those company branches or entities located within Australia are eligible to affiliate entitlements.

### Delegate cancellations

- On or after Tuesday 21 February 2012: *no refund.*
  - Non-attendance: *no refund.*
- Substitutions will be accepted at any time. Cancellations are required in writing.

### Event changes

The Australian Centre for Geomechanics (The University of Western Australia) reserve the right to make changes to programmes and speakers, or to cancel events if enrolment criteria are not met or when conditions beyond their control prevail. Every effort will be made to contact each delegate if the event is cancelled. Should the event not be held for any reason, our liability is limited to the event fee only.

All attendees will have their name, affiliation, address, phone, fax and email address printed in the delegate list.  
 Do not include my details in the event delegate list.

Partners are welcome to attend the seminar dinner with a delegate, please contact the ACG to request a dinner registration form.

Please note: a registration form must be completed for each delegate, even if multiple delegates from the same organisation are attending. Organisations can be invoiced for multiple delegate registrations - please enquire with the ACG.

Please notify the ACG if you have any special dietary requirements.

### Payment details

Payment prior to the event commencement is a requirement. Registrations are finalised once payment has been received and processed.

	SEMINAR PRICING	WORKSHOP PRICING	COMBINED PRICING	DINNER
	6th International Seminar on Deep and High Stress Mining	Stress Measurement Workshop	DM2012 Seminar and Workshop	DM2012 Dinner
	28-30 March 2012 (code: 1201)	31 March 2012 (code: 1200)	28-31 March 2012 (code: 1201/1200)	29 March 2012
Standard Registration	<input type="checkbox"/> 1,980	<input type="checkbox"/> 990	<input type="checkbox"/> 2,860	<input type="checkbox"/> 132
ACG Affiliate/JV Partner	<input type="checkbox"/> 1,540	<input type="checkbox"/> 770	<input type="checkbox"/> 2,200	<input type="checkbox"/> 132
Student*/Retiree	<input type="checkbox"/> 550	<input type="checkbox"/> 330	<input type="checkbox"/> 770	<input type="checkbox"/> 132

All prices are in AUD and include GST  
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^ Students are required to provide proof of current full-time enrolment.

Payment includes attendance at event/s, luncheon/s, morning and afternoon teas (as supplied) and a copy of event proceedings.

\_\_\_\_\_ \$ \_\_\_\_\_  
Please debit this VISA/MasterCard (**no other cards accepted**) Expiry date \_\_\_\_\_ Amount to charge

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Cheque enclosed for \$ \_\_\_\_\_  Request an invoice for this registration  
Please make cheques payable to *The University of Western Australia* and mail cheque to ACG. Contact name (if different from delegate) \_\_\_\_\_  
Cheques must be received no later than 3 weeks prior to event. Purchase order number (if available) \_\_\_\_\_

Please forward your completed registration form to [info-acg@uwa.edu.au](mailto:info-acg@uwa.edu.au).