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Ninth International Symposium on Field Measurements in Geomechanics Report



Instrumentation: the key to managing project performance

Following in the big footsteps of the highly acclaimed FMGM symposia, the Australian Centre for Geomechanics, with collaborating organisation Pells Sullivan Meynink, were delighted to host the Ninth International Symposium on Field Measurements in Geomechanics, during 9 – 11 September 2015, in Sydney – a first for Australia. More than two hundred mining, civil and tunnelling engineers and professionals assembled to explore the various topics related to field instrumentation, monitoring and associated project management. Delegates came from the four corners of the world with thirty-two countries represented.

As Mark Fowler, FMGM 2015 Symposium co-chair noted in his opening comments – it is hard to escape the reality that technology in everyday life is advancing so rapidly, and it is not just changing our lives, but in fact shaping it. The pervasiveness of smart phones and tablets, cloud computing, drones — data vacuums of the air — and the potential benefit and threat of big data may individually and/or collectively enrich and exploit our lives.

Geotechnical monitoring is no exception. It's hard not to think we are in or approaching the golden age of monitoring and there is no question these advances have, and will, greatly further our profession.

The three day technical symposium programme featured 65 presentations. The scene was set with a riveting presentation from Dr Philip Pells, "Monitoring – the good, the bad and the ugly". This very appropriate paper highlights the pitfalls when the application of instrumentation is poorly understood; it is not there to 'tick a box'. The proceedings were supported by excellent keynote papers by: Dr Andrew Ridley on soil suction and its measurement; Dr W Allen Marr on instrumentation as a risk management tool with application to dam safety; Dr Ian Gray looking at understanding the in situ stress in real materials and the influence of fluid pressure; and Dr Martin Beth on how to manage the data obtained in a clear and easily accessible way.



ACG Michele Salvoni, FMGM 2015 Best Young Engineer Paper winner (right) with Professor Phil Dight, FMGM 2015 Symposium co-chair (left)

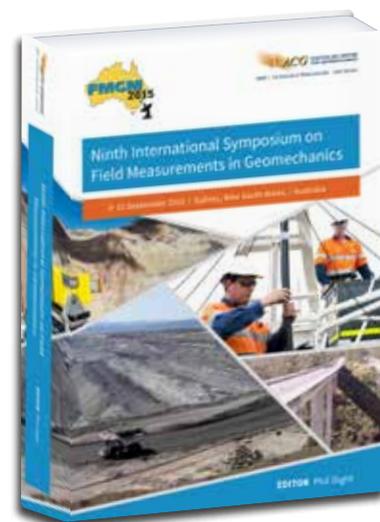
Initiated at FMGM 2011, Berlin, and repeated in Sydney the Best Young Engineer Paper Award was well contested. ACG's Michele Salvoni won the prize with "Improvement of pseudo-3D pit displacement mapping technique through geodetic prism data integration", and PSM's Michael Salcher was a close runner-up with "Robust monitoring for high risk underground excavations". Our gratitude to all who participated in the award.

The symposium trade exhibition was sold out with 33 exhibiting companies showcasing their products and services which monitor performance. The support and encouragement received from our sponsors and exhibitors was much appreciated. We especially thank IDSAustralasia Pty Ltd for being the Principal Sponsor – their involvement was integral to the success of the event and we acknowledge the wonderful contribution of their team: Garry Spencer, Henri Prevost and Susanna Botterill.

Two workshops preceded the symposium. The first, ACG InSAR and Emerging Technologies Workshop, attracted 40+ participants and focussed on various types of remote sensing together with emerging technologies for monitoring both above and below ground level. The second, ACG Radar and Monitoring Workshop, was attended by 35 delegates and explored some new developments relating to conventional terrestrial monitoring systems such as open pit radars, prisms, laser scanning, photogrammetry, as well as the integration of the different types of these monitoring systems and their interpretation.

The symposium dinner was a Sydney Harbour boat cruise which showcased, to the 130+ international and local attendees, the beautiful harbour and globally acclaimed landmarks.

Professor Phil Dight and his team were well supported by the International and Australian Symposium Organising Committees. In particular, we extend our appreciation to Dr Helmut Bock for his sage advice. We wish the organisers of FMGM 2018, Brazil, every success.



The ACG team was delighted to produce peer-reviewed, hardbound symposium proceedings, which feature 66 technical papers.

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