



Caving 2022

Proceedings of the Fifth International
Conference on Block and Sublevel Caving

30 August – 1 September 2022 | Adelaide, Australia

Volume Two

EDITOR Yves Potvin



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Editor

Yves Potvin

Australian Centre for Geomechanics, Australia

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The Australian Centre for Geomechanics (ACG) was formally established in 1992 as a University of Western Australia not-for-profit research centre in order to promote research excellence and continuing education in geomechanics, with particular emphasis on its application to the mineral and energy extraction sections of Australia's resources industry.

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- CSIRO Mineral Resources
- The University of Western Australia — Civil, Environmental and Mining Engineering

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Preface

The Fifth International Conference on Block and Sublevel Caving (Caving 2022) was held in Adelaide, South Australia, 30 August to 1 September 2022. Following the 2020 COVID-19 pandemic, where travelling was limited for over two years, the excitement and interest from the caving community to renew the face-to-face conference experience was felt for months prior to the event's opening. The South Australian host city of Adelaide, home to our principal sponsor OZ Minerals, was a new destination for the Australian Centre for Geomechanics' (ACG) Caving conference series, which added to the attraction of our international audience.

The buzz surrounding Caving 2022 translated into a broad global authorship, and more than 150 abstracts were submitted, culminating in the publication of 105 papers available in these proceedings. This important contribution to caving literature is freely accessible worldwide, along with previous Caving conference proceedings, as well as many papers from the Eighth International Conference & Exhibition on Mass Mining (MassMin 2020), via the ACG's Online Repository of Conference Proceedings (papers.acg.uwa.edu.au).

The technical content of the Caving 2022 proceedings addressed the main caving topics, with the usual emphasis on geomechanics aspects such as rockburst and seismicity, ground support, monitoring, mudrush, numerical modelling, subsidence, geotechnical characterisation, and hydraulic fracturing. The themes of mine planning, fragmentation, and case studies were also well covered.

The keynote presentations featured two world-leading caving operations: Freeport-McMoRan's Grasberg mine, given by Ryan Campbell, Freeport-McMoRan, and Codelco's El Teniente New Mine Level delivered by Pedro Landeros, Codelco. In addition, the opening keynote presentation, delivered by Simon Hanrahan, SRK Consulting, provided some very important insights into what drives the success of caving projects.

The ACG acknowledges the strong engagement of the mining suppliers and mining companies in supporting Caving 2022.

Professor Yves Potvin, Australian Centre for Geomechanics
Editor and Conference Chair

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The Australian Centre for Geomechanics proudly acknowledges the generous contribution by the Principal, Industry and Major Sponsors of the Fifth International Conference on Block and Sublevel Caving.

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