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Caving 2018

Proceedings of the Fourth International Symposium on Block and Sublevel Caving

15–17 October 2018 | Vancouver, Canada



EDITORS Y Potvin and J Jakubec

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Australian Centre for Geomechanics, The University of Western Australia, Australia

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SRK Consulting (Canada) Inc., Canada



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The dedicated efforts of the peer reviewers have resulted in the high quality of the technical programme and the papers compiled for this publication. The editors thank the following people who contributed their time and expertise as reviewers of manuscripts for the proceedings of the Fourth International Symposium on Block and Sublevel Caving held in Vancouver, Canada. A technical and critical review of each paper was undertaken by a minimum of two reviewers for the production of this volume.

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Preface

The Fourth International Symposium on Block and Sublevel Caving (Caving 2018) was held for the first time in North America, in the scenic city of Vancouver, Canada, on 15–17 October 2018. This symposium generated unprecedented interest from international authorship and participants. More than 100 abstracts were submitted and a total of 66 papers were accepted for publication in these proceedings. The symposium and associated Australian Centre for Geomechanics workshop were sold out several weeks prior to the symposium. This response is testimony to the very strong interest from the mining community towards this rapidly growing mining method and the level of innovation associated with this low-cost, high-productivity mining approach.

There are over 50 cave mining projects in various stages of studies and development around the world. Despite the fact that cave mining is more than 100 years old, it is only within the past 20 years that this mass mining method has spread, with an estimated 17 cave mining operations in 11 countries.

The traditional cave mining themes were thoroughly covered, and the latest developments covering the following topics are documented in these proceedings:

- Cave mechanics
- Draw control
- Mine planning
- Cave front tracking
- Ground support
- Seismicity
- Subsidence and monitoring

Three excellent keynotes were presented. Craig Stegman provided an overview of the important learnings from Rio Tinto's involvement in many caving mines. David Cuello and Geoff Newcombe, from Newcrest Mining Limited, described guidelines and key geotechnical knowledge for caving operations, and Ryan Campbell shared how Freeport-McMoRan's Grasberg Block Cave mine has been optimised for success.

The organisation of this symposium was the result of a close collaboration between the Australian Centre for Geomechanics and SRK Consulting (Canada) Inc., Vancouver. We acknowledge the important contribution of Alice Huynh in coordinating many logistical and technical aspects of Caving 2018.

The symposium proceedings are available online free of charge through the Australian Centre for Geomechanics' Online Repository. The papers can be accessed by scanning the QR code or from papers.acg.uw.edu.au/caving2018



Yves Potvin and Jarek Jakubec Co-editors

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