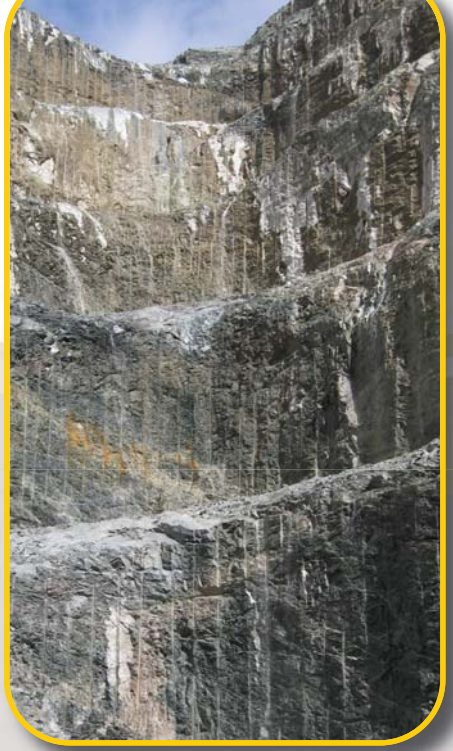
Journal Comment

Slope Stability 2016



The papers in this *Journal* issue are selected from the proceedings of the Slope Stability Symposium held in Cape Town in October 2015. The symposium was organized by the SAIMM in conjunction with the South African Institute of Rock Engineering (SANIRE). This was the sixth event in this international symposium series, which originated in Cape Town in 2006 and has subsequently been held in Perth, Santiago, Vancouver, and Brisbane. A total of 222 delegates attended from the following countries: Argentina, Australia, Botswana, Brazil, Canada, Chile, the DRC, France, Italy, Lesotho, Madagascar, Namibia, Dominican Republic, Russia, Saudi Arabia, South Africa, Spain, Switzerland, The Netherlands, Turkey, United Kingdom, the USA, and Vientiane. This is the only international event that is dedicated to slope stability in mining and is therefore well attended by authors, delegates, and sponsors.

Optimized slope angles due to improved data, analysis and interpretation, and risk management can result in significant cost savings. This event brings together researchers, consultants, mine operators, and service providers to share newly developed methods and technologies that can improve slope designs and slope management.

One keynote presentation by a well-established contributor to slope stability research is included in this *Journal*. L. Lorig presents methodologies for taking extreme seismic and rainfall events into account in slope design, and discusses the relevance of each in mining.

Slope design methodologies are discussed by M.H. Fillion and J. Hadjigeorgiou, who illustrate the effect of level of confidence in the data on slope design, and give examples of how improved data can result in less conservative designs. D. Wines compares two- and three-dimensional slope analyses, and shows that a true representation of the 3D nature of the structures is often critical in providing realistic stability estimates.

W. Newcomen and G. Dick have updated their strain-based failure prediction approach. The method for setting slope monitoring movement thresholds based on rock mass rating and total strain is now based on over 100 failures in various geological environments.

Two papers deal with the geotechnical management of slopes. M. Bester and co-authors discuss a mine-to-design reconciliation process in which various technologies are implemented to measure the performance of a slope relative to the design and allow for feedback into the mine design cycle. P.J.H. de Graaf and S.D.N. Wessels provide details of the geotechnical management system implemented in the iron ore mines in the Pilbara, Western Australia.

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