



AfriRock 2017



This edition of the *Journal* is dedicated to AfriRock 2017, the International Society for Rock Mechanics (ISRM) International Symposium for 2017, which was held at the International Convention Centre in the beautiful city of Cape Town, South Africa from 3 to 5 October 2017. This is the first conference of that name and the first African-hosted ISRM International Symposium since the Tunisian and Zimbabwean national groups joined the African Region of the ISRM. The Symposium was well attended by 264 delegates from 42 countries. Each of the ISRM regions were represented; Africa (135 delegates), Asia (56, including 33 from China), Australasia (10), Europe (36), North America (13), and South America (14). Africa's proud participation was evident through the number of delegates from Botswana, the DRC, Egypt, Ghana, Lesotho, Swaziland, Tunisia, Zambia, and Zimbabwe, with a substantial number from South Africa.

Prior to the Symposium, the ISRM Board meeting was held over 30 September and 1 October, followed by the ISRM Commission and Council meetings on 2 of October. The ISRM Advisory Forum met on the evening of 3 October.

Dr Nick Barton and Professor John Cosgrove presented their informative short course on 2 October, spanning a wide array of technical aspects such as empirical methods, rock mechanics, and structural geological methods useful for excavation in jointed and fractured media.

The Symposium opened on 3 October, commencing with addresses by the Symposium Chairman, Mr William Joughin; the President of SANIRE, Mr Jannie Maritz; the President of the ISRM, Dr Eda F. de Quadros; the President of the SAIMM, Professor Selo Ndlovu and the Secretary General of the ISRM, Dr Luís Lamas. These were followed by the Rocha Medal presentation by Dr Bryan Tatone and the Franklin Lecture by Professor Francois Malan. Four excellent keynote lectures were presented by Professor Dick Stacey, Dr Nick Barton, Dr Luís Lamas, and Professor Sergio Fontoura. Technical papers were presented during plenary sessions as well as during two parallel sessions. The Symposium proceedings contain 94 papers, 50 of which are from Africa (South Africa, Tunisia, Zimbabwe, Zambia, Ghana, and Egypt). Given that mining is a key driver of the economies in several African countries, many of the papers dealt with rock engineering research and case studies for mines. The civil engineering industry was well represented, and some papers from the petroleum industry are also included in the Symposium proceedings. Topics included geotechnical investigations, laboratory testing, new investigation technologies, monitoring, seismic analysis, numerical modelling, support design, slope stability, underground mine design, pillar design, stability of tunnels and caverns, dam foundations, hydraulic fracturing, reservoir engineering, and borehole stability. The Symposium proceedings were provided electronically to delegates and will be made available to the industry at large in the near future on the following websites: www.sanire.co.za, www.saimm.co.za, www.onemine.org and www.onepetro.org.



Induction of ISRM Fellows

The first Early Career Forum (ECF) was held on 4 October, where rock mechanics practitioners in the earlier phases of their career were given the opportunity to present case studies and research. It was a very successful undertaking and demonstrated promising talent and enthusiasm from Africa. The ECF delegates were funded by the ISRM Secretariat and the ISRM Education Fund Committee.



Early Career Forum, ISRM Board, and SANIRE President

Technical excellence was recognized in the form of awards for 'best papers', which were presented to Dr Dave Roberts and Dr Ehsan Ghazvinian (young author), and Edeshni (Candice) Munsamy was recognized as the best ECF presenter. The Symposium closing address was given by Mr William Joughin.

A technical exhibition was on display adjacent to the main hall throughout the Symposium, creating ideal opportunities for sponsors to showcase their products and engage in lively technical discussions during tea and lunch breaks.

In addition to the technical presentations and discussions, professional networking opportunities were aplenty. A cocktail function was held on the evening of 2 October to welcome

delegates. The banquet was hosted on 4 October at the Castle of Good Hope, a bastion fort built by the Dutch East India Company in the 17th century, which made for an unforgettable experience.

The post-symposium technical tours took place on 6 of October. The Chapmans Peak tour provided an excellent opportunity to see the rockfall protection measures installed to protect the incredibly scenic Chapman's Peak drive in Cape Town. The tour also visited various local attractions and the fantastic geology of Cape Town and surrounding areas. Delegates were also given the

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opportunity to tour one of the deepest gold mines in the world, Kloof No. 4 shaft at Kloof Gold Mine and see the challenges associated with deep-level mining in high-stress, seismically active conditions. The mine is situated near the border of Gauteng and Northwest Provinces approximately 75 km from Johannesburg.

AfriRock 2017 was jointly organized by the Southern African Institute of Mining and Metallurgy (SAIMM) and the South African National Institute of Rock Engineering (SANIRE). The Symposium was generously sponsored by IDS GeoRadar, New Concept Mining, Reutech Mining, TRE Altamira, Optron, Aciel Geomatics, Geobruigg, Groundwork, Maccaferri Africa, Minova, Rocbolt Technologies, QualiRock, SRK Consulting, FST Mining Engineering, M&J Mining, and Sandvik.



Technical tour – Chapman's Peak rockfall protection



Technical tour to Kloof No. 4 Shaft

W. Joughin