

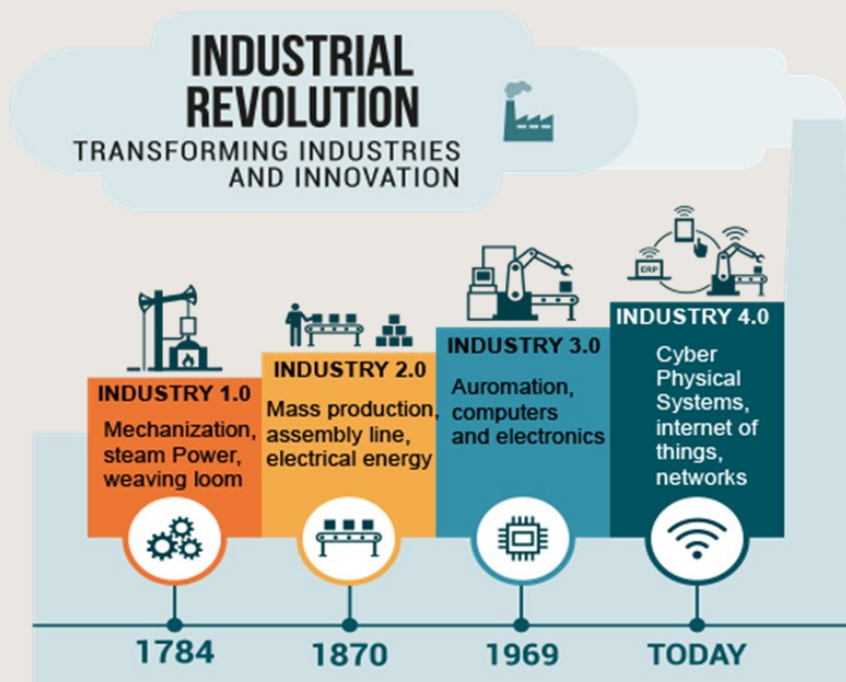
President's Corner

Are we being left behind?

What is this big hype about Industry 4.0? One should actually ask, what is Industry 4.0? Talking about the fourth industrial revolution, one cannot help but think about what really happened in the previous three and how those impacted our day-to-day going about doing our jobs. In short, condensing hundreds of years into a few lines, the first industrial revolution (IR1.0) saw the birth of the word press. With this, reproduction of books became faster and knowledge got round faster, however that led to the need for more people to become literate.



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The second revolution (IR2.0) saw Henry Ford producing any colour motor car, as long as it was black, in a factory where “mass production” was the need. This turned manufacturing around, producing in quantities and resulting in lower cost, stimulating economic growth. The third revolution (IR3.0) saw humans going to the moon, aka, the birth of computers. The disruptive technologies driving the fourth industrial (IR4.0) revolution would include things like Internet of Things (IoT), Artificial Intelligence (AI), Block chain and Building Information Model (BIM).

You may say: “Great Jannie, so what?”

Well sitting back, doing some reflection on what is happening on my desk from day to day, I realised that every so often I sit down still re-writing (pre-IR1.0) systems that could need some innovation. I tend to miss opportunities coming my way that could make life happen in “Mass Production”. There are so many technologies out there, functioning in other industries what with a little bit of ingenuity could end up solving tedious procedures and data acquisitions. Then, by employing other technologies, this metadata could lead to making better decisions faster. Why is it that when you are thinking of something and open Google to read up on it, Google search finishes your sentence? With data, predictions are made and with more data, better predictions can be made (Stats 101).

The challenge however remains in recognising the trends and acting on it. Applying technologies in a surface operation are “easier” than the intimidating underground environment, but yet again, every horse has its course. Do not try to fit a square peg in a round hole!

Go ahead, sit back and do the same. What can be done differently today that will have a major impact on the way your department is running. And with that I do not suggest resigning!

Are we changing REPRODUCTION, into MASS PRODUCTION? Are we changing INFORMATION, into INNOVATION?

Till next time... Be better today than yesterday

Jannie

ISRM News

Obituary (John Hudson)

It is with deep sadness that we inform that our Past President and friend John A. Hudson passed away on the 14 February 2019, in London, from complications resulting from a severe stroke.

John was one of the most active members ever of our Society chairman of the Commission on Testing Methods during 19 years, Vice President, President and Fellow. He was one of the most influential teachers of rock mechanics and author and editor of several of the most relevant books on the discipline.

We will keep warm memories from him for his paramount professional contributions, but also for the permanent friendship and kindness. The ISRM will prepare tributes to John Hudson during the coming months.

Our thoughts are with his wife Carol and his close family, to whom we present our deepest condolences.

Recent developments

ISRM Congress 2019

- 798 abstracts were accepted and 15 were rejected.
- The list of all accepted abstracts will be available soon at the Congress webpage.
- The site is open for the full paper submission and will close on March 18th.
- Taylor and Francis will be the Publisher for ISRM2019 and all refereed and finalised papers must be with the Publisher by the end of June.
- Registration is open as well as reservation for accommodation at the official hotel. Instructions are available at the Congress webpage.
- The announcement for Rockbowl and call for team registration have been published at the Congress webpage. Some contacts have been made and the work is coming along very well.
- Sponsorship has been granted by Geobrugg.

ISRM News

Two new suggested methods have been approved and will be made available on the ISRM website:

- Determining Deformation and Failure Characteristics of Rocks Subjected to True Tri-axial Compression.
- ISRM SM for In-situ AE Monitoring of the Fracturing Process in Rock Masses.

Two new ISRM Online Lectures are available for viewing or downloading on the ISRM website (www.isrm.net):

- 24th Online lecture: Professor Claudio Olalla: Computing Foundations with Hoek and Brown Failure Criteria
- 25th Online lecture: Prof. Derek Martin: Stress-induced fracturing (Spalling) around underground excavations: Laboratory and In-situ Observations (as of 21 March 2019).

ISRM Conferences

The following ISRM Conferences are scheduled:

Event title	Start date	End date	Country	City
Geotechnical Challenges in Karst	2019-04-11	2019-04-13	Croatia	Omis-Split
8th International Symposium in Geomechanics - an ISRM Specialised Conference	2019-05-06	2019-05-10	Colombia	Bucaramanga
2019 Rock Dynamics Summit in Okinawa	2019-05-07	2019-05-11	Japan	Okinawa
ISRM 14th International Congress on Rock Mechanics	2019-09-13	2019-09-18	Brazil	Foz do Iguaçu
YSRM2019 - the 5th ISRM Young Scholars' Symposium on Rock Mechanics and REIF2019 - International Symposium on Rock Engineering for Innovative Future	2019-12-01	2019-12-04	Japan	Okinawa
EUROCK 2020 - Hard Rock Excavation and Support - the ISRM European Rock Mechanics Symposium	2020-06-13	2020-06-19	Norway	Trondheim
EUROCK 2021 - the ISRM European Rock Mechanics Symposium	2021-06-01	2021-06-01	Italy	Torino

MINING WITH



ELBROC OMNI PROP

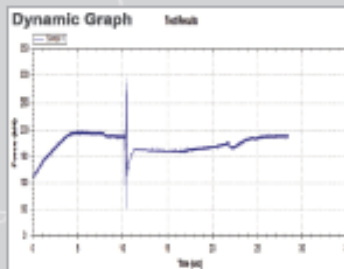
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- Safe remote installation
- Resilient in rock-burst conditions
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- Can accommodate numerous seismic events
- Constant support resistance
- Reusable
- Light, easy and quick to install
- Cannot be over extended
- Standard attachments
- Controlled yielding

OMNI 89

- 89mm diameter
- 20 ton support resistance
- Blast on dynamic load bearing
- Covers stoping widths up to 2.0m
- Light weight

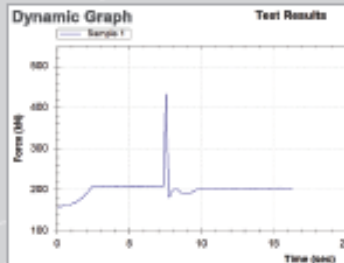


OMNI 89



OMNI 127

- 127mm diameter
- 20 ton support resistance
- Blast on dynamic load bearing
- Covers stoping widths up to 4.5m

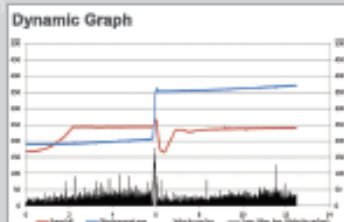


OMNI 127



OMNI 150

- 150mm diameter
- 20 & 40 ton support resistance
- Blast on dynamic load bearing
- Covers stoping widths up to 6m
- Longer lengths available



OMNI 150
20 Ton

OMNI 150
40 Ton



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Rock Star of the Quarter

Dirk Venter



Full Name: Dirk Venter

Position: Consulting Rock Engineer

Company/Organisations: Open House Management Solutions

Date and Place of Birth: 12 December 1988, Boksburg

Education: BSc. Physics and Mathematics

First Job: Sales Assistant at CUM Books

Personal Best Achievement/s: Completing a marathon at a depth of 3.4km underground on Mponeng's 120 level in 2011

Philosophy of Life: Life is too short for bad wine or bad coffee

Favourite Food/Drink: Cheese, anything with cheese, and any type of cheese.
Good wine, Weisse beer and good coffee

Favourite Sport: Mountain biking and running

How did your career in the mining industry begin and where are you now?

My career started when Lourens Scheepers gave a presentation on Rock Engineering at the Physics department of the NWU during my second year of study. At the end of that same year, I applied for vacation work at AngloGold Ashanti, through the MQA program. Following completion of my degree, I started as a trainee at Mponeng mine. I'm currently working as a consulting rock engineer at OHMS.

Why did you choose Rock Engineering?

During my studies at university we conducted small scale lab experiments to understand the fundamental laws of physics. When I was introduced to rock engineering, I pictured a mine as a large laboratory where you can observe and experience the forces of nature first hand. This sparked my interest in rock mechanics.

Please tell us a bit more about your career journey?

My career started in 2010 with AngloGold Ashanti in the West Wits region. From 2010 to the end of 2012 I worked at Mponeng, TauTona and Savuka mines, gaining experience in deep level mining. I was fortunate to work with numerous experienced RE's during this time. I completed my COMREC at the end of 2012. Thereafter, I joined New Concept Mining's research and development department, focusing on support product design. I was appointed as international business development manager in 2014. At the end of 2016, I joined Open House Management Solutions as a consulting rock engineer.

What are some areas that you believe will become of increasing importance in the near future of the rock engineering discipline?

In order to remain internationally competitive, mining operations are challenging conventional design and practices to improve safety, efficiency and productivity. To improve our designs, we need to increase our understanding of the fundamental rock mechanics principles. Experience is good, but a sound understanding of the mechanics at work is better. We need to be able to provide customized solutions for each unique geotechnical environment. The rapid development of monitoring technologies, big data processing capabilities and numerical simulation techniques are providing the tools needed to achieve this. A pro-active, rather than a re-active, design philosophy is needed.

What advice would you offer people aspiring to be in your position?

You are responsible for your own career path and development. Do not be afraid to make difficult choices. Make career moves for the right reasons and always treat people with respect.

Who is your role model/mentor?

Martin Cawood

What is the best advice you have ever been given?

Do not be afraid to make mistakes. When you do make a mistake, learn from it, and do not repeat it.

SANIRE Birthdays

March to May

J L Campbell	April
J P Rangwaga	May
G B Breckle	March
T Dlokweni	May
C Mkandawire	March
A S Makgala	April
P E Sepato	April
FM Motebang	May
W Zirima	May
J N Dodds	May
D Bierman	April
T N Nortje	April
P G Groenewald	March
R Muller	March
P D Witbooi	March
W J Marx	April
J Bezuidenhout	April
J J Grobler	May
T van Aard	May
P Mpunzi	May
R O Phadagi	March
C Nyoni	March
L M Gezimati	April
I Crozier	April
Ms S Coetsee	March
EF Gouws	April
N Killassy	April
V de Lange	April
T Munzhelele (Gcuda)	April
A J van Zyl	March
M M Sibiya	May
Q L Grix	March
Ms A Boodoo	April
M H Ngwenya	March
P F Janse van Rensburg	April
Ms L L Ditlopo	May

N Mandhaze	April
M A Mbongonya	April
A D Ngosa	March
P J van Wyk	March
B M Kioya	March
D M Kubayi	March
K. Maketa	April
A G Hartzenberg	April
M.A. Pieterse	March
M Chatfield	May
S Zuma	April
LV Vernoooy	April
A Mabelane	March
RV van Heerden	May
P. Ghasemzadeh Daghigh	March
SM Lloyd	March
SK Mosotho	May
K Moodley	April
G L M Sims	March
S V Mohlala	April
S Mazara	April
C Muthelo	May
NA Khosa	May
B Tshelane	March
Oelofse MN	May
CM Kazadi	May
EM Ziluga	March
H Rasethe	May
J Kwiri	March
N Mthembi	May
F Fredericks	March
E van Dijk	May
D Swanepoel	April
Q Kebatsetse	March
D de Beer	May
V Nematili	April
K Tshephe	April

SANIRE Birthdays

March to May

B Manyike	May
M Makoe	May
W Swanepoel	April
L Lesejane	April
B Rodrigues	March
C Schrader	April
MB Manyike	May
M Mariba	April
P Banjwa	May
J Gouws	April
TD Manyaka	March
TJ Mulutsi	May
S Mtshali	May
MS Mbona	March
A Fourie	May
SP Booysen	May
P Molaoa	March
O Kutta	May
D Nkomo	May
J Steyn	May
ML Sibeko	March
MP Phasha	March
U Makhode	April
FS Medupe	April
L Mtekwana	May
Muusha	March
Jack	May
Maluleke	May
D C Oldroyd	May
H A D Kirsten	March
J V James	May
A A Brown	April
P J le Roux	April
DJ Postma	March
EJ Sellers	May
ML Treloar	April

MJ Cockram	March
WJ Snyman	March
RIL Ferreira	May
JM Oelofse	May
W Hartman	March
AH Olivier	May
W Holtzhausen	May
MRC Kevane	April
D Louw	March
M Bester	May
D Lees	April
CA Jermy	April
D van Rooyen	March
TT Itholeng	May
AP Esterhuizen	April
WL Mahne	April
JOJRoussel	March
MW Pretorius	April
JJvan der Merwe	April
CW van der Westhuizen	March
H Jordaan	March
F Chiramba	April
MG Barnard	March
AG Hartzenberg	April
QL Grix	March
R Muller	March
C Nyoni	March
R van Heerden	May
E Kleynhans	April
Y Rajpal	March
JC van Zyl	March
T Zvarivadza	March
RWD Kersten	April
MDG Salamon	May
TO Hagan	March

Personality of the Quarter

Sifanekiso 'Fanta' Sibanda



Full Name: Sifanekiso 'Fanta' Sibanda

Position: Unit Manager Rock Engineering

Company/Organisations: Sibanye Stillwater Platinum

Date and Place of Birth: 24th of October in Bulawayo, Zimbabwe

Education:

- MSc Mining Engineering (Applied Geotechnics), Camborne School of Mines, UK. Graduated cum laude.
- BSc (Hons) Mining Engineering, University of Zimbabwe, Zimbabwe. Graduated summa cum laude with a distinction.

First Job: Graduate Mining Engineer with Anglo American Zimbabwe

Personal Best Achievement/s: My best achievement is yet to come. I am always looking to achieve more tomorrow than I did today and strive to improve myself all the time. However, I am most proud of the work I have done in developing young graduates and seeing them becoming competent Rock Engineers who have made great contributions to our profession.

Philosophy of Life: Always look on the bright side of life. Adopted this ethos after I watched Monty Pythons' Life of Brian countless times.

Favourite Food/Drink: I am very partial to a glass of good cognac. I enjoy traditional African food such as intloko, ulusu, umngqusho.

Favourite Sport: Generally, I'm a petrol head, so Formula 1 racing and any other motorsport is a favourite. Although I was terrible at athletics, I enjoy watching athletic events such as the IAAF diamond league.

How did your career in the mining industry begin and where are you now?

I became a Mining Engineer by accident really. At high school, I was good in STEM subjects and I knew I wanted to do something in the engineering field. Mining Engineering sounded more exotic than civil or mechanical so I chose that. I never had any career guidance whatsoever growing up but I'm glad I ended up in something I enjoy. I am currently in charge of the Rock Engineering function for the Sibanye Stillwater Platinum mechanised operations.

Why did you choose Rock Engineering?

Like every Mining Engineer, I had the opportunity of experiencing the different disciplines within Mining Engineering. I discovered I did not have the temperament suitable for an operations Mining Engineer. My academic tastes have always been eclectic and Rock Engineering taps into so many skillsets such as geology, mining, mathematics, physics, materials science and so on. It's a perfect fit for me.

Please tell us a bit more about your career journey?

After completing my BSc., I worked as a graduate trainee at a couple of Anglo American mines in Zimbabwe. In 2004, I was fortunate to be awarded a Chevening Scholarship by the British Council to pursue MSc. studies at the Camborne School of Mines in Cornwall, UK.

While doing my MSc., I was invited for interviews with Anglo American in the UK. I was successful and was given a choice of where I wanted to be deployed within the Anglo global operations. I chose SA as this was closer to home. I came to SA in 2006 and while doing experiential rounds in the different departments, I spent some time with Graham Priest who was then the Chief Rock Engineer.

I had a great relationship with Graham and he encouraged me to join his department as a trainee SCO. I got my SCO certificate a few months later and within a year of that, I had passed my COMRECC. I will be the first to admit that at that time I was not ready to be appointed on a shaft and had a steep learning curve to negotiate, but I am grateful to people like JC van Zyl who gave me a good grounding on practical strata control, Alan Olivier who took me under his wing for a few months to show me the ropes after I had passed my ticket, Graham Priest who believed in me and gave me a chance, Lucky Mnisi who helped me understand mining and how to handle relations with stakeholders such as the DMR. Subsequently, over the years, I got appointments at Anglos' Boschfontein Shaft, Townlands (now Khuseleka) and Waterval (now Bathopele) before my current role.

What are some areas that you believe will become of increasing importance in the near future of the rock engineering discipline?

Our mines are currently operating under unfavourable macroeconomic conditions. A lot of our operations are marginal if not loss making and it is becoming increasingly necessary for Rock Engineers to look beyond their narrow specialities and learn to take a holistic view when assessing problems and developing solutions. Tomorrow's Rock Engineer must understand mining and the impact of his/her decisions on the operation. SANIRE is doing good work towards this by having a blasting ticket as a pre-requisite for doing an SCO practical.

Although still a relatively new discipline, the current state-of-the-art of Rock Engineering is not too different from 20 years ago. Very little research and scholarship is being undertaken in our organisations. Added to this, very good research done by research institutes in the past has not seen the light of day in the mines. The increasing challenges we face (seismicity, FOG's, rockbursts) make it imperative that we undertake applied research in our operations and to ensure our organisations are attuned to adoption of research findings.

What advice would you offer people aspiring to be in your position?

Get to know what you're good at... and what you're not. Work on developing skills that will make you better at what you're not good at.

Who is your role model/mentor?

I have never really subscribed to the concept of a role model. I consider myself my own role model and I strive to be the best I can be. People from all walks of life inspire me with their different opinions, ideas and perspectives. I learn and acquire good things from the people I come across regardless of who they are; from a lowly RDO to a CEO.

What is the best advice you have ever been given?

You can never please everyone, so don't try to.



SARES 2019

SOUTH AFRICAN ROCK ENGINEERING SYMPOSIUM

26 JUNE 2019, MISTY HILLS, MULDESDRIFT, GAUTENG

TIME: 08:00 FOR 09:00

ABSTRACT CLOSING DATE: 1 MARCH 2019

PAPER SUBMISSION DATE: 3 MAY 2019



MISTY HILLS, MULDESDRIFT



A COLLAGE OF SOUTH AFRICAN ROCK ENGINEERING

ABOUT THE ANNUAL SARES SYMPOSIUM

The annual South African Rock Engineering Symposium will be hosted at Misty Hills, Muldersdrift following the ACG/SAIMM/SANIRE Deep Mining 2019 conference. This will allow attendees and presenters some international exposure.

SUBMISSIONS

ABSTRACTS - 1 March 2019

NOTIFICATION OF ACCEPTANCE OF ABSTRACTS - 8 March 2019

SUBMISSION OF PAPERS - 3 May 2019

ACCEPTANCE OF PAPERS - 31 May 2019

The day is unfortunately limited to 10 oral presentations. Other suitable papers will be allowed the opportunity to present at the poster sessions throughout the day.



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SAVE THE DATE



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BANQUET 2019



Date: 6 September 2019
Time: 18:00 for 18:30
Venue: TBC (Gauteng area)
Dress: Black tie
Cost: R 10 000 per table (10 seater)
(R 2 000 per couple)

Accommodation will be available (at own cost)
Dinner and entertainment will be included

Western Bushveld Branch Committee

Chair Person	Christiaan Van Rooyen
Deputy Chair Person	Nelson Mandlazi
Secretary	Edeshni Munsamy
Treasurer	Anna van Niekerk
Young Member	Ian Breedt
Suppliers Rep	Stephan Nel and Peet Swart

New Members

9 November 2018 to 6 March 2019

ASSOCIATE MEMBERS			
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2	J Koch	Associate Member	A723
3	AJ Voges	Associate Member	A728
4	L Mtekwana	Associate Member	A807
5	L Xaba	Associate Member	A808
6	D Muusha	Associate Member	A812
7	S Jack	Associate Member	A813
8	E Maluleke	Associate Member	A814

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SANIRE

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Vision:

To actively promote the South African Rock Engineering profession

Mission:

SANIRE promotes the advancement of the Rock Engineering discipline by encouraging and promoting:

Interest and the development of education in Rock Engineering

Professional practice and high ethical standards

Networking, collaboration and information exchange

Research areas

Values:

- Honesty
- Integrity
- Professionalism
- Accountability
- Transparency

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The SANIRE Committee has decided to increase the advertising opportunities for suppliers who would like to market their business and products in the Rock Talk.

The table below indicates the prices for different size advertisements as well as bookings for the future.

Please contact Alida Hartzenberg for more details

Alida.hartzenberg@lonmin.com

Type of advert	Rates (Excl. VAT)
	Solus, Casual
Square (Not front page)	R 1 000
Skyscraper (Front page)	R 4 000
Full page (Middle)	R 8 000

Editor's Corner

This is your newsletter and I would like to hear from you.

If you have any information or stories that we can use, please submit them via email to

alida.hartzenberg@lonmin.com

Your feedback will be highly appreciated.