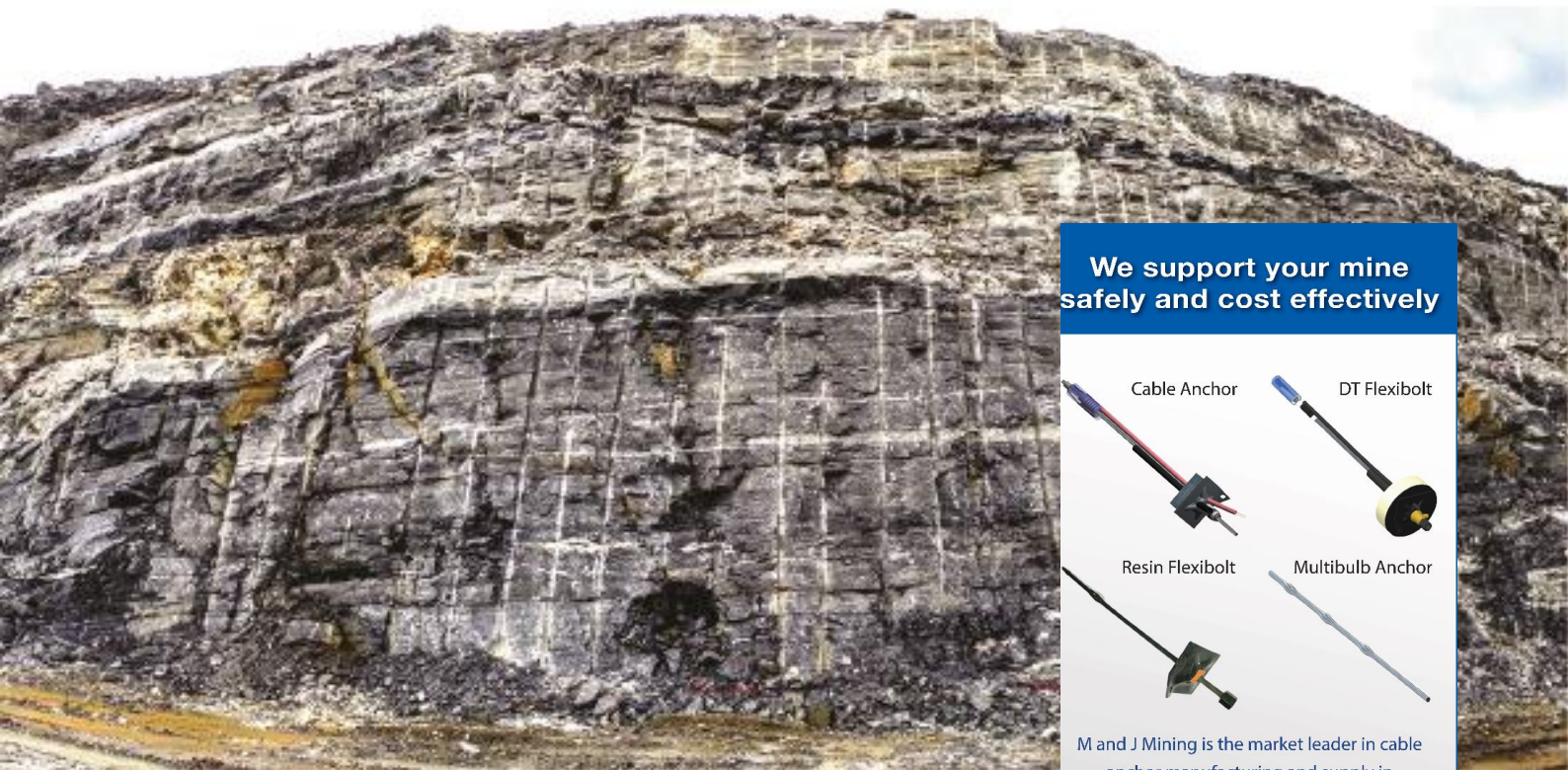
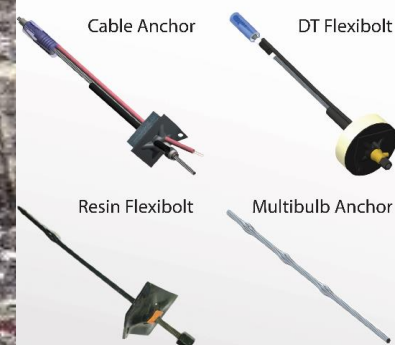


ROCK *talk*

Volume 7, Issue 4 | December 2021



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PRESIDENTS CORNER

As we It is with great excitement that I write the last Presidents corner for 2021.

This time of year is generally a time where we can reflect on the accomplishments achieved during the year. I will not waste this opportunity to reflect on some of the highlights of this institute in 2021, but regrettably, before I can share the highlights of SANIRE, I need to remind us that the South African mining industry have had a less fortunate year with 60 fatalities in total of which 32% of them are related to rockfall and rockburst. One cannot help to feel saddened by the losses of life and disappointed by the poor performance in comparison to previous years.

WHAT'S INSIDE

- Presidents Corner
- New ticket holders
- Lest We Forget

- ISRM News
- SANIRE Branch News
- Rock Star of the Quarter – P.A. Mulenga

PRESIDENTS CORNER

There are many reasons and explanations of this inadequate occurrence, it will even differ from one operation to another. The fact remains that it is unacceptable, and we have not yet reached success in this regard.



On a lighter note, SANIRE continued to demonstrate resilience through the covid pandemic and managed to have quite an eventful year:

The new Council was elected and started their term at the beginning of July. The branches have also elected new committees during their year-end functions. I would like to thank every member who has made and are still making themselves available to serve the institute and SANIRE members on the previous and new committees.

The Education workshop hosted at Kloof training centre brought candidates and examiners together to discuss the current concerns with the examinations and was aimed to evaluate and review the guidelines based on these consultations. The revised examination guideline, SCO practical and RE practical guidelines are available on the website to download.

The slope stability seminar was hosted in partnership with the SAIIEG in February and it was great to shift the focus again to surface and civil engineering industries. Webinars, the virtual AGM and RockBowl had all a great attendance due to it being easily accessible and in line with current covid protocol. Therefore, it makes sense to host more of these events in 2022 on virtual platforms.

Congratulations to all the candidates who have obtained the Minerals Council SCO and RE tickets in 2021. The May and November exams continued as planned, with 32 x SCO's and 13 x RE's who have obtained their tickets. A special acknowledgment to all the mentors who have guided and invested time into these candidates and SANIRE urges more mentors to step-up and invest in our younger generations of future geotechnical and rock engineers. Obtaining a ticket is a great achievement, but it comes with an even greater responsibility. SANIRE governs a set of values that encompasses Integrity, Honesty, Professionalism, Accountability and Transparency. Furthermore, one should always strive towards continuous improvement to advance oneself and the rock engineering discipline. We must not forget in order to reach our potential that every achievement makes up a portion of our complete journey

On a more social side, the golf day was a great success, along with the sponsorship of the day made it fun and unforgettable.

Finally, the year has ended on a high note, or rather a high mountain as the Council and former presidents had the president's forum at the Harties cable way. It was great for the Council and former presidents to meet for lunch to become nostalgic about the institute's origins, but also to share valuable lesson learnt through time.

Despite all the up and downs, I hope that 2021 has been a successful year for you too.

SANIRE appreciates every member who have made time to contribute towards the institute, either being an organiser, attendee, sponsor, presenter, mentor, examiner, host, committee member or Council member.

Enjoy the holiday season! Be safe and stay safe.

SANIRE greetings

Lizelle Prinsloo
SANIRE President



SANIRE
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ROCKtalk

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Prof. Seokwon Jeon from the Republic of Korea elected ISRM President for 2023-2027

The election took place during the ISRM Council meeting on 17 November 2021. The President-elect will now join the Board and will assume the Presidency of the Society after the 15th International Congress on Rock Mechanics in October 2023.

[READ MORE](#)



OTHER ISRM-SPONSORED EVENT DETAILS

ISRM SPONSORED CONFERENCES



International Society for Rock Mechanics
and Rock Engineering

Forthcoming Conferences (9 conferences will be held in 2022):

- **TUNIROCK 2022** - 2nd Int. Conf. on Advances in Rock Mechanics, 26-28 March 2022, Hammamet, Tunisia
- **MAG** - 5th Symposium of the Macedonian Association for Geotechnics, 23-25 June 2022, Ohrid, Macedonia.
- **RocDyn-4** - 4th International Conference on Rock Dynamics, 17-19 August 2022, Xuzhou, China.
- **SBMR2020** - 9th Brazilian Rock Mechanics Symposium, 23-26 August 2022, Campinas, Brazil.
- **EUROCK 2022** - an ISRM Regional Symposium, 12-15 September 2022, Helsinki, Finland.
- **10th Nordic Grouting Symposium**, 4-6 October 2022, Stockholm, Sweden
- **LARMS 2022** - Latin American Rock Mechanics Symposium - the **2022 ISRM International Symposium**, 16-19 October 2022, Asuncion, Paraguay.
- **ARMS12** - 12th Asian Rock Mechanics Symp., Hanoi Vietnam, 22-26 November 2022
- **AusRock 2022** - 6th Australasian Ground Control in Mining Conference - an ISRM Regional Symposium, 29 November – 1 December 2022.
- **15th ISRM International Congress on Rock Mechanics** - 9-14 October 2023, Salzburg, Austria
- **Eurock2024** - 15-19 July 2024, in Valencia, Spain
- **ARMS13** - 13th Asian Rock Mechanics Symposium – 24-28 September 2024; New Delhi, India



15th ISRM CONGRESS

*Challenges in Rock Mechanics and
Rock Engineering*

SALZBURG – AUSTRIA
October 8th – 14th, 2023



CONGRATULATIONS TO THE NEW TICKETS IN STRATA CONTROL

Following the Strata Control Officer held in October 2021, the following persons have obtained their Strata Control Certificates

STRATA CONTROL PRACTICAL PASSES OCTOBER 2021



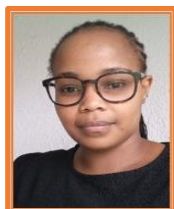
A Sambo
Exxaro Coal



K Manyelo
Sibanye Stillwater
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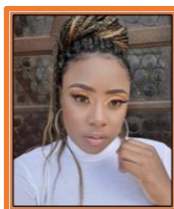
R Maila
Seriti Coal



M Langa
Harmony Gold



S Mulchand
Anglo American



L Dube
Anglo American



T Mamosebo
Anglo American



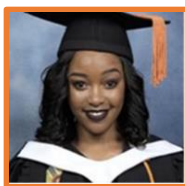
S Pentasaib
Sibanye Stillwater
Gold



Lindiwe Zondo
Royal Bafokeng



T Phukubje
Royal Bafokeng
Platinum



M Khoele
Seriti Resources



K Mashaba
Seriti Coal



L Motlhake
Anglo American



R Mokgohole
Anglo American

CONGRATULATIONS TO THE NEW TICKETS IN ROCK ENGINEERING

Following the Rock Engineering examinations, the following persons have obtained their Rock Engineering Tickets.



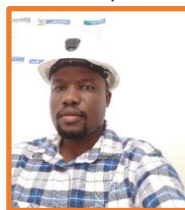
R Moyake
Harmony Gold



N van Wyk
Sibanye Stillwater



D Boke
Harmony Gold



W Chinogureyi
Zimplats



A Mapuranga
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“LEST WE FORGET”



I count myself fortunate to still remember what the “Lest We Forget” message means, that is shown on our public bus service here in Vancouver, and how the sacrifice of so many persons from many countries on the planet, has contributed to the

lifestyles that many of us enjoy today. However, the title of this article is specifically related to the South African Rock Engineering discipline (I do acknowledge that it is now just past the 10-year mark that I left South Africa, so perhaps things have changed that may render the content of this article archaic: I'd like to think it is still relevant).

Before I forget, I was thinking about an experience that happened to me shortly after I graduated (I had a long university career ☺), having commenced working on Anglo American's Vaal Reefs Gold Mine (it actually had a longer name at that stage) as a mining learner official. Newly graduated mining engineers were privileged to attend many “management development” programs, and this particular one was hosted at Maccauvlei (an Anglo American training facility). I honestly cannot remember the course name (shows what an impact it made to my career), however what I do remember is the following. The course facilitator enquired of each of our course delegates what vehicle we drove. Most people drove new model vehicles (Volkswagen Jetta, Audi, Mercedes, etc.), and I drove a 1972 VW Beetle. The course facilitator told me: “You'll never be successful, because in order to be successful you need to portray success”. I could never figure out what yardstick her definition of “success” was measured against.

It finally dawned on me this morning that the course facilitator should've used a different yardstick; i.e., reliability vs flashiness. I can almost guarantee that those newer, flashy vehicles possibly never lasted as long as my Beetle (which I sold about 5 years later; by then it was 26 years old). I do acknowledge that I spent many hours constantly maintaining my Beetle, however it was the most reliable of the vehicles of my fellow Shift Bosses (Mine Overseers had company vehicles which were maintained by Vaal Reefs).

This brings me to the “Reliable” vs “Flashy” Rock Engineering Practitioners (REPs) that I have seen in my now more than 25 years within the Rock Engineering discipline. What I can proudly acknowledge is that South Africa's Rock Engineering training develops the fundamentals of a “reliable” Rock Engineering Practitioner, and it is then up to the individual to choose the path of reliability or flashiness (a short-lived “spark”; lived being in terms of expertise offering). I have seen many practitioners that have put in tremendous efforts to obtain their Rock Mechanics Practitioner's Certificate, RMC, (not an easy feat), and then sat back on their laurels and never developed their expertise/knowledge any further. In my opinion, it is a real pity, as the RMC provides the fundamental training, and thereafter the growth and development in this discipline commences. I have a colleague who has a PhD in Rock Mechanics, and he has only ever conducted designs using spreadsheets and numerical models. The concept of support resistance calculations and designing tendon-based ground support systems was an alien concept to him, and now he still practices calculating with a calculator instead of using spreadsheets developed by others or numerical models.

More on this later, as I have a personal opinion about what should be reintroduced into the South African Rock Engineering discipline.

To get back to the title of this article, a recent emailed conversation with my father (Roger More O’Ferrall), who is still my life and Rock Engineering mentor, prompted me to write this article. There are a number of topics which I’d like to cover, and hopefully at least one may enlighten or encourage you.

Code of Practice

When Rock Engineers refer to the Code of Practice, we must be specific to which Code of Practice we are referring to; i.e., there are numerous codes of practice related to many different disciplines, so our reference to the Code of Practice to Combat Rock Fall and Rock Burst Accidents in., or for Surface Mines, etc. (CoP). We need to be technically correct in our communications (examples of this to follow later).

I was fortunate to be informally involved in the drafting of the CoP Guidelines, whilst working as a Mining Engineer on production when the guidelines were being drafted. My father was part of the drafting committee, and he regularly asked me to review various drafts to see if they made sense and where some issues may be better covered. Therefore, I was privy to the “spirit” of the CoP. Unfortunately, many persons in the mining industry when the CoP Guideline was published, and the compilation of the CoP became mandatory, saw this as a finger-pointing/blame exercise, instead of identifying that it was providing guidance on actually addressing root causes of rock falls and rock bursts, or slope failures, and developing strategies to address these hazards. I’d like to think that the mining industry has matured and this misperception has dissolved.

I have recently reviewed a number of CoPs, and a number of common misconceptions appear to have crept into the development of the CoP.

The guidelines are very specific that the “owner” of the CoP is the General Manager, whose duty it is to form a CoP drafting committee (which should incorporate the relevant technical department representatives, relevant mining representatives, representatives from the various unions on the shaft, and well as the Safety and Health Committee). What I have noticed, and this is not new, is the Rock Engineer assumes it is her/his responsibility to draft the document. I have no idea where this misconception arose, i.e., the Rock Engineer’s input into the document is a small, albeit relevant, part.

This misconception is not only held by the Rock Engineer. I was once part of a delegation to the Mine’s Inspectorate to Klerksdorp, when the Chief Inspector, in front of Lonmin’s

Senior Executive which included the Chief Operating Officer, asked me “Mr Rock Engineer, where is the Code of Practice for the Opencast operations?”. My response was: “Chief Inspector, ask the General Manager, as it is his document.” This was not seen favourably by Lonmin’s executive, thinking that I had thrown the General Manager under the bus. However, the Chief Inspector acknowledged that I was correct (the document actually only required a few more items to be addressed, which was up to the GM to address, and then sign the document and provide a copy to the Chief Inspector). Therefore, my advice to the current and the up-and-coming Rock Engineering practitioners, is that you read through the “Guidelines” and familiarise yourselves with your required inputs, and address only those specific to you (i.e., do not assume that you are the Chief Geologist and write the geology section, etc.).

Before I leave this topic, there is one other misconception that appears to have crept into the Drafting Committee section. “Affiliation” in the context of the CoP does not mean professional membership, e.g., SANIRE, Association of Mine Managers of South Africa, Engineering Council of South Africa, etc. “Affiliation” in this context, refers to “Unions” (e.g., NUM, Solidarity, AMCU, MWU, etc.), “Safety and Health Committee”, “Management”, etc. This document is to be drafted by the entire committee which is to incorporate representation from all those whose members/staff, are held responsible and accountable for various activities to address the strategies identified to eliminate or reduce the risks associated with rock-related instability.

Technical Correctness

As a technical discipline, it should be expected that we use correct technical terms and references when communicating either verbally or in the written form. I have used the following to identify the difference in an often incorrectly cited term, i.e., rockbolt.

Terminology

A couple of decades ago there was a civil court case following a mining rock fall fatality (the case was referred to court). The Rock Engineering Practitioner (REP) who was summonsed to testify had retired many years previously, but the fatal had occurred in a working place where he had made the ground support recommendations. This person had recommended 1.5m long **rockbolts** as the tendon support unit. During the court case, the prosecutor held up a tendon that was of the type used in the working place, and asked the REP is this was the recommended support type, to which he answered “yes”. The prosecutor then went onto to explain to the REP this this was in fact a **rockstud**, i.e., it had threads on both ends of the tendon; one for the expansion shell unit and the other for a nut to tension the tendon. Therefore, ensure that what you recommend is correctly termed.

Lately I have also noticed that with the mechanisation into the hard rock mining environment, both mining and consulting personnel are referring to a “**Bord** and Pillar” mining method. The term “Bord” is a coal mining term, and the hard rock term should be “**Room**”. The term “room” is also often used in the coal mining industry, and this is acceptable.

Design

Since venturing in and out of consulting, I have also noticed the continued use of empirical design charts, which have virtually eliminated the common-sense development of an engineered solution to specific situations. I am by no means indicating that empirical charts do not have their place in early studies until more appropriate data is obtained, as they definitely do. I am highlighting the fact that the derivation of the charts should be better understood before drawing conclusions from making use of these. An example is the often-used Grimstad-Barton ground support design chart. What the person who makes recommendations based on this chart (or derivations thereto or modifications thereof) tends to forget is that these tendon lengths do not account for anchoring mechanisms, load-elongation performance, etc. which are fundamentals to design requirements.

Referencing

This year I read an article in a SANIRE newsletter where it stated, “The average hard-rock pillar stress was calculated using the **Hedley and Grant tributary area theory**”. I was gobsmacked by the incorrectness in this single sentence and was disappointed that its technical incorrectness was published in this newsletter which is available to international readership. In 1972 Hedley and Grant published an empirical **pillar strength** relationship for Elliot Lake Uranium Mines, i.e., the development of the Tributary Area Theory is not credited to either, or both, Hedley, and Grant, as they developed a pillar strength relationship specific to the Elliot Lake Uranium Mines (using a very small database). This brings me to the next topic.

Mentorship

I know that I have mentioned this previously, and the importance of this is the reason why I am mentioning it again. The “older” generation Rock Engineering Practitioners in the South African mining industry were in the fortunate position to have spent our formative rock engineering years in Rock Engineering Departments. This “luxury” ensured that we had hands-on mentorship opportunities to learn from those who were preceding us in this technical discipline. Times have changed, and “departments” are becoming more of an exception than a given. Therefore, many Rock Engineers will find themselves working alone or with limited experienced and “suitably qualified” peers. Unfortunately, some may find themselves pressured to provide technical advice outside of their “conscious” competence. Remember that “no” or “I don’t

know” are perfectly acceptable responses. If you don’t know, try to find a resource that would be able to address the issue that may at the time be out of your competence, and direct the request to that resource.

Again unfortunately, with the COVID-19 pandemic, we have lost many experienced, and seasoned, REPs, either indirectly because of one of the virus variants exposing another health issue, or because of other illnesses. All these persons were potential sources of mentors. It is up to those experienced REPs to make themselves available to mentor those still in the early stages of their careers (not necessarily early, but also mid-to-mature stages; after all, I am still learning, and have an idea of what I don’t know and need to know) who seek mentorship. What is important in this last sentence was “seek”. I have always been ready to share my knowledge and experience with those who have sought it, instead of merely “teaching” others, i.e., you need to be hungry to learn and develop, as this is the defining character of a “reliable” versus a “flashy” REP.

South Africa has produced many excellent researchers and academics, and some of these are still actively contributing to the Rock Engineering discipline. Again, I was very fortunate to have been in the discipline when many of the past researchers/academics were active, e.g., Nic Gay (he was my first boss between my military service and commencement of tertiary studies), Tony Jager, Terry Hagan, John Ryder, Prof Budavari, etc. Fortunately, John Napier, Francois Malan, Matthew Handley, Bryan Watson (and I’m sure there are others that I cannot remember at this time) are still around, and you are encouraged to learn from these excellent resources whilst they are still active in the industry/discipline.

One aspect that we REPs tend to forget is that we can also be mentored by those specialists who are in the supplier/manufacturing industry that supports our discipline. I was fortunate to have worked with a very dynamic entrepreneur, Paul McKelvey (founder of **New Concept Mining**), who assisted me in identifying potential solutions to Lonmin’s requirements. Paul would visit me and discuss the issues that Lonmin faced pertaining to rock-related instability, and during his travels from South Africa back to his home in the UK, would design conceptual solutions to the issue and discuss these with me. I learnt a lot from Paul, and appreciated the bolded term above, as he really did develop new concepts. Unfortunately, Paul was taken away from us at a relatively young age, and this dynamic appears to have faded with his passing.

Another dynamic resource/person who is still available to us is Don O’Connor (Minova). I still pick Don’s brain to this day, although I am based in Vancouver. Don once posed the following question to we REPs during a conference many years ago: “Tell we manufacturers exactly what you

require from us. We are making 3.5mm, 4mm, 4.5mm and 5mm thick bearing plates (face plates/washers) for tendons, and we'd like to know exactly which one it is that you require." To this day I doubt any REP actually provided him with an answer, because truth be told, we possibly didn't (and still don't) know. The issue, as I see it, is that REPs are provided with a "menu of offerings from which to choose", instead of determining what is actually required, and then seek a manufacturer of the product or somebody willing to partner in developing this "new concept".

I am sure that there are many other potential manufacturer/supplier mentors who are willing to share their unbiased competence with those of us in the Rock Engineering discipline. With conferences now being virtual, this has resulted in more isolation from potential networking, and therefore it is up to the "reliable" REPs to seek this mentorship (read technical papers or articles on both manufacturer and professional institutional websites, and then identify potential mentors who may fulfill your requirements for further development).

And finally...

Design

I mentioned about my colleague who had never designed a ground support system from first principles. I have seen this creeping into our discipline over the past decade and a half; particularly with the improvement in computer speeds and memory. Technology has improved, and unfortunately in many cases, this appears to have made engineers/REPs "dumber"; i.e., they rely on technology to provide them a solution to a problem without understanding the actual problem and what the solution may look like beforehand.

There are many numerical modelling codes that are marketed to "simulate reality and provide correct solutions", and therefore I am very often seeing REPs (I'm lumping the mining 'Geotechnical Engineers' and 'Engineering Geologists' into this definition too) running to numerical models very early in the design phase of a study. Most often, due to the lack of appropriate quality and spatial quantity of data, they construct and run a model and then present the results as the solution. I liken this to, and no offense to the vehicle manufacturers, taking Tata engine parts, and putting them into a Rolls Royce manufacturing facility and then assuming that you have a high-quality Rolls Royce as the end product; instead of a Tata that appears to be a Rolls Royce.

What is apparent is that when this practice takes place, that the REP has no idea of what s/he is doing and is taking a shotgun approach to finding (instead of developing) a solution, i.e., throw everything into the mix and hope to get one realistic solution/result. Numerical codes, if necessary,

should only be done at the end of a design cycle, and this is to support/verify that the analytic design is appropriate. If, with sufficient and appropriate input parameters, it does not verify the solution, then either the analytic solution was incorrect, or the model is incorrect, and the process should be repeated. It is important that, if a numerical model is required, to identify if a 2D or 3D model is required (although our problems are three-dimensional, sometimes a simple two-dimensional model is adequate), and the type of model (and limitations) to better simulate the reality for which you are trying to design a solution.

Once the design has been completed and implemented, one critical aspect is monitoring. The following are two examples of the lack of monitoring and reacting to issues in a timely manner led to closure of both mines.

Mine A was designed on a stable pillar system. During a routine mine inspection, it was noted that the pillars were punching into the footwall (footwall heave observed alongside the pillar walls). No investigation was conducted to determine the cause of the pillar punching, and hence no design change was made (possibly deemed necessary by the person responsible for evaluating the design; or possibly no finance provided to ensure that the investigative process could be followed). The mine collapsed three years later (fortunately nobody was injured).

Mine B, on a different continent, was also design on a stable pillar system. The mine's geotechnical engineering personnel were addressing numerous falls of ground from the crown of the drifts and attributed these to premature failure and corrosion of "Super Swellex" tendons, and hence focussed on rehabilitation strategies. However, it was identified that again the issue was that the pillars were yielding (a weak layer within the pillars was being squeezed out, and in one instance severe footwall heave was observed (these persons had never seen yielding or squeezing pillars before and assumed that this behaviour was normal). The failure in the drift crown was the result of the pillars deforming, and hence "buckling" the crowns. The mine has since closed due to a number of factors, the resign of the mining layout and ground support method being a key contributor.

Parting wishes

I sincerely hope that this article revives some drive towards reliability in most of our REPs; the operations and our clients (all those working in our mining environment and those affected by the safety/stability of the operations), without the "flashiness"; i.e., don't tell people how good you are, rather show them. I certainly hope that you will keep developing on your knowledge and competence in mining rock engineering during your entire working careers, and during this journey that you make use of the

opportunity of learning from others that are either involved directly in operational or consulting rock engineering, or support us in the form of manufacturing, research, or teaching. You are a “consultant” for your clients (whichever form they make take) and are responsible for providing them with the best advice you are able to or direct them towards somebody who is able to provide them with appropriate advice.

Please heed the path that those who have travelled ahead of us in our careers have paved, and do not try to reinvent the wheel. It is at our own peril if we, do not actively learn from those who have experience, or delve into “black box engineering”. Lest we forget.....

Gregory More O’Ferrall
Principal Rock Mechanics Engineer, Worley

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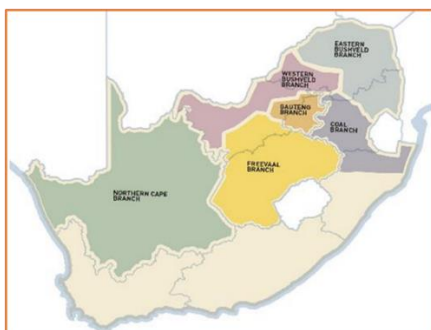
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SANIRE BRANCH NEWS



WESTERN BUSHVELD BRANCH

SANIRE welcomes the new WB branch committee who were elected on 24 October 2021 during the quarterly meeting. SANIRE is looking forward to the energy and commitment of this committee.

SANIRE wishes to thank all of those who have served on the past committee and the contribution they have made towards the members of SANIRE.

As the newly elected Chairperson of the Western Bushveld Branch, Edeshni Munsamy would like to sincerely thank the previous branch committee under the sterling leadership of Willie Liebenberg for steering the ship in the right direction and creating a solid platform from which, we as the new committee, can build. The WBB branch has reached new heights and we commit to articulate and drive the vision for our members to completion.



*From back left: Neil Kruger (Secretary), Peet Swart (Supplier representative), Stephan Nel (Supplier representative)
From Front Left: Edeshni Munsamy (Chairperson), Hlomani Mthombeni (Vice-Chairperson), Renard Pretorius (Young member/Technical visits Rep)*



GAUTENG BRANCH

The SANIRE Gauteng Branch held a year end technical evening on 24 November 2021 at Wits University and despite the circus created by the coronavirus, it was well attended.

The Gauteng Branch committee would like to extend a great thank you to our sponsors and speakers, TIMRITE - Gert Jansen van Vuuren, M&J Mining - Vernon Baptista and ARC Innovations - Cyril Attwell, WITS - Bryan Watson, Zwelinzima Thebethe for assisting with the venue and Robolt Technologies, all without whom the event would not be possible. To the members who make the effort to attend such events, an extra special thank you goes out to you.



Snippets from the evening



Newly elected GP Branch, from left to right: Ohveshlan Pillay (Vice Chair), Yolanda Chambati (Education and examinations), Katinka Cartes (Supporting role), Phumza Banjwa (Secretary), Vernon Baptiste (Supplier representative), Ross van Heerden (Chairperson), Thato Mathole (Technical Events administrator).

Not present in the main photo, top left and right: Adelaide Moganedi (Technical Events coordinator), Tafadzwa Chindedza (Treasurer)

FREEVAAL

SANIRE welcomes the new FreeVaal Branch Committee who were elected on the 19th November 2021 during the quarterly meeting which was held at Sand River Golf Club, Virginia. The meeting was well attended by the members and was a great opportunity to catch up with colleagues and friends since the last meeting.

SANIRE wishes to thank all of those who have served on the past committee and the contribution they have made towards the members of SANIRE.

As the newly elected Chairperson of the FreeVaal Branch, Louis Lochner would like to sincerely thank the previous branch committee under the leadership of Dr. Jaco Le Roux. The COVID-19 situation did not make it easier for the previous branch committee, but they have shown excellent leadership in these difficult times.



From Top Left: Chris Jooste (Young Member Rep), Abner Mashabela (Company Rep NW), Blackie Swart (Secretary)
From Bottom Left: Thapelo Mangali (Additional member), Theo Ferreira (Company Rep FS), Jerry Wienand (Vice-Chairperson), Louis Lochner (Chairperson)

EASTERN BUSHVELD BRANCH

The Eastern Bushveld Branch have also elected a new committee during their end of year meeting in November. Congratulations to the new committee. "I have known most of you for years now hence I am confident that you are more that capable and equipped to take SANIRE and our branch to new heights. Be passionate in your endeavours to uplift and uphold the fraternities' values and what we strive for. As outgoing chairperson, I will be eager to assist where I can and wish all of you the very best for the next two years and beyond", says Petrie Wessels.

Chairperson: Gunther Betz

Vice-Chairperson: Esavani Wessels

Company/Organisation: De Beers Group: Venetia Open Pit

Treasurer: Sampie van Buuren

Administrator: Ben Smit

Youth Development: Azwindini Makungo

Supplier Representative: Chris Brink



PAST PRESIDENT'S FORUM LUNCH

On 18 November 2021, SANIRE Council hosted, Past Presidents for a lunch at the Aerial Cable Way, Hartebeespoort Dam.



SANIRE GOLF DAY AT MAGALIES PARK GOLF COURSE

On 14 October 2021, SANIRE hosted a golf day at the Magalies Park Golf Course. Visit our website for more information www.sanire.co.za

Thank you, all participants and sponsors.



ROCK STAR OF THE QUARTER



Full Name: Prince Ajawa Mulenga
Company/Organisation: De Beers Group: Venetia Open Pit
Date and Place of Birth: 14 October 1989, born in Shurugwi, Zimbabwe (At Chrome Mines Hospital: guess mining chose me from that point on)
Education: MSc, BSc Mining Engineering (Wits), AREC and RMC (Open Pit)
First Job: Mining Geotechnical Engineer (intern) SRK Consulting extremely memorable times there.
Philosophy of Life: Do not fear failure, rather fear not trying
Favourite Food/Drink: Roco Mamas peri peri ribs slap different

Q. Favourite Sport:

Really splitting hairs here (Formula 1 just about edges cricket)

Q. Where is your favourite place to eat?

Did I mention Roco Mamas?

Q. What gets you out of bed in the morning?

Bills (lol)

Q. Do you have a favourite quote?

Absolutely, "It's for free" (pun intended), on a serious note, "What has reached you was never meant to miss you, and what has missed you was never meant to reach you."

Q. What is your favourite line from a movie?

"Why Fight When You Can Negotiate?"

Q. What is the best vacation you've been to?

Diani Beach (South Coast Kenya) can SANIRE sponsor a technical evening there?

Q. Do you have a favourite newspaper, blog?

Crypto Assets Blogs (reading about the future invented in front of our eyes)

Q. What is your favourite thing to do?

Chilling whilst browsing the web (there is enough to keep me engaged)

Q. What is your greatest fear?

Heights are freaky man

Q. What is your hidden talent?

I am literally the fastest eater you will ever meet.

Q. If you could interview one person (dead or alive) who would it be?

Steve Jobs the bloke was a top visionary

Q. If you could only drink one beer for the rest of your life, what would it be?

Is ginger beer even a legit beer?

Q. If you were an animal what would you be?

Dolphin, who doesn't want that infectious happiness?

Q. If you were on death row, what would your last meal be?

Let me have pap and a lot of meat thanks.

Q. If you were stuck on an island what three things would you bring?

Cell phone (anything that can browse internet really), form mattress and food

Q. What are 3 words to describe Rock Engineering?

Every mine's superpower

Q. What do you find the most challenging of Rock Engineering?

Reducing such a complex subject with so many variable inputs into a single acceptance number often Factor of Safety or Probability of Failure

Q. What do you like most about Rock Engineering?

It is the uncertainty and variability; it always has one thinking about what they are doing

Q. Why did you choose Rock Engineering?

I thought it was mentally stimulating (and I wasn't wrong), almost the cog of every mine, you get data and then deliver a mine isn't that just close to rocket science?

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

As mining operations are becoming marginal due to deeper orebodies and lower grades, value will be driven through rock engineering optimizations. So, data uncertainty and sufficiency studies together with risk/reward-based design approaches will increasingly become important.

Q. Who is your role model/mentor?

Prof Gordon Smith former Technical Executive Head at Anglo Platinum (both coach and role model, I see a lot of my drive and ambition in the road he traversed from mining engineering to rock engineering and then back to lead a technical role)

Q. What is the best advice you have ever been given?

Do not take life too seriously you will never come out of it alive anyway.

WE ARE LOOKING FOR THE NEXT ROCK STAR NOMINATIONS ARE NOW OPEN

WE ARE SEARCHING FOR THE NEXT ROCK STAR WHO IS GOING ABOVE AND BEYOND

Please send us your nominations of who you would like to see interviewed in the next issue of Rock Talk.

PLEASE INCLUDE THE FOLLOWING IN YOUR NOMINATION

- Name & Surname of Nominee
- Mining Operation of Nominee
- Designation of Nominee
- Nominee's contact details
- A short motivation as to why you have nominated the person.

FOR FURTHER ENQUIRIES OR TO
SUBMIT YOUR NOMINEE, PLEASE
SEND AN EMAIL TO:
info@sanire.co.za

The Rock Star award is given to up and coming younger generation rock engineers (younger than 35). The award acknowledges the valuable work individuals are doing in their fields to improve systems, technologies, mining practices and applications. These candidates are making a name for themselves in the industry by their interventions and participation, as recognised by their peers and colleagues.

Typically, one award a year will be given to a deserving individual at the discretion of the SANIRE Council. The award, consisting of a certificate, trophy and a 1 oz silver Krugerrand, will be presented by the SANIRE President at the annual general meeting.



SANIRE
SOUTH AFRICAN NATIONAL INSTITUTE OF ROCK ENGINEERING

ROCKtalk

WE ARE LOOKING FOR YOU

WE VALUE YOUR INPUT AND WE ARE
CALLING ON OUR MEMBERS TO
CONTRIBUTE CONTENT TO THE
SANIRE NEWSLETTER

**THIS IS AN OPEN INVITATION
CALL FOR ARTICLES**

If you are interested in submitting content for the next issue of **ROCKtalk**, please send us an email at info@sanire.co.za with your proposal along with a commitment date.

SUBMISSION CATEGORIES

- Industry Related Articles
- Academic Papers
- Case Studies

**SUBMIT AN ARTICLE AND
STAND A CHANCE OF WINNING**

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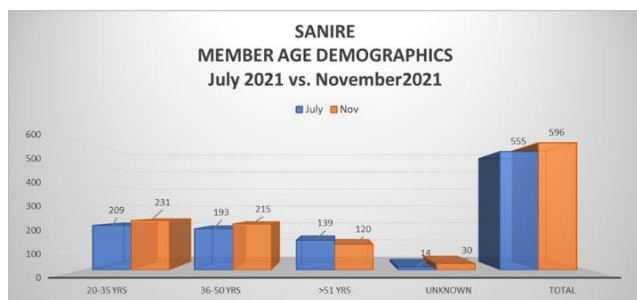
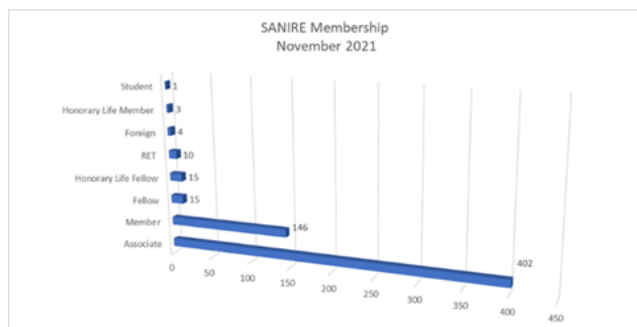


SANIRE
SOUTH AFRICAN NATIONAL INSTITUTE
OF ROCK ENGINEERING



Kevin le Bron
Vice-President

Branch Chairpersons
Louis Lochner – Freevaal | Ross van Heerden – Gauteng Branch | Edeshni Munsamy – Western Bushveld Branch
Gunther Betz – Eastern Bushveld Branch | Rofhiwa Phadagi – Coal Fields | Anton Gregory – Northern Cape



SANIRE VISION, MISSION, & VALUES

Vision
To actively promote the South African rock engineering profession.

Mission
SANIRE promotes the advancement of the rock engineering discipline by encouraging and promoting:

Values

- Honesty
- Integrity
- Professionalism
- Accountability
- Transparency

- Interest and the development of education in rock engineering
- Professional practice and high ethical standards
- Networking, collaboration and information exchange
- Research areas



EDITORS CORNER



This is our newsletter and SANIRE would like to hear from you.

If you have any information or stories you would like us to include in the next newsletter, please submit them via email to mbalenhleb@mpas.org.za, Thovhedzo.Gcuda@Seritiza.com and lizelle.prinsloo@angloamerican.com

Remember to visit all our media platforms.

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