The 121st Annual General Meeting of the Southern African Institute of Mining and Metallurgy was held at the Country Club, Napier Road, Auckland Park, Johannesburg on Thursday 16 August 2018.

**Welcome**

The President, Selo Ndlovu, extended a special welcome to the guests and representatives of our sister institutes and other associations, and also to recipients of awards, senior members of industry, Honorary Life Fellows, Past Presidents, our members, and other guests, among them the following:

- **Engineering Council of South Africa**
  - Cyril Gamede, *President*

- **Geostatistical Association of South Africa**
  - Christina Dohm, *Past Chairperson*

- **Minerals Council South Africa**
  - Roger Baxter, *Chief Executive*

- **South African Council on Automation and Computation**
  - Otis Nyandoro, *Past President*

- **South African National Institute of Rock Engineering**
  - Jannie Maritz, *President*

- **Women in Mining South Africa**
  - Tendani Lukhaimane, *Representative*

**Past Presidents attending**

- Nic Barcza
- Marek Dworzanski
- Henry James
- Rodney Jones
- Gys Landman

- Cuthbert Musingwini
- Joshua Ngoma
- Rams Ramokgopa
- Gordon Smith
- Dick Stacey

**Minutes**

The minutes of the previous Annual General Meeting, which were published in the September 2017 issue of the *Journal* and sent to all members, were confirmed.

**Obituaries**

The President announced the deaths, during the year, of the following members:

- **Honorary Life Fellows**
  - Oskar Steffen

- **Members**
  - Kevin McMillan, Miklos Salamon, Dee Bradshaw

- **Retired Members**
  - John Myles Fowlds

- **Associates**
  - Rendani Sirwali

In memory of the deceased and in sympathy with the bereaved, all rose and observed a moment of silence.

**Honorary Life Fellowship**

*Vaughn Duke*: Honorary Life Fellowship is awarded by the Council to Corporate Members of the Institute who have rendered outstanding service to the Institute over many years. It is my pleasure to announce that the Council has decided to award Honorary Life Fellowship to:

- **Michael Woodall**, for his outstanding service and support of the SAIMM over many years.

**Brigadier Stokes Memorial Award**

*Selo Ndlovu*: The Brigadier Stokes Memorial Award was instituted in 1980 to commemorate the outstanding contribution to the South African mining industry made by Brigadier R.S.G. Stokes, an Honorary Life Fellow and Past President of this Institute. This is the premier award of the Southern African Institute of Mining and Metallurgy and is made to an individual for the very highest achievement in the South African mining and metallurgical industry. It gives me great pleasure to announce that the award for 2018 is to be made to Michael Solomon Teke.

*Selo Ndlovu called upon Mzila Mthenjane to read the citation:*

Michael Solomon Teke was born in KwaThema, Springs in 1964 and holds BA (Ed) and BEd (University of Limpopo) 1985-1989; BA (Hons) (Rand Afrikaans University, now the University of Johannesburg) 1995-1996; and MBA (Unisa) 1999-2002. He started his career as a school teacher in 1990, and in 1992 joined Unilever. In 2000 he moved to BHP Billiton, where he rose to the position of Vice President of Human Resources at Ingeve Collieries. He was appointed Head of Human Resources at Impala Platinum in 2005.

Mike served as a Director of Zimplats Holdings Ltd. from January 2006 to February 2007. He was a Member of the IPM from 1992 to 1998, completed a Human Resources Management Programme at IPM in 1992, and has completed a Professional Certificate in Management and an Advanced Diploma in Management through Unisa-SBL. He is a Fellow of the SAIMM.

In 2008, Mike left Impala to be one of the founding members Optimum Coal, a 71% black-owned company whose shareholders included Mlungisi Kwini, Tom Borman, Peter Gain, and the late Eliphus Monkoe. Optimum was listed on the JSE in 2010, with Mike as CEO, after acquiring Optimum Collieries, a stake in Koornfontein Mines, and a stake in Richards Bay Coal Terminal (RBCT) from BHP Billiton. Optimum was South Africa’s fourth-biggest coal exporter and was intended to form the foundation for a black-owned coal mining and exploration group, but was acquired by Glencore in 2012. Mike resigned as CEO, but stayed on in the role of Non-Executive Chairman until April 2015.
He became Chairman of the Richard’s Bay Coal Terminal in 2012 and is currently serving as an Independent Non-Executive Director. Mike is the founder, Executive Chairman, and controlling shareholder of Masimong Group Holdings, a diversified investment company formed in 2015. Masimong focuses on financial services, energy, agriculture, and industry, and is a member of the Serati Resources consortium, which recently acquired Anglo America’s Eskom-tied thermal coal mines. Among his other interests is Dedicoal, a service-based mining and beneficiation vehicle that is active in the South African mining sector.

Since his days as an active CEO in the listed equity of the corporate world, Mike has contributed to various associations and educational bodies and has developed and grown his own business interests. He is Vice Chairperson of Council at the University of Johannesburg. He was appointed Vice President of the Chamber of Mines in 2011 and served as President of the Chamber from November 2013 to May 2017. Mxolisi Mgojo, CEO of Exxaro Resources and incoming President, paid tribute to Mike for his ‘…exemplary leadership of the Chamber and his invaluable contribution to the mining industry during extremely challenging times. His inspired leadership and firm belief that mining really matters for the growth, transformation, and development of South Africa has been instrumental to the industry’s drive to achieve growth and transformation and governance outcomes that are in the national interest.’

Throughout his career, Mike has responded diplomatically to the pressures facing the mining industry. ‘I don’t like being confrontational, particularly in the public space,’ he says. However, he is not averse to speaking his mind when necessary. In 2014, when the mining industry came under pressure from then minerals minister Ngoako Ramatlhodi on disagreements over the achievement of Charter targets, Teke, who was then Vice President of the Chamber of Mines, said: ‘There is a commitment and will, from our side, to transform, but it is not a flat easy thing to do as some black partners will sell their stake to make money while other empowerment shares are under water’. In 2015, when President of the Chamber, he defended the organization against the accusation that it had ‘no backbone’, saying that the Chamber’s role was advocacy. ‘Successful advocacy depends on finding the delicate balance that puts SA first but creates an environment in which the mining sector can function optimally’, he stated. And, in his address at the Chamber’s AGM in 2017: ‘We have stood resolute in our desire for achieving growth and transformation and governance outcomes that are in the national interest. We must have the courage and fortitude to continue pushing for what is right in our country and to get the South African dream, as encapsulated in the NDP, back on track.’

Parentless from an early age, Mike was raised by his grandmother, who he regards as one of the major influences in his life. ‘My grandmother always said that if you want to make a difference you have to wake up and act … early to bed and early to rise makes a man healthy, wealthy and wise. I still live by that credo. I could have easily been a negative human being as I grew up in an ordinary family that did not have enough, and as an orphan I could have taken a back seat in life, but I have always stayed the course and I am always positive and am driven’. He is also inspired by Philip Hechter, Ram Charan, author Jim Collins, and the late Steve Jobs. His personal key to success? ‘The ability to master the art of simplifying complexity. This is what life is all about. Hard work has never killed anyone. Don’t be afraid to learn. Just work, deliver, and stay focused!’

Vaughn Duke called upon Mike Teke to come forward to collect his award from Selo Ndlouv. The following is an edited version of his acceptance speech:

‘The President Professor Sehlisele ‘Selo’ Ndlouv, Past Presidents, members of the Institute of Mining and Metallurgy, honourable guests, distinguished ladies and gentlemen.

Good afternoon.

Its August, a month designated for Women, but I believe we should dedicate 24/7/365 to women.

In the name of Zero Harm, we must be relentless in our drive to make our mines safe all the time. We presently sit with 55 Fatalities versus 42 this time last year. It is a good thing that at the outset of the long journey called life, we are ignorant of the trials and tribulations that await us on that unpredictable road. I like to say, I was lucky. I was lucky because I was born on the wrong side of the tracks, where I personally learnt that privilege is the enemy of progress. Today, I am honoured to receive the Brigadier Stokes Memorial Award 2018, which was previously received by the greats of the mining industry, great men such as Mr Sipho Nkos, Mr Patrice Motsepe as well as Harry Oppenheimer and a great many others.

I was born in a place called Masimong or Masimini, in KwaThema, Springs. I believe that it is its harsh winters and the warmth of its people that carved me into the individual that I am. In many ways, I represent their hopes and fears. We hope for a better life for our children, community, and ourselves. And we always fear that poverty, which is something I know so well, is always lurking around the corner.

First, let me tell you about the harshness of KwaThema. The winters are cold, and the cold pierces through the bones. When I was a younger, every day before sunset, you had to make sure that the wood had been chopped and the coal collected to make a fire in the coal stove. Coal was fuel not only for the household, but for the community. There were people like Mr Mathunjwa who had a coal business. Without people like him there was no eating, no heating, no washing — because you had to put the kettle on the stove in order to get hot water to wash for school, and in the case of adults, in order to go to work. Coal was sold on horse-drawn carts, and you knew that it was coming because invariably the coal-sellers would sit in the cart and shout — Yooyooyoyooyo. Some would use a bell, sing, shout… do something to let people know that the coal-cart was passing by. When we were kids, cars were very few. So we would run out and hold on to the back of the coal cart, letting your legs hang in the air, just to be on something that is moving on four-wheels. It was dangerous but it was fun.

We always knew that coal was both dirty and dangerous. Coal caused death through carbon monoxide poisoning. There were instances where children woke up at the crack of dawn to light up imbawula, or the brazier and bring it into the room. Needless to say, the ventilation is poor in a single
that always been the dilemma of coal — cheap, dirty, and deadly. Nothing has changed much, even in these the days of environmental awareness. At Seriti alone we employ a number of coal miners, and they are responsible for 5 times that. Their children have to go to school, hopefully under very different circumstances to what I experienced. Shareholders of mining companies are largely pension funds which take care of the savings of retired teachers and nurses and the general public.

The coal dilemma is indicative of the challenges faced by management these days. Management challenges are not between right and wrong, but between right and right, as the Harvard scholar and ethicist Joseph Badaracco argues in his book, *Decisive Moments*. We cannot look at decision-making from a single perspective. We have to look at the impact it has on the environment in which we live, the employees and communities, the country, the shareholders — who are the pension funds of the people as I said earlier.

Our most pressing role as leaders in the mining sector is to stop the bleeding of jobs. When mines close down, they lead to ghost towns and untold suffering. This cannot be achieved by wishes alone. It requires serious engagement among all players. The underlying principle should be that this is our country, we should take pride in it, but most importantly, we must remember that a nation is in good hands when its old people plant trees whose shade they will never enjoy. We should ask the question, which trees are we planting or are we harvesting even before we sow? Are we making sure that in the future there will be new recipients of this august award or are we experiencing its last days, which would be a great pity?

Armed with the vision of the future that we want to create, the mining industry, together with the government of South Africa, should look seriously at strategies of restoring the local industry's global leadership. For instance, a few years ago cars were some of the major polluters. Today, thanks to filters and major progress in science, cars have clean technologies. The countries that are original equipment manufacturers in the automotive sector, such as Germany, are enjoying strong economies underpinned by robust growth.

Likewise, our country should invest in filter technologies that will make power stations emit well-filtered and cleaner air. We need good, reliable power stations if South Africa is to create jobs for the millions of its youth. As things stand today, you cannot power a smelter with wind turbines or solar power.

First we must start at home. Our trading partners, particularly China and the USA, have what they call the Africa strategy. They are actively investing in the continent while we argue and debate about small stuff. We should be active participants in the development of our continent. Mining built cities such as Johannesburg here in South Africa, and we must have a plan on how mining will build better cities throughout the continent. So that most children can have a better life than my childhood and certainly a better future. At this time, ladies and gentlemen, our country's mining industry is facing critical challenges that require strong leadership with an unselfish commitment to enhancing its performance so that it is able to compete more effectively with other global mining jurisdictions. I am convinced of our ability to compete meaningfully with the United States, China, Canada, Australia, as well as all of the mining sectors that we find elsewhere on our own African continent.

Ladies and gentlemen, I am both honoured and privileged to be here at what is a truly auspicious event and at which I am to be the grateful recipient of an equally auspicious award. And for it I am enormously thankful to my grandmother, Dorothy Teke, who took on the responsibility of raising me with a disciplinary approach concentrated on the value of hard work and integrity. Very little changed when my grandmother passed on and my sister Maria stepped into her responsibility authoritative shoes. It was my additional good fortune to receive support from the broader family and friends. Again, I am deeply indebted to my sister who to all intents and purposes became my mother and has fulfilled that role right up to today. I emphasise, my family is big and virtually all of them supported me. I am eternally grateful.

I thank the Institute and all of its distinguished members for giving me this esteemed award and I intend dedicating it in the first instance to my grandmother, Dorothy Teke, who never wavered in her profound commitment to raising and providing invaluable guidance to an orphaned grandson. It is dedicated as well to my sister Maria and to my wonderful wife, Sandi. All three of these ladies have been infallible pillars of support throughout my life and they occupy a very special place in my heart.

Ladies and gentlemen, I stand here this afternoon as a proud South African who has earned recognition as a long-standing member of the South African mining community. I remain committed to making a positive difference to the industry.

Earlier I spoke about the unpredictability of the journey. There is a saying that if you have to go fast, go alone, but if you want to go far, go with someone. I’ve been lucky to have met my beloved wife of 26-years, Sandi, who has been my constant companion and invaluable guide and adviser. Sandi knows better than anyone else both the painful times that I have endured, and the good times that I have enjoyed. She is here today to share the honour that has been bestowed upon me and with your indulgence, ladies and gentlemen, I want to thank her for always keeping the home fires burning. Thank you also Sandi for taking care of our two lovely children - our son Boikano and our daughter Tshiamo. I woke up one day wanting to take them to school when it dawned on me that I was too late. They had completed matric, were young adults and I had hardly noticed. Why? Mainly because I was consistently busy marvelling at the massive yellow equipment in front of me, the draglines on the horizon and the different stopes and panels at operations with which I was associated.

In conclusion, let me say that I am acutely aware of the distinguished work performed by the Southern African Institute of Mining and Metallurgy and the value that comes out of the Institute’s deliberations. I know most of the key people in this organization and I believe that you still have a major role to play in shaping the future of mining in our country.

Thank you for recognizing me.
Presentation of awards, medals, and certificates

Vaughn Duke announced the following awards, medals, and certificates, which were presented by Selo Ndlovu.

50-year Membership Awards
(with effect from 1 July 1967 to 30 June 1968)

- Hendrik George Albertyn
- Nicholas Adrian Barcza
- Alan George Cameron Merson
- Peter John Cook
- Claude Victor Bruce Cunningham
- Noel Cain Joughin
- Robert Arthur Lindsay
- Herman Egbertus Lombard
- Montaque Cholmondeley William Morris
- William Alan Nairn
- Andrew David Ochse
- Mervyn van Rynveld Steyn
- Hans Helmut Stotko
- Peter Stenhouse Wentworth

We also have a recipient who was unable to collect his badge last year, who requested to receive it at this year’s AGM.

- David Robert Fleming

The Danie Krige Memorial Award

The Danie Krige Memorial Award was instituted in 2013 to honour the memory of Professor Danie Krige, who was one of South Africa’s most influential mining engineers and a geostatistician of international repute. The Danie Krige Memorial Award is considered for the best geostatistical paper published in the SAIMM Journal between January and December 2017.

There was no award this year.

Gold and Silver Medals

Papers published in the Journal from March 2017 to February 2018 by members of the Institute were considered for medals.

Gold Medals

Gold medals are awarded for papers that are of a world-class standard, and judged to be publications that will become key references in their mining or metallurgy field in the future.

No awards were made.

Silver Medals

Silver medals are awarded for papers that make a major contribution to the professions of mining and metallurgy and to the prestige of the Institute.

Silver Medals were awarded to:


As non-members, V. Coetzee, K. Soldenhoff, and J. Quinn received certificates of merit.


Presentation of Student Prizes

Vaughn Duke announced the student winners of the SAIMM Prestige Prize and Selo Ndlovu presented the awards to the students adjudged by their departments to be the best final-year students in 2017.

University of the Witwatersrand

Mining Engineering: S. Motha
Metallurgical Engineering: M. Dlamini

University of Pretoria

Mining Engineering: J-P. Labuschagne
Metallurgical Engineering: J. Wicks

University of Johannesburg

Mining Engineering: No award
Extractive Metallurgy: R. Moanakoena

The following SAIMM student prizes were presented at the Western Cape Branch AGM on 3 September 2018.

University of Cape Town

Best final-year student
Mineral Processing: V.L. Dzimanhete
Mineral Processing: D.S. Goho

University of Stellenbosch

Best final-year student
Mineral Processing: C. Laker

Cape Peninsula University of Technology

Best final-year student
Mineral Processing: R. Mapfumo

The Western Cape Branch also awards two Outotec postgraduate scholarships for students conducting research in the area of sustainable mineral processing, but there was no award this year.

SAIMM 5 Star Incentive Programme

The SAIMM 5 Star Incentive Programme was introduced in 2015 to thank members who contribute to the growing membership of the SAIMM and to provide additional benefits to Fellows and Members of the SAIMM. The following will receive free attendance at the Annual Banquet in 2019.

The Top 5 proposers were:

Darius Muma
Gangatha Dabula
Sihe Nhleko
Markus Erwee
William Joughin.

The Top 5 referees of papers published in the Journal were:

Marek Dworzanowski
Markus Erwee
Matthew Handley
Norman McGeorge
Steven Rupprecht

The author who submitted and published the most papers in the Journal was:

John Bunt.

Top advertiser in the Journal

The award for the most supportive advertiser in the Journal

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was made to Elbroc. Jan van Jaarsveld received the award on their behalf.

**Annual Report**

*Selo Ndlovu* presented the Annual Report with highlights of his year as President.

**Accounts**

The Honorary Treasurer, *Vaughn Duke*, presented the financial statements, which are reproduced in the Annual Report in this edition of the *Journal*.

**Office bearers and Members of Council for 2018/2019**

*Selo Ndlovu* announced the office bearers for the ensuing year, elected by the retiring Council in accordance with Clauses 3.5, 5.1, and 5.2 of the Constitution:

- President: Alastair Macfarlane
- President Elect: Mzila Mthenjane
- Senior Vice President: Zelmia Botha
- Junior Vice President: Vaughn Duke
- Immediate Past President: Selo Ndlovu
- Honorary Treasurer: Vaughn Duke

In terms of the election of ordinary members of Council (Clause 3.2.7 of the Constitution and By-law B2.1), there were fourteen vacancies and the following members are now declared elected (in alphabetical order):

- Isabel Geldenhuys
- Cornelia Hotzhausen
- William Joughin
- Gary Lane
- Elias Matinde
- Harmony Musivairira
- Godknows Njowa

In terms of By-law F1.7 of the Constitution, the Chairpersons of the branches are as follows:

- Botswana: Len Dimbungu
- DRC: Susa Maleba
- Johannesburg: John Luckmann
- Namibia: Nikowa Namate
- Northern Cape: Fabian Nieuwenhuys
- Pretoria: Roelf Mostert
- Western Cape: Lawrence Bbosa
- Zambia: Darius Muma
- Zimbabwe: Clara Sadomba
- Zululand: Christo Mienie

The Chairperson of the South African National Council on Tunnelling (SANCOT) is R. Tluczek.

These Chairpersons will be *ex-officio* members of Council.

In terms of By-law I, which governs the Young Professionals Council, Clause 4.1 states that the affairs of the YPC shall, subject to the control of the Council, be managed by the YPC members constituted as follows:

The office bearers of the YPC are:

- Chairperson: Katlego Letsealo
- Vice Chairperson: Gangatha Dabula
- Immediate Past Chairperson: Sihesenkosi Nhleko

The Chairperson and Vice Chairperson will represent the YPC on the SAIMM Council.

Clause 14.4.6 states that the YPC must consist of a minimum of 14 and a maximum of 18 members who are 35 years of age and younger. These members are still to be ratified by Council.

The following Past Presidents have signified their willingness to serve on Council for the ensuing year:

- Richard Beck
- Roger Dixon
- Marek Dworzanski
- Henry James
- Rodney Jones
- Gys Landman
- Elias Matinde
- Harmony Musivarira

*Selo Ndlovu* thanked those Past Presidents who indicated that they cannot serve on Council for the next year for all their time, effort, and dedication in the past. She also thanked Past Presidents for their continued support. She congratulated all those elected, and thanked those who agreed to serve another term of office.

**Declaration of Honorary Vice Presidents of the SAIMM for the 2018/2019 session**

*Selo Ndlovu*: the SAIMM has a long standing arrangement of inviting the President of the Minerals Council of South Africa as well as the Ministers of the Departments of Mineral Resources, Science and Technology and Trade and Industry to serve as Honorary Vice Presidents.

These positions are intended to create closer collaboration between our organizations so that we may better serve the needs of our members and the industry. These positions will be confirmed for the period 2018/2019.

**Election of auditors and honorary legal advisers for 2018/2019**

*Selo Ndlovu* proposed, and it was agreed, that Genesis be appointed as Auditor for the coming year and that Scop Incorporated be appointed as Honorary Legal Advisers.

**Induction of President**

*Selo Ndlovu* introduced the new President, Alastair Macfarlane, and then called upon *Vaughn Duke* to read his *curriculum vitae*.

**Presidential Address**

Alastair Macfarlane presented his Presidential Address entitled *Towards the future: African mining vision, Mining Phakisa, and the SAIMM*, which is reproduced elsewhere in this edition of the *Journal*.

**Vote of thanks**

Mzila Mthenjane, gave the vote of thanks.

**Closure**

The meeting closed at 17:55. ◆
Honorary Life Fellowship Award

Brigadier Stokes Award

50-year Membership Awards
50-year Membership Awards

Peter Cook, receiving his 50-year Membership lapel badge

Claude Cunningham, receiving his 50-year Membership lapel badge

Noel Joughin, receiving his 50-year Membership lapel badge

Peter Wentworth, receiving his 50-year Membership lapel badge

David Fleming, receiving his 50-year Membership lapel badge

Silver Medal Award winners

Sydney Archer and Eleanore Former, receiving the Silver Medal Award, for their paper that was published in the Journal

Dave Roberts, receiving the Silver Medal Award, for his paper that was published in the Journal
Student Prizes

Juan-Pierre Labuschagne receiving his student prize

Jurgens Wicks receiving his student prize

Reotshepile Moanakoena receiving her student prize

Most Supportive Advertiser in the SAIMM Journal

Selo Ndlovu receiving her Commemorative Plaque from Sam Mooila (Manager)

Jan van Jaarsveld receiving the award on behalf of Elbroc as the Most Supportive Advertiser in the Journal

Alastair Macfarlane delivering his Presidential Address
Office Bearers for 2017/2018


Council members and Past Presidents of the SAIMM

Front row (from left to right): Gary Lane, Henry James, Marek Dworzanowski, Selo Ndlovu, Alastair Macfarlane, Cornelia Holtzhausen, Jeanne Walls
Back row (from left to right): Gys Landman, Mike Solomon, Mzila Mthenjane, Nic Barcza, Dave Tudor, Elias Matinde, Rams Ramakgopa, Rodney Jones, Cuthbert Musingwini, Steven Ruprecht, Isabel Geldenhuys, Vaughn Duke
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Branch Chairpersons of the SAIMM

Nonku Buthelezi, Darius Muma, Christo Mienie, Alastair Macfarlane, John Luckmann, Clara Sadomba, Nikowa Masbuto Namate, Susa Maleba

Past Presidents of the SAIMM

Members and their guests at the cocktail party

Noel and Helen Joughin, Alex du Plessis, Margaret Archibald, Dave Roberts with Alastair and Debbie Macfarlane

Sandi and Mike Teke, Brigadier Stokes Memorial Award recipient

Susa Maleba, Tahepo Mmola, Sihe Nhleko with Cuthbert Musingwini

Claude and Maureen Cunningham with Dick Stacey

Peter and Sheila Cook with Barbara and Peter Wentworth
Students