

# Proceedings, 102nd Annual General Meeting, 1999

The 102nd Annual General Meeting of The South African Institute of Mining and Metallurgy was held in the Gold Room, Transvaal Automobile Club, 60 5th Street, Lower Houghton, Johannesburg on Wednesday, 18th August, 1999.

## Obituaries

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

### *Honorary Life Fellows and Past Presidents*

D.D. Howat

### *Life Fellows*

O. Deane, J.S. van Zijl

### *Fellow*

A.A. Hejja

### *Retired Fellows*

A.L. Forder, C.B. Parker, A.C. Petersen, F.W.J. Ross

### *Members*

J.S. Stanko, D.H. Gray

### *Retired Member*

P.K. Bredell

### *Retired Associate*

I.S. van Eyssen

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

## Minutes

The Minutes of the previous Annual General Meeting, which were published in the September 1998 issue of the *Journal*, were confirmed.

## Welcome

The President extended a special welcome to the guests and representatives of our sister institutes and other associations. Also, to recipients of awards, senior members of Industry, Honorary Life Fellows, Past Presidents, Members, and other guests, among them the following:

Rosemary Falcon, President, Associated Scientific and Technical Societies of South Africa

Laurence Robb, President, The Geological Society of South Africa

Alf Schulze, President, The South African Institute of Electrical Engineers

Cyril Gamede, President, South African Institution of Mechanical Engineers

Frank von Glehn, President, Mine Ventilation Society of South Africa

Chris Albertyn, President, South African Institution of Chemical Engineers

Nielen van der Merwe, Chairman, The South African Institute of Rock Engineering

Ian Livingstone-Blevins, President, The South African Colliery Managers' Association.

## Brigadier Stokes Memorial Award

*Mr Alastair Douglas:* 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. The award 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 1999 is to be made to Mr Leslie Boyd.

*Mr Roger Dixon:* Mr Leslie Boyd was born in Bell's Hill, Scotland, in 1937. He started his career in the British steel industry and was Works Manager of a steel works in England prior to emigrating to South Africa in 1970. He joined the Highveld Steel and Vanadium Corporation and was appointed General Works Manager. This was followed by the appointment as General Manager in 1972 and Managing Director in 1974. He was appointed Chairman of the same company in 1983. Mr Boyd currently holds the following positions: Deputy Chairman of the Anglo American Corporation; Chairman of AMIC of the Anglo American Industrial Corporation; Chairman of AECl Ltd; Chairman of the Columbus Joint Venture, Chairman of the Highveld Steel and Vanadium Corporation; Chairman of the Daewoo-AMIC Joint Venture (Pty) Ltd. He is the non-Executive Chairman of Allied Technologies Ltd and the non-Executive Chairman of Amplats. Mr Boyd holds many other directorships that reflect the high esteem that he is held in not only in the mining and minerals industry but in many other varied industries. He is also President of the Board of Governors of the South African Foundation, a Past-Chairman of Business South Africa that was in 1976. He was the founding President of the South African Chamber Business (SACOB) in 1990. He was the final President of the South African Federated Chamber of Industries, and that was in 1989.

He is a Past Chairman of the Corporate Forum, also in 1989. He is a Member of the International Iron and Steel Institute, a Fellow of the Institution of Metallurgists in the UK, an Associate Member of the British Institute of Management, and a Chartered Engineer.

Ladies and gentlemen, I think you'll agree that Leslie Boyd has made an outstanding contribution to the mining and metallurgical industry in this country and rightfully takes his

## Proceedings, 102nd Annual General Meeting, 1999

place amongst the list of illustrious recipients of this prestigious Award, and I would ask Mr Boyd to come forward and accept this Award.

*Mr Leslie Boyd:* Good afternoon and thank you. I feel greatly honoured to receive the Brigadier Stokes Memorial Award, given what the award stands for, its prestigious namesake and the stature of its past winners.

I am fortunate enough to be able to say that I know, or knew, many of the past winners personally, which could mean that I keep good company, or, perhaps more realistically, that I am getting on in my career and this Award serves as a gracious reminder of growing older.

As the current Chairman of Anglo American Platinum, I am also pleased to receive this valuable, attractive and well-priced *platinum* medal as opposed to the cheaper yellow alternative.

Joking aside, the current gold price is as worrying to me as it is to the vast majority of South Africans and miners. This, in itself, indicates seemingly insurmountable obstacles that have to be overcome and our role will demand that we continue to show leadership and ability to ensure that South Africa develops to its full potential.

Thank you.

### Presentation of Awards, Medals and Certificates.

Alastair Douglas announced the following awards, which were presented to the recipients by the President.

#### 50-year Membership Awards

- ▶ G.P. Bennett, who was elected as an Associate on 1st March, 1949.
- ▶ O. Davel, who was elected as a Student on 10th June, 1949.
- ▶ D.A. Immelman, who was elected as an Associate on 22nd June, 1949.
- ▶ P.C.M. Bathurst, who was elected as a Member on 1st January, 1949.
- ▶ J.F. Curtis, who was elected as a Member on 26th January, 1949.
- ▶ D.F. Grieve, who was elected as a Student on 14th October, 1949.

Papers published in the *Journal* from March 1997 to February 1998 by members of the Institute were considered for medals.

#### Gold Medals

No Gold Medals were awarded this year.

#### Silver Medals

M.D.G. Salamon, M.U. Ozbay, and B.J. Madden for their paper published in the May/June issue of the *Journal* entitled 'Life and design of bord-and-pillar workings affected by pillar scaling'.

F. Sawyerr, D.A. Deglon and C.T. O'Connor for their paper published in the July/August issue of the *Journal* entitled 'Prediction of bubble size distribution in mechanical flotation cells'.

D.J. Greeff and C. Aldrich for their paper published in the July/August issue of the *Journal* entitled 'Developments of an empirical model of a nickeliferous chromite leaching system by means of genetic programming'.

J.M.A. Geldenhuis and P.C. Pistorius for their paper published in the January/February issue of the *Journal* entitled 'The use of commercial oxygen probes during the production of high titania slags'.

### Presentation of Student Prizes

*Alastair Douglas:* The prize is awarded to the following student for the best student dissertation in part fulfilment of the B.Sc. (Eng.) degree.

- ▶ *Mining:* J.S. van Heerden, University of Pretoria, 'The impact of ventilation control on mine revenue'.

Other prizes awarded to students at the Universities of the Witwatersrand and Pretoria were presented at faculty prize-giving ceremonies held at the respective universities. The prize-winners were as follows:

#### University of the Witwatersrand

##### *Prestige Prize:*

Mining	D.G. Thompson
Metallurgy	A. Reid

##### *Book Prize:*

Mining	J. Deysel
Metallurgy	S. Broccardo

#### University of Pretoria

##### *Prestige Prize:*

Mining	R. van Staden
Metallurgy	D.P. McManus

##### *Book Prize:*

Mining	O. Richter
Metallurgy	H. Schwarzer

#### Technikon Witwatersrand

##### *Prestige Prize:*

Metalliferous Mining	D.F. Kangleas and R.J. Gerber
Coal	No award

### Highlights of the year from the President

The recognition of the need to adapt to changing circumstances and the environment precipitated two strategic workshops in the early part of the year. The review of current practices and traditions in the Institute resulted in an action plan to reposition for the future and to provide a platform from which we could adapt to change and move forward into the new millennium.

Some of the more important aspects considered were the composition of the Institute, in particular its committees in terms of representing the demographics of the country. We also reviewed the financial structure, the relationships with other similar Societies, Institutes and Associations and, most

## Proceedings, 102nd Annual General Meeting, 1999

importantly, we reviewed the service provided to members. Then we looked at the general administration of the Institute. The plans and actions put in place should, if followed through, ensure a healthy future.

The high level of activity from the Technical Committees that are the backbone of the Institute has continued throughout the year. The year began with a successful international conference entitled 'Mining in Africa 98'. The conference provided ample evidence of the need and scope of opportunity for this Institute to serve further afield in sub-Saharan Africa. The committees seem to have mastered the knack of recognizing and organizing the 'hot topics', as I call them which, are current and very much of interest to members.

The *Journal* was recognised in the strategic sessions as one of the core services provided to members and, therefore, one which should never be compromised. The *Journal* was published throughout the year on a bi-monthly basis. The quality of the publication is outstanding; this is due to the exceptional efforts of Professor Robbie Robinson and his wife Diane who give unstintingly of their time to the *Journal* and for that we thank them sincerely.

Career guidance and education was also recognised as an important aspect of our activities. The main focus is on raising awareness of, and improving the image of, the minerals industry amongst school children and I can tell you that's a very difficult task in the current situation. Sustained effort has been put into this endeavour during the year but there remains a huge task ahead.

The Institute has also been instrumental, and successful in resurrecting the compilation of a South African Code for Mineral Resources and Reserves. It is envisaged that this code will be officially published and recognized by the end of this year. The drawing-up of the South African Code has been done in conjunction with the other members of CMMI to arrive at an internationally acceptable code. This initiative has illustrated the need for the Institute to move out and become recognized internationally and play its part in the global game.

Membership has been a focal point throughout the year and much has been done, or attempted, to get closer to our members and to understand their needs. This has resulted in much tidying up of the membership list and status of members within the list. The number of members has remained constant throughout the year, however, if the Institute is to prosper in the future then everything possible must be done to ensure the gradual growth of membership.

My thanks go to the Staff, Council and Committee members of the Institute who have given of their invaluable time to make this—what I hope has been—a successful year in what have been difficult circumstances.

Thank you.

### Annual Report and Accounts

Subscriptions received showed an increase on the previous year, being Company Affiliates R175 751 (R164 473) and individual membership R452 111 (R411 758).

Income from colloquia and schools decreased from the previous year R428 579 (R916 227).

A surplus on the sale of investments of R292 638 (R 391 019) was recorded for the year and was required to supplement the day-to-day running of the Institute. Interest and dividends

received were lower than the previous year R32 997 (R59 730). The result of the above saw the total income decrease markedly R1 243 183 (R1 784 072). To assist with the cash flow a larger overdraft facility was arranged and utilized to avoid the selling of shares under unfavourable conditions. The market value of our investments decreased R1 626 681 (R2 381 052).

Expenditure for the year decreased to R1 511 421 (R1 796 911) mainly due to last year's write-off of the non-recurring loss of R175 980 for Stonehurst and a decrease in the provision for debts over six months to R35 000 (R142 600).

The *Journal* expenses increased to R676 296 (R394 609) which was partially off-set by sales and advertising revenue which increased to R227 771 (R52 072). Subscriptions written-off almost doubled R50 926 (R25 981). The increase in the *Journal* is due in the main to a larger *Journal* with more pages, issues in full colour and increases in printing and postage.

The Institute has suffered a substantial loss for the year being R268 238 (R12 839). In the past we have relied upon excess income from colloquia and schools to supplement our expenses and have therefore kept our annual subscriptions at a level far below our sister institutions. It is a sign of the times that we can no longer depend on this source of income to the extent that we have in the past and so, to make ends meet, subscriptions can be expected to double in the next two years.

Our thanks go to Quyn Martin our investment adviser, our new accountants VIA Strategic Partners Trust who took over from Hanlie Smith on her untimely and tragic death and to our auditor for financial services rendered during the year.

### Office Bearers and Members of Council for 1999/2000

*President:* I have pleasure in announcing that, in accordance with Clauses 3.2 and 3.3 of the Constitution, the retiring Council has elected the following Office Bearers for the ensuing year:

President	M.H.Rogers
President Elect	Dr L.A. Cramer
Senior Vice President	A.A.B Douglas
Junior Vice President	S.J. Ramokgopa
Immediate Past President	J.R. Dixon
Honorary Treasurer	J.A. Cruise.

In terms of the election of ordinary members of Council I have to report that in terms of By-law 3.2.7 there were fourteen vacancies and the following members are now declared elected.

Dr L.A. Cornish	Prof. R.F. Sandenbergh
F.M.G. Egerton	P.D. Scott
R.M.S. Falcon	Dr. T.R. Stacey
K.J.R. Ford	D.J. van Niekerk
R. Graham	P.E. Venter
N.M. O'Brien	J.C. Viljoen
R.G.B. Pickering	J.N. Wallington.

In addition, Dr R.V.R. Handfield-Jones and P.J. Knottenbelt were elected to represent non-corporate Members of Council.

In terms of Clause 3.2.8 of the Constitution, the Chairmen of the Branches are as follows:

Johannesburg	M.J. Daniels
Pretoria	R.F. Sandenbergh
Free State	C.B. Sheppard
Mpumalanga	D.A.A. Smith
Western Cape	P.G. Gaylard

## Proceedings, 102nd Annual General Meeting, 1999

Bushveld M.J.P. Bierman  
Zululand D. Kok

These Chairmen will serve on Council.

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

Prof. R.P. Plewman	H.G. Mosenthal
Prof. R.E. Robinson	R.D. Beck
G.Y. Nisbet	J.P. Hoffman
Prof. A.N. Brown	Dr H. Scott-Russell
H.E. James	J.A. Cruise
B.C. Alberts	D.A.J. Ross-Watt
Gene Fivaz	Dr N.A. Barcza
Dr Oskar Steffen	R.P. Mohring

I would like to record our thanks to the Past Presidents for their continued support. I congratulate all those elected, and thank those who have agreed to serve another term of office.

### Election of Auditors and Honorary Legal Advisors for 1999/2000

*President:* I propose that Messrs KPMG be re-appointed as auditors for the coming year, and that Messrs Van Hulsteyns Attorneys be re-appointed as Honorary Legal Advisors. Agreed.

### Induction of President

*President:* It is my pleasant duty to introduce your new President, Mr Mike Rogers.

*Mr Alastair Douglas:* Mike Rogers, a third generation coal miner was born in Witbank in 1944 and was educated at Glenwood High School in Durban.

Having started his career as a Learner Official at Iscor's Durban Navigation Colliery in northern Kwa-Zulu Natal, he completed a B.Sc. in Mining Engineering at the University of the Witwatersrand in 1967.

He joined JCI in 1968 and gained experience on their gold, platinum, copper, antimony and coal mines in various managerial and technical support capacities, culminating in his appointment as General Manager of Tavistock Collieries Ltd in 1990. Following which he was appointed Technical Director of JCI's Coal and Base Metal's Division in 1994 and was subsequently promoted to Managing Director of the Division in 1995. After the acquisition of Tavistock Collieries by Duiker Mining Ltd, he was appointed Deputy Managing Director and Technical Director of that company, the position he holds today.

Mike is a registered Professional Engineer serving on the Professional Advisory Committee (Mining) of the Engineering Council of South Africa. He is a Fellow of the SAIMM having served as Branch Chairman of the Mpumalanga Branch and then as a council member from 1994.

He is married to Pam and they have two sons, Craig and Sean.

### Presidential Acceptance and Address

Mr Chairman, ladies and gentlemen:

I am deeply aware of the great honour that Council has

bestowed on me by electing me to the office of President of the SAIMM. It is a position I accept with great humility and undertake, with the help of Council and Office Bearers, to progress the affairs and business of the Institute to the best of my ability.

In preparing for this meeting, I looked back 100 years ago to the business of the Institute or Society as it was, those far off days, and to how they were preparing for the new century that lay ahead. The Institute in 1899 was known as the Chemical and Metallurgical Society of South Africa and had some 534 members of all grades. It was in its 5th year of existence and like us, also had an annual dinner (which also made a loss). I read Dr J. Loevy, the retiring President's valedictory speech in which he touched on some of the issues of the day. These were:

- The *Journal* was highly regarded by the scientific community and had become a widely accepted reference in the field of gold metallurgy
- There was concern about the arrears in fee payments by members.

He also recorded some factors which had contributed to the success of the young Society, viz.

- The zeal and interest displayed by members in the interests of the Society
- The support and encouragement received from leading representatives of the industry, the government and the town
- The liberal membership policy
- The independent stance adopted by the Society in expressing unbiased views on technical and scientific issues.

Although war clouds were on the horizon and war was just three months away, no mention was made of this. The main concern expressed was that...

'Members should be careful and precise in their statements so that the scientific and technical standards of the proceedings and meetings might be elevated'.

As you might imagine, most of the papers presented at the monthly meetings and recorded in the *Journal* dealt in the main with gold recovery.

It is interesting to note that the position of the Assayer and Assay Office in mine economics was debated at great length. Being a chemical society there is comment on the production of dynamite, the quality of the town's water and the additions, and alleged poisonous quality of the liquor sold to the local population. This paper gives a new meaning to skokiaan and witblitz. Debate at the meetings was vigorous, uncompromising and few punches were pulled. There are three issues raised in Dr Loevy's address which I will be focusing on in the year ahead. The first is Members and Membership.

- We need greater participation in the events and business of the Institute. We need more members to attend the colloquia and symposiums and to stand up and debate the issues at hand
- We also need our members to pay their fees and on time
- Our membership policy, while not liberal, does provide for ready admission to membership to those meeting the necessary criteria. However, what we need is more members, particularly members who are considered to have been previously disadvantaged. Our Institute

## Proceedings, 102nd Annual General Meeting, 1999

membership is all too pale and too male. If we are to survive beyond the first decade of the millennium our membership numbers will have to be swollen by the many men and women of colour in South Africa who qualify for membership.

We are already under pressure from ECSA to provide representatives from the previously disadvantaged communities on the mining and metallurgical PACs and cannot do so yet.

This year, however, we do have two women on council for the first time ever.

Prior to the suspension of its activities due to war, the Society recognized the need to broaden its membership to include the mining profession. This ultimately led to the Society becoming the Chemical, Metallurgical and Mining Society of South Africa in 1902.

Which brings me to the second issue.

In developing a strategic plan for the Institute this past year, Council has recognized the necessity of broadening membership through affiliation with other institutions and associations more directly associated with our business. This is being actively pursued by Office Bearers and Council as a means to securing your Institute's long-term future.

Finally, unlike the old Society, the Institute's financial position is not as secure as one would like it to be and this will be the third issue which Council and Office Bearers will be pursuing in the year ahead as we go forward into the first century of the new millennium. I look forward to working with Office Bearers, Council and the Secretariat in the year ahead as we progress these issues and objectives to the benefit of the Institute and its members.

Thank you.

I now call on Roger Dixon to come forward and accept a commemorative plaque in recognition of the sterling work done during his term of office as President of the Institute.

### Presidential Address

Mr Rogers then presented his Presidential Address entitled 'Coal—An industry in change', which is reproduced elsewhere in this edition of the *Journal*.

### Vote of thanks

*Mr Rick Mohring:* Mr President, ladies and gentlemen, it is my

privilege this evening to be allocated the graveyard shift and to thank your incoming President for a most thought-provoking Address.

As a coal miner myself, the observations that Mike makes are particularly relevant and I believe this Address will be of great interest to all in this great industry of ours. However, although the coal industry is the focus of this Address the challenges and opportunities outlined can be applied equally to any industry in the commodities game.

Mike has very succinctly described the nature of the industry and his environmental scan has identified the major issues which need to be tackled if we are to ensure the longevity of our coal industry.

And how things have changed, this must be the first time that the environment has taken up 4 out of 14 pages of a Presidential Address of an engineering institute. The environmental threat to the coal industry is real and it is pleasing to note the advances in all phases of the coal energy-chain; of clean coal technologies to reduce the impacts on the environment.

The industry needs to come to grips with the notion that coal prices although cyclical, as with many other commodities, are reducing in real terms. This, coupled with a declining reserve base, both in terms of quantity and quality, places an enormous responsibility on producers to work smarter—not harder to ensure their continued existence.

The important fundamental issue raised is whether enough resources are being committed to research and development to make coal the fuel of choice on the international energy scene.

As you have heard, Mike is indeed a man who possesses an in-depth knowledge of the coal mining industry and his insights into how we should be taking this industry into the future has been most stimulating.

I have known Mike since my university days and I know that the Institute will be enriched by his contribution and leadership. His hands-on experience and expertise has made him a respected leader in this field and he represents the industry with energy and enthusiasm. I wish to congratulate him on behalf of us all on his appointment and thank him for a stimulating address to us today.

Finally, our best wishes to Mike, Pam and the family for what promises to be a most memorable year.

### Closure

The meeting closed at 18:15. ◆