

Annual report

FOR THE YEAR ENDED 30 JUNE 2014

Council for 2013/2014

President

M. Dworzanowski

President-elect

J.L. Porter

Vice-Presidents

Senior

R.T. Jones

Junior

C. Musingwini

Immediate Past-President

G.L. Smith

Honorary Treasurer

J.L. Porter

Members of Council

N.A. Barcza
H.E. Bartlett
R.D. Beck
N.G.C. Blackham
J.A. Cruise
J.R. Dixon
V.G. Duke
F.M.G. Egerton
A.M. Garbers-Craig
M.F. Handley
W.C. Joughin
G.V.R. Landman
A.S. Macfarlane
R.P. Mohring
D.D. Munro

S. Ndlovu
J.C. Ngoma
G. Njowa
R.G.B. Pickering
S.J. Ramokgopa
M.H. Rogers
S.M. Rupprecht
A.G. Smith
M.H. Solomon
D. Tudor
J.N. van der Merwe
D.J. van Niekerk
W.H. van Niekerk
A. Wilson

Observers on Council

D. Andersen
M. Cary
J. du Plessis
M. Dworzanowski
W.C. Joughin
A.R. Nundlall
M. Nzimande
C. Smith
M. Veti

IMSSA
SAIEE
SACEA
MMMA, SACPS
SANIRE
MVSSA
AMMSA
GSSA
SACMA

Branch Chairmen

DRC Branch S. Maleba
Johannesburg Branch I. Ashmole
Namibian Branch G.B. Ockhuizen
Pretoria Branch N. Naude
Western Cape Branch T.V. Ojumu
Zambian Branch H. Zimba
Zimbabwean Branch S. Gaihai
Zululand Branch C.W. Mienie

Past-Presidents serving on Council

N.A. Barcza J.C. Ngoma
R.D. Beck R.G.B. Pickering
J.A. Cruise S.J. Ramokgopa
J.R. Dixon R.P. Mohring

F.M.G. Egerton
A.M. Garbers-Craig
G.V.R. Landman

M.H. Rogers
J.N. van der Merwe
W.H. van Niekerk

Key objectives of the Institute

To initiate and give effect to the means whereby the requirement for technology and scientific knowledge of the minerals and metals section of the southern African economy is satisfied; and to represent and promote the interests of its members.

Arrangement of this Report

In accordance with the current management policy, this report on the activities of the Institute is presented under eight main headings:

1. Interests of Individual Members
2. Technical Meetings
3. Publications
4. Regional Development
5. Engineering Science and Technology in South Africa
6. State Liaison
7. International Liaison
8. Management and Administration.

1. Interests of Individual Members

Portfolio Holder: J.L. Porter

In terms of membership, South Africa still predominates with a membership of 3457; and for the first time in many years, a new branch has been established in the Northern Cape to service the expanding mining communities and companies in that part of South Africa. However, we continue to see strong growth in our more established country branches in Zimbabwe and Zambia, with a steady increase of membership in the newer branches in Namibia, the DRC, and Botswana, which now have a combined non-South African total membership of 493. Thus, the southern African region now has a total membership standing at 3939. Opportunities for additional country branches are under review in Mozambique and Botswana, where the Council is playing an active role in supporting local leaders by sharing with them the systems and intellectual property that make the SAIMM an effective organization for professional development. Current total local membership is broken down as follows.

Country	Grade	Number of Members
South Africa	Fellows	315
	Life Fellows	4
	Honorary Fellows	1
	Honorary Life Fellows	32
	Retired Fellows	105
	Members	1154
	Life Members	1
	Retired Members	82
	Associates	990
	Retired Associates	9
	Company Affiliates	126
	Students	638

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The SADC region has a total of close to 497 members – 16 in Tanzania, 12 in Lesotho, 2 in Mozambique, and 2 in Swaziland. West Africa has a membership of 3, split between Nigeria with 1 and Mali with 2.

Over the past five years, the South African mining industry has had to contend with high levels of employment uncertainty in certain commodity sectors, due to fluctuating metal prices and ongoing labour disputes. These factors, together with steeply increasing costs of energy, steel, and labour, have led the Council to adopt progressively more conservative, but also more innovative, strategies to sustain the Institute on a forward-going basis. The graph below of total membership indicates that despite these tough circumstances, there is still growth.

As indicated in Figure 1, the growth in our country branches represents a considerable investment of time and Institute resources. To ensure that we are able to manage this on a sustainable basis in 2014, Council decided at the urging of the President at that time to employ a Regional Development Manager. I am happy to report that good progress has been made in this regard and an appointment will be announced within the next 3 months.

In addition to the above, the Membership Committee has also been active in the following tasks:

- Re-creating the application form to make it easier to apply for membership
- Making membership application forms available on-line
- Re-defining membership benefits in conjunction with our sister Institutes around the world to ensure that reciprocity is more visible and effective
- Implementing the revised by-laws relating to membership
- Actively focusing on upgrading members to higher membership grades
- Encouraging members to join ECSA and benefit from the reduction in fees
- Creating an electronic membership archive to ensure easier access and prevent loss of documentation
- Streamlining the processes of membership payment.

At the end of the financial year 2013/2014, 387 members were still in arrears, resulting in a total of R343 475.10 of uncollected membership fees. The Membership Committee took a decision not to strike Members off the membership roll, as current market conditions have placed serious financial strain on Members.

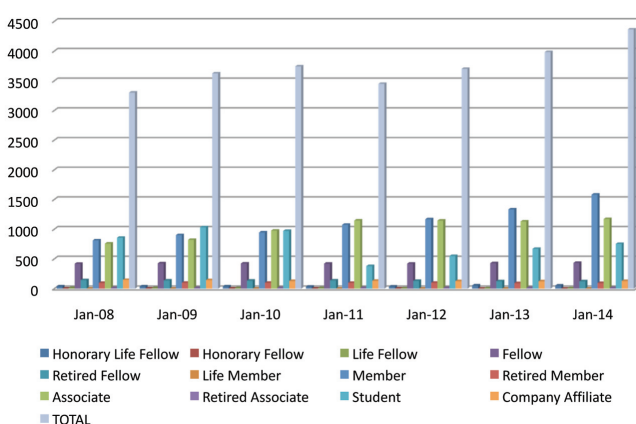


Figure 1 – Membership growth over the last 7 years

1.1 Membership Committee

J.L. Porter, Chairperson

N.A. Barcza

R.D. Beck

J.A. Cruise

J.R. Dixon

A.M. Garbers-Craig

G.V.R. Landman

R.P. Mohring

J.C. Ngoma

R.G.B. Pickering

S.J. Ramokgopa

M.H. Rogers

D.A.J. Ross-Watt

G.L. Smith

T.R. Stacey

O.K.H. Steffen

J.N. van der Merwe

D.J. van Niekerk

M. Woodhall

Membership

The SAIMM membership comprises engineers, metallurgists, chemists, physicists, geologists, certificated managers, and technikon diplomates, and other disciplines, all of whom have an interest in the fields of mining, extractive metallurgy, metals technology, and other related areas.

Requirements for Corporate membership

HONORARY LIFE FELLOW: An Honorary Life Fellow shall be a person whom the Institute specifically desires to honour in consideration of services rendered to the Institute, to science, or to industry. Honorary Life Fellows shall have all the privileges of Corporate Members.

- The election of an Honorary Life Fellow shall take place at a Council meeting, due notice having been given at the preceding Council meeting of Council's intention to nominate a person as an Honorary Life Fellow. The election shall require the majority vote of Corporate Members of Council present at a Council meeting
- The election of an Honorary Life Fellow shall be announced at the following Annual General Meeting of the Institute
- An Honorary Life Fellow will have all membership fees and subscriptions waived.

FELLOW: A candidate for admission to or transfer into the category of Fellow shall:

- Be at least 35 (thirty-five) years of age
- Have, for a period of at least 5 (five) years, been practising in a senior technical position in mining or metallurgical undertakings, or in governmental, educational, or research organizations concerned with those industries, or
- Have, for a period of at least 5 (five) years, been practising as a consultant in the skills of mining and metallurgy, and
- Be practising his/her profession at the time of application, satisfy Council that he/she is a fit and proper person to become a Fellow, and Council shall be satisfied that his/her qualifications, training, and technical experience justify such professional status, and
- Have been a Member of good standing for 5 (five) years and have promoted the interests of the SAIMM through:
 - Serving on committee structures, and/or
 - Publishing in the SAIMM Journal or conference proceedings, and/or
 - By other means acceptable to Council.

MEMBER: A candidate for admission to or transfer into the category of Member shall:

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Table I

Summary of new applications and membership movements for 2013/2014 and comparison of membership grades and total membership 2013/2014

Membership grade	Members July 2013	New members	Transfers in	Transfers out	Reinstatements	Resignations	Deceased	Struck off	Net gain/ (loss)	Members June 2014
Honorary Life Fellow	54	0	0	0	0	0	-1	0	-0	53
Honorary Fellow	2	0	0	0	0	0	0	0	0	2
Life Fellow	7	0	0	0	0	0	0	0	0	7
Fellow	429	0	18	-10	0	-1	-2	0	5	434
Retired Fellow	125	0	10	-1	0	-5	-6	0	-2	123
Life Member	1	0	0	0	0	0	0	0	0	1
Member	1 334	184	85	-24	25	-17	-3	0	250	1 584
Retired Member	92	0	7	0	0	-3	-2	0	2	94
Associate	1 132	113	52	-91	11	-43	-1	0	41	1 173
Retired Associate	13	0	1	0	0	0	-1	0	-1	12
Student	672	129	7	-53	1	-2	0	0	82	754
Company Affiliate	123	8	0	0	0	-3	0	0	5	128
Total	3 984	434	179	-179	37	-74	-16	0	381	4 365

- Be at least 25 (twenty-five) years of age
- Have, for a period of at least 2 (two) years, been practising in a responsible or senior technical position in minerals and metals industry undertakings or in governmental, service, educational, or research organizations concerned with those industries, or
- Have, for a period of at least 2 (two) years, been practising as a consultant in the minerals and metals industries, and
- Be practising his/her profession at the time of his/her application, satisfy Council that he/she is a fit and proper person to become a Member, and Council shall be satisfied that his/her qualification, training, and technical experience justifies such professional status.

Requirements for Non-corporate membership

COMPANY AFFILIATE: Companies involved in or associated with the mining and metallurgical industries are eligible for admission to the category of Company Affiliate.

HONORARY FELLOW: Honorary Fellows shall be persons of distinction in public service, science, or the arts and shall be elected or re-elected by Council for the current year. They shall enjoy all the privileges and rights of members, except those of holding office and voting.

ASSOCIATE: A candidate for admission into the category of Associate shall:

- Be at least 18 (eighteen) years of age, and
- Be involved in minerals and metals industry undertakings or in governmental, service, educational, or research organizations concerned with those industries, but not meet requirements to be registered as a Corporate Member

- Satisfy Council that he/she is a fit and proper person to become an Associate Member.

STUDENT: A candidate for admission into the category of Student shall:

- Be a person, in the third or further year of being educated or trained in a manner approved by Council to occupy a technical position or associated with the minerals or metals industries
- Satisfy Council that he/she is a fit and proper person to become a Student Member
- Remain a Student Member only while he/she is being educated in a manner approved by Council
- Confirm their membership at the beginning of each academic year by submitting proof of registration at their applicable tertiary institution. Failure to submit proof of registration will result in termination of membership
- Not remain a Student Member after the end of the Institute's financial year in which he/she attains the age of 28 (twenty-eight) years. Council may relax the provisions of this clause in such cases as it considers appropriate.

Membership roll

Members of the Institute are divided into Corporate and Non-Corporate Members, all of whom are entitled to attend and speak at meetings. Only Corporate Members are entitled to vote. All applications for membership or transfer require one proposer and one seconder.

RESIGNATION: A Member may resign from the Institute by sending his or her written resignation to the Secretary together with payment of any monies due.

RETIRED MEMBERSHIP: A Fellow or Member who has *bona fide* retired from active business may retain membership at a reduced

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subscription providing he or she has been a member for 20 years. Members can contact the Secretary to establish the number of years of service prior to submitting a written request for Retired Membership to the Institute.

STUDENTS: A candidate may remain a Student Member only while he or she is being educated or trained in a manner approved by the Council.

When he or she no longer qualifies as a Student Member, he or she shall automatically be transferred to the category of Associate. Students are reminded to forward a copy of their degree certificates to the Institute on graduation.

A candidate may not remain a Student Member after the end of the Institute's financial year in which he or she attains the age of twenty-eight years, unless the Institute receives written confirmation from the university or technikon that the Student Member is still a full-time student.

CHANGE OF DETAILS: It is essential that members contact the Institute without delay about change in designation, change in employer, payment address, or change in postal address. Without this the communication link to members is broken. Also, members must ensure that, where subscriptions are paid by a company, the Institute has on record the correct payment address.

Benefits of membership

Individuals derive various benefits from membership of the Institute:

- Contact with fellow members
- Special reduced fees when attending congresses, symposia, colloquia, conferences, schools, discussion groups, etc.
- Notices of events promoting technology transfer, which also satisfy the need for continuing education
- A monthly *Journal* with a balanced content and of high technical standard, which serves as a communication medium to keep members informed on matters relating to their professional interests
- Participation in technical excursions, banquets, and other social events, which create further opportunities for professional association and fellowship
- Tax deduction of membership fees in most cases
- Reduced registration fees for professional registration through the Engineering Council of South Africa.

Companies that become Members of the Institute

- Benefit from the opportunities to exchange knowledge, particularly about new developments and research
- Receive the Institute's publications of international conferences held in South Africa, as well as monographs on a variety of subjects and regular copies of the monthly *Journal*
- Are entitled to send two non-member employees to mining and metallurgical schools, colloquia, congresses, visits, and excursions at Member rates
- Receive newsletters and notices about all Institute activities
- Benefit from the fact that Company Affiliateship is tax deductible
- Have ample opportunity to send delegates to attend technical meetings to obtain information and to benefit from the experience of others.

1.2 Career Guidance and Education

V.G. Duke, Chairperson

N.G.C. Blackham	S. Moolla
K. de Jager	S. Ndlovu
A.W. Dougall	L. Petrick
J. Janse van Vuuren	E. Preis
P.J. Knottenbelt	S.M. Rupprecht
G.V.R. Landman	A.G. Smith
P.J.K. Leeuw	I. Wermuth
J.A. Luckmann	

The year began with much enthusiasm following last year's successful interaction with our students at a career guidance event at Sci-Bono in August 2013. Our efforts were initially targeted at addressing the following two important areas of need as identified by the students:

- **Mentoring:** The Committee looked into using the SAIMM website together with the old SAIMM mentoring programme to link students with suitable mentors. Students would apply for mentorship via the website and the Committee would seek to link them up with specific mentors while not publicizing a list of mentors. This was considered to represent more of a 'soft' mentoring approach and was not necessarily aligned with the ECSA requirements. The Committee did not obtain much support in the form of volunteer mentors from industry
- **Practical training:** The Committee generated a letter from SAIMM requesting support for students who required practical training or vocational work as part of their graduation requirements. The letter was sent to all SAIMM Company Affiliates but attracted little response. The Committee recognizes that this need is real and can be addressed properly only with a significant injection of energy and passion.

As a consequence of the lukewarm response from industry and SAIMM members in particular, the Committee proposed that a needs analysis/market research study be commissioned to obtain a better understanding of industry's requirements. After investigation, it transpired that the cost would be prohibitive and that perhaps such an exercise should be inclusive of the needs of the students. Our Committee then acknowledged that our youth is likely to have a different viewpoint to members of Council when it comes deciding on opportunities and threats to their future careers in the mining industry.

Council was then consulted on the idea of restructuring the efforts of the Career Guidance and Education Committee such that future focus centred only on establishing and entrenching a Youth Council over the next twelve to eighteen months. The Committee would cease addressing ancillary initiatives, and these would be developed and driven by Council in future.

The Chairman of the Committee has engaged with the various institutions on the merits of this approach, and as a consequence not only has the full support of the youth, but has managed to co-opt appropriate attendance onto the Committee and with a view to mentoring potential members for the initial sitting of a Youth Council. It is envisaged that the current Committee members will continue to attend meetings, but as observers until such time as the Youth Council is running smoothly.

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A revised mandate for the Career Guidance and Education Committee has been submitted for formal approval by Council.

Although the Committee has supported and presented at the 'Engineering Focus Week' that took place on 26 to 30 May 2014 at the Sci-Bono Discovery Centre, it has not arranged a follow-up Career Day as yet. This will be done in due course.

Purpose and Mandate of Career Guidance and Education Committee (Revised)

(Approved in principle but still to be ratified by Council)

Council has had to consider, whether or not the SAIMM, as a professional society, is also meeting the needs of the new generation of engineers at university or those recently graduated. The result was agreement on a need for renewed focus on 'youth' amongst current and potential future membership of the SAIMM. Both the Pretoria and the Johannesburg branches of the SAIMM enjoy strong student representation but not with a specific focus on the younger generation of mining and metallurgical Engineers.

Council has therefore agreed, in principle, to the establishment of a 'Youth Council', which as a developmental initiative, should be modeled on the SAIMM Council, but with a mandate to cater for the needs of members in the age category of between eighteen and thirty years of age.

Such a council would, *inter alia*, address the following issues:

- Uncertainty regarding career prospects in the mining industry
- A need for an active and effective mentoring scheme with suitable mentors
- Experiential training on a mine for young graduates, and
- Vocational training for under graduates.

Accordingly, the Career Guidance and Education Committee is now mandated by Council to:

- Reconstitute the current committee
- Draft suitable terms of reference for the Youth Council for approval
- Involve students from each of the universities and solicit representation as observers on the youth council when it is eventually constituted
- Set up the rules for the functioning of the Youth Council (similar to the SAIMM Council, but subordinate)
- Establish/entrench the Youth Council over the next twelve months
- Prepare an election process
- Provide for on-going guidance (via observer status) to ensure traction and sustainability.

1.3 Promotion of the SAIMM

Portfolio holder: M. Dworzanowski

During the past 12 months the South African mining industry has witnessed the longest strike in its history, namely the 5-month-long platinum strike. The full extent of the fallout from this strike remains still to be seen. The global mining industry is also experiencing uncertainty, with decreases in most commodity prices and widespread economic and political instability. But despite all these negative factors, the SAIMM has continued to grow and the interests of members were further expanded through a number of ongoing strategic thrusts, specifically: professional relevance, membership

growth, student development, regional expansion, international liaison, reporting code development, journal excellence, information availability, and relevant conferencing.

Professional relevance has been maintained via co-operation with associated organizations, specifically the Association of Mine Managers of South Africa (AMMSA), the South African Colliery Managers Association (SACMA), the Southern African Coal Processing Society (SACPS), the Mine Metallurgical Managers Association (MMA), the Institute of Mine Surveyors of South Africa (IMSSA), the Mine Ventilation Society of South Africa (MVSSA), the South African National Institute of Rock Engineers (SANIRE), the Fossil Fuel Foundation (FFF), and the Geological Society of South Africa (GSSA). The annual MineSAFE conference has been expanded to include the SACPS and the MMA, in addition to the AMMSA and the SACMA. This has been done to achieve a more inclusive participation in safety in the mining industry, such that mining and metallurgy are represented.

The Global Minerals Professionals Alliance (GMPA) between the SAIMM, the Australasian Institute of Mining and Metallurgy (AusIMM), the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), and the Society for Mining, Metallurgy and Exploration (SME) progressed with a follow-up meeting in Australia in September 2013. The first formal meeting of the GMPA in South Africa occurred at the Mining Indaba in February 2014. This meeting generated a SWOT analysis amongst all the organizations present, and this allowed the formulation of a clearer strategy for the GMPA going forward. The organizations also agreed to the establishment of a formal Memorandum of Understanding. The Institute of Mining, Minerals and Materials (IOM3) also participated in this meeting and is likely to become a member of the GMPA. The next meeting is scheduled to be in Canada in October 2014. The Global Mining Standards and Guidelines (GMSG) Group held an SAIMM-organized workshop just before the GMPA meeting in Cape Town. The relevance and influence of the GMSG is expanding and SAIMM participation is proving to be beneficial. There will be another GMSG workshop in South Africa in August 2014.

The southern African country branches remain critical to the future relevance of the Institute, as economies grow and the minerals and metals industries expand. The Institute actively supported the maintenance of these country branches. Currently the country branches are located in Zimbabwe, Zambia, the DRC, and Namibia. Events have been hosted in all four countries, and the strategy going forward is to establish an annual 'anchor' event in each country, thus allowing each country branch to sustain itself. This will be modelled on the SAIMM Western Cape Branch, which holds an annual Mineral Processing conference. In addition to the Western Cape Branch, the Johannesburg, Pretoria, and Zululand branches continue to thrive within South Africa. The Northern Cape Branch in the Kathu area was launched in January 2014, and the first official meeting with election of committee members will take place in August 2014.

Currently, total membership has passed 4000. Diversity of membership is gradually increasing, with further gains in numbers in the under-30 age group and from countries other than South Africa – these are the key drivers of our future sustainability. The membership profiles in terms of age, gender, and race are more in balance, and this is also reflected in the various SAIMM committees.

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Management and Office Administration

The number of Council meetings was maintained at one per quarter. The attendance of Branch Chairpersons at Council meetings throughout the year was very encouraging, and allowed the Council to gain an improved appreciation of the contribution of the branches. The appointment of a Branch Administrator to the SAIMM office team has improved the overall management of the branches. The functioning of all the SAIMM committees has again been exemplary.

During the year, the strategic objectives of the Institute were well supported by the office team with emphasis on branch support, membership growth, and maintaining the excellent standard of conferencing for which the Institute is renowned. The collective effort of the dedicated staff is acknowledged, with each staff member contributing in their own way to the overall success of the SAIMM.

Accounts

Accounting policy and procedure were further improved, with more streamlining of management financial reports. An operating surplus was achieved. The SAIMM AFC investment account experienced significant growth.

Technical Programme Committee revenue was just over 80% of budget which, given the economic climate within the mining industry, is not surprising. The TPCs will examine ways to convene more affordable events while not compromising quality. Selection of venues and offering printed proceedings to delegates as an optional extra will be key to optimizing conference budgets.

Branch financial control was improved with more detailed reporting on individual branches, which in turn allowed informed decisions to be made on branch financial management.

Debtor management has continued to be a key focus area, with further improvement in debtor-days and collection of membership dues.

The US dollar account has proved to be very beneficial and growth in its use will continue.

The 2014/2015 budget was developed, reviewed, and approved by Council on 18 July 2014 for execution.

Conferencing

The Conferencing Department hosted a total of 13 events for the period July 2013 to June 2014, with an attendance of 2 477 delegates. SAIMM events were hosted all over the southern African sub-region and attracted delegates from across the globe.

The SAIMM partnered with the Association of Mine Managers of South Africa (AMMSA) and the South African Colliery Managers Association (SACMA) for the MineSafe 2013 conference, which drew 1 234 delegates. The MineSafe conference series was established in 2009 and the SAIMM, in collaboration with AMMSA and SACMA and conference partners, is proud to be hosting the 6th MineSafe conference in August 2014.

The partnership negotiated in 2010 with the Advanced Metals Initiative (AMI), as endorsed by the Department of Science and Technology, hosted the New Metals PGM 2013 conference. A renewal of this partnership is being negotiated.

There were repeats of the Base Metals and Physical Beneficiation conference themes, and the annual Student

Colloquium was another success, with even wider participation from tertiary institutions. The Furnace Tapping conference, launched as a new series, was a resounding success, and the Young Professionals has also initiated a promising new conference theme.

Despite the adverse economic circumstances, the SAIMM continued to receive invaluable support from industry partners in terms of conference sponsorship and participation, and we would like to place on record our gratitude to them for their invaluable support.

Publications

The *Journal* continued to be published monthly, although there were delays again in deliveries due to ongoing postal strikes. The *Journal* includes the President's Corner by the Institute's current President, Marek Dworzanowski, and the Journal Comment, to which there have been various contributions the past 12 months. Both of these columns are featured on our website and attract commentary. The quality of published papers continues to be of a high standard, and SAIMM conference and global author contributions continue in significant numbers. For some time now there have been no gold medal Journal papers, but this time around there are two gold medal papers as well as two silver medal papers.

The open access system for electronic communication and the retrieval of information is functioning well, and the SAIMM is served by the OneMine system (www.onemine.org), the African Journal Archive (www.ajarchive.org), and SciELO SA (www.scielo.org.za).

Membership

The SAIMM began the financial year with 3 984 members and ended with 4 365, a gain of 381 members. Two-thirds of these were Members and the majority of the balance were Students and Associates. Conversion of Student Members to Associate Members continues to be a problem, and it has been recommended that Student Members can receive their first year of Associate membership free if they provide their new contact details. Conversion of Members recruited at conferences into paying members continues to be reasonable.

Given the current economic circumstances there are clearly many Members who will find it difficult to pay their membership fees if they are unemployed. Our sister institute, the Australian Institute of Mining and Metallurgy (AusIMM), has a system in place that assists members in 'distress' by waiving membership fees for one year. It has been recommended that the SAIMM adopt a similar system. The Membership Committee is busy finalizing the details. As a result of this there will not be any striking off of Members until their 'ability to pay' status can be established. In conjunction with this, an initiative has been launched to establish contact with 'lost' members via the input of contactable members.

Strategy

The future of the Southern African Institute of Mining and Metallurgy is dependent on meaningful regional expansion. The realization that part-time, volunteer office bearers are unable to apply the sustained, focused efforts necessary to create, enable, and support new regional branches has been clearly illustrated with efforts around creating branches in Botswana and Mozambique. A branch was started in Botswana

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a number of years ago but was not sustained. Although there are sufficient numbers of SAIMM members in Botswana to support a viable branch, the issue is around establishing a relationship and cooperation with the Botswana Chamber of Mines, without which a branch is not possible. With respect to Mozambique, contact was made with the Minister of Mines at the 2014 Mining Indaba and the initial reaction was favourable. However, the issue will initially be to recruit more members in Mozambique to allow the establishment of a branch. The inputs required to establish these branches and others will not be possible without a Regional Development Manager.

From the 2013 strategy session, the recruitment of a Regional Development Manager was proposed and then approved by Council. Since then a job description has been formulated and the position advertised. Eighteen applications were received. After completion of the short-listing and interviewing process, it is anticipated that the successful applicant will be appointed in October 2014.

The other major strategic thrust from the 2013 strategy session was the investigation into the SAIMM investing in its own property, which would cover offices for the SAIMM team and a conference venue. The motivation for this was that our auditor recommended that the SAIMM reduce its exposure to its investment fund to minimize future financial risk. This strategy was approved by Council. Various options are being investigated, and currently the purchase of a complete floor from the Rand Club, as a sectional title, in the Johannesburg CBD seems to be the most promising in terms of meeting the property specifications and budget. This option will be investigated further, and it is hoped that this will result in some form of acceptable agreement before the end of 2014.

The 2014 strategy session will be scheduled just before the 2014 AGM.

1.4 Awards and Adjudication Committees

Awards and Adjudication Committee—Mining

M.H. Rogers, Chairman

J.R. Dixon	G.L. Smith
F.M.G. Egerton	T.R. Stacey
M.F. Handley	D. Tudor
R.G.B. Pickering	

Awards and Adjudication Committee—Metallurgy

D. Tudor, Chairman

R.D. Beck	R.L. Paul
A.M. Garbers-Craig	R.T. Jones

Honorary Life Fellows

Honorary Life Fellowship is awarded by Council to Corporate Members of the Institute who have rendered outstanding service to the industry or to the Institute over a considerable period. Council has conferred Honorary Life Fellowship on the following persons:

Pre–

1923	A. Aiken	S.H. Pearce
	A.F. Crosse	J.P. Williams
	J. Littleton	
1923	J. Moir	
1930	H.A. White	

1931	P. Cazalet	J.A. Wilkenson
	A. Whitby	
1932	J.R. Thurlow	
1934	Wm. Cullen	A. McArthur Johnston
	W.R. Feldtmann	G.H. Stanley
	E.H. Johnson	
1938	G. Melvill	F.W. Watson
	S. Newton	
1941	J. Henderson	
1943	Sir R.N. Kotzé	
1946	J. van N. Door	T.K. Prentice
	C.J. Gray	R.S.G. Stokes
	Jas Gray	S.J. Truscott
	J.V. Muller	G.A. Watermeyer
	John Orr	J.A. Woodburn
1951	W.W. Mein	
1953	P.E. Hall	B. St. J. van der Riet
1954	C. Biccard Jeppe	
1955	P.N. Lategan	
1958	R.A.H. Flugge-de-Smidt	
1960	G. Hildick-Smith	A.J. Walton
	A.J. Orenstein	F. Wartenweiler
	H.J. van Eck	
1961	C.S. McLean	
1966	F.G. Hill	F. Meyer
1970	H.E. Cross	D.M. Jamieson
	R.C.J. Goode	
1974	R.J. Adamson	C.J. Irving
	W. Bleloch	J.F. Reid
	H. Britten	
1975	M. Barcza	J.T. McIntyre
	J. de V. Lambrechts	
1976	D.G. Maxwell	A.R.O. Williams
1978	J.K.E. Douglas	V.C. Robinson
	D.D. Howat	
1979	J.P. Hugo	P.W.J. van Rensburg
1980	Hon. S.P. Botha	R.P. Plewman
	Hon. P.G.J. Koornhof	R.E. Robinson
	A. Louw	
1982	M.G. Atmore	
1983	C.S. MacPhail	
1985	P.R. Jochens	M.D.G. Salamon
	D.G. Malan	
1986	D.G. Krige	G.Y. Nisbet
1987	A.N. Brown	
1988	J.D. Austin	D.A. Viljoen
	R.P. King	
1989	P.A. von Wielligh	
1990	S. Budavari	G.T. van Rooyen
	L.W.P. van den Bosch	
1991	H. Wagner	
1992	J. Lurie	
1993	No award	
1994	B.C. Alberts	
1995	R.D. Beck	H.E. James
	P.R. Janisch	
1996	R.J. Dippenaar	H.G. Mosenthal
	J.S. Freer	
1997	J.A. Cruise	
1998	D.A.J. Ross-Watt	

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1999	No award	
2000	N.A. Barcza	J.R. Dixon
	R.P. Mohring	
2001	M.H. Rogers	D.J. van Niekerk
2002	L.A. Cramer	R.F. Sandenbergh
	C.T. O'Connor	J.H. Selby
2003	A.A.B. Douglas	P.J. Knottenbelt
2004	No award	
2005	F.A. Camisani-Calzolari	
2006	T.R. Stacey	
2007	No award	
2008	E.U.H. Sachse	
2009	I. Walton	
2010	R.T. Jones	
2011	No award	
2012	No award	
2013	No award	
2014	G.V.R. Landman	R.G.B. Pickering
	A.S. Macfarlane	

Brigadier Stokes Memorial Award

The Brigadier Stokes Memorial Award, which takes the form of a platinum medal, is awarded to an individual for the very highest achievement in the South African mining and metallurgical industry, and is not necessarily based on technical expertise.

The Award was established in 1980, and the previous recipients were as follows:

1980	H.F. Oppenheimer
1981	W. Bleloch
1982	F.G. Hill
1983	A.W. Whillier (posthumously)
1984	D.G. Krige
1985	R.E. Robinson
1986	M.D.G. Salamon
1987	T.F. Muller
1988	W.J. (Wim) de Villiers
1989	R.A. Plumbridge
1990	W.G. Boustred
1991	P. du P. Kruger
1992	E. Pavitt
1993	D.A. Pretorius
1994	H. Wagner
1995	O.K.H. Steffen
1996	B.E. Hersov
1997	D.W. Horsfall (posthumously)
1998	B.P. Gilbertson
1999	L. Boyd
2000	A.H. Mokken
2001	T.L. Gibbs
2002	J. Ogilvie Thompson
2003	P.V. Cox
2004	H.J. Smith
2005	P. Motsepe
2006	G.T. van Rooyen
2007	D.H. Laubscher
2008	T.R. Stacey
2009	C.J. Fauconnier
2010	C. O'Connor
2011	B.C. Alberts
2012	R.P. Mohring
2013	H.R. Phillips

This year the award is made to R.M. Godsell for his outstanding contribution to the industry over many years.

SAIMM 50 Year Club

The Institute established the 50 Year Club in 1989 to recognize the faithful and loyal support of its senior members with 50 years' unbroken membership. They become members of the club on the 50th anniversary of their joining the Institute. Their names are published each year in the Annual Report and they are presented with a gold lapel badge on a suitable occasion. There are no fees, and the only obligation of members is to wear their lapel badges with pride and affection at all meetings of the Institute. The present members of the club are as follows:

Year to

June	Member	
1924	E.C. Polkinghorne*	
1926	R.M. Martin*	
1927	W. Allen*	
1930	E.T. Dunstan* (posthumously)	
	P.L. Ward*	
1931	F. Bowdler*	
1932	J.E. Laschinger*	
1933	F.D. Cartwright*	E.R.C. O'Connor*
	C.H. Coxon*	B.M. Roberts*
	J. Levin*	A.A. von Maltitz*
	D.D. McWilliam*	T. Waterman*
1934	A.C.M. Cornish-Bowden*	J.W.V. Mortleman*
	H.E. Cross*	K. Rood*
	E.F. Laschinger*	A. Siff*
	E. Margo	O. Weiss*
1935	O.B. Swallow*	
1936	O. Deane*	A.H. Mokken*
	T.L. Gibbs*	H.L. Munro*
	R.C.J. Goode*	R.M.F. Seawright*
	F.G. Hill*	A.C. Pigott*
	D.M. Jamieson*	J.S. van Zijl*
	D.J. Rogers*	L. Walter*
1937	W. Bleloch*	J.J. Klein*
	L.A. Bushell*	C.D. Storrar
	K.W. Findlay*	
1938	V.C. Barnes*	C.A. McKechnie*
	E.T.S. Brown*	J.A. Nixon
	R.S. Cooke*	E. Popplewell*
	J.K.E. Douglas	C.G. Sowry*
	A.L.A. Forder*	E.W. Thiel*
1939	G. Armstrong-Smith*	R.S. Pearson*
	D.E.R. Ayres*	D.C.J. Squirrell*
	E.H.D. Carman	R.F.J. Teichmann*
	W.G.H. Jackson*	I.S. van Eyssen*
	T.A. Newman	S.J. Venning*
1940	L.D.C. Bok*	G.D. Gettliffe*
	A.W.L. Brereton*	G.G. Stanley*
1941	A.H.H. Davison*	D. de V. Oxford*
	D.J. Forder	E. Pavitt
	A.R.C. Fowler*	A.C. Petersen*
	H.F.W. Ketelbey*	E.R. Rudolph*
	J.D. McNamara*	P.W.J. van Rensburg*
	T.F. Muller*	
1942	R.E. Burnton*	O.L. Papendorf*
	R.C. Espley-Jones*	V.O. Steed

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	N.M. Hayne*	J.E. van Leeuwen*
	R.T. Naudé*	W.C. Walmsley*
1943	D.J. Molony*	R.P. Plewman*
	J.D. McMorran*	
1944	A.F. Dick	V.M. Reinecke*
	R.B. MacGillivray*	A.S. Swartz
	L.J. Prince*	A.H. Taute*
	J.F. Reid*	P.B. Weehuizen*
1945	J.L. Curtis*	K.E. Steele*
	E.T. Pinkney*	
1946	W.I. Spence	J.D. Pollard
1947	G.H. Grange	V.C. Robinson*
	W.B. Howe	A.N. Shand*
	J. Marr-Levin	G.R. Still
	C.J. Parr*	J. Pope*
1948	D.F. Foster	N.A. Stacey
	M.H. Grusd*	J.A. Tyser
	P.A. Laxen*	
	G.Y. Nisbet	
1949	G.P. Bennett*	J.P. Hugo
	J.F. Curtis*	D.A. Immelman
	O. Davel	
1950	D.F. Grieve	R.P. Plasket*
	B.E. Hersov	V.C. Ward
	D.G. Maxwell	
1951	D.G. Krige*	N.C. Pope
	B.H.L. Leach	W.T. Ruhmer
	M.J. Martinson	T. Zadkin*
	W.D. Ortlepp*	
1952	A.N. Brown	E.P. Mortimer
	M.J. Deats	D.J. Murphy
	W. Lurie*	H.J. Stucke*
	N. Martincevic	R.G. Williams
1953	B.G. Fordyce	G.D. Tainton
	G. Langton*	J. Uys*
	A.A. Sealey	N. Zolezzi
1954	R.C. Bertram	R.B.W. Wiggill
1955	R.A.O. Chelius*	G.R. Parker
	S.P. Ellis	W.B. Parker
	C.T. Fenton	
1956	G.A. Brown	M.A. Madeyski*
	D.R. Chelius	D. Rankin
	M.F. Dawson	G.C. Thompson
	L.M. Falcon	
1957	K. Babich	A.M. Edwards
	J.J. Blom	R.C. More O'Ferrall
	R. Campbell	N.C. Officer
1958	J.F. Dear*	B.S. Tattersson
	R.H. Swan	P.J. van der Walt
1959	H.E.K. Allen	H.A.G. Slater
	D.C. Brink	G.T. Van Rooyen
	G.D. Louw	
1960	R. Hemp	C.T. Shaw
	G. Joynt	L.W.P. van den Bosch*
	B. Moore	H. von Rahden
	R.E. Robinson	M. Wishart
	C. Roper	
1961	W.B. Evans	G.S. Lee
	R.A. Featherstone	B.J. Love
	I.R.H. Forrest	P.J. Muller
	J.S. Freer	G.J.C. Young
	B.W. Holtshousen	W.J.G. Young

1962	S.I. Du Preez	E. Schmid
	P.J. Heystek	
1963	L. Anderson	J.N. Gallie
	H.K.R. Cahnbley	J.J. Geldenhuys
	G.C. Clatworthy	T.J. Kotze
	R.E.F. Cowley	A.H. Munro
	J.A.J. De Cuyper	A.G. Netto

* Deceased since becoming members of the Club

The Danie Krige Memorial Award

Following discussions at Office Bearers and Council during 2013 it was agreed to honour the memory and contribution to the minerals industry made by the late Prof. Danie Krige.

It was agreed, amongst other activities, to make an annual award of a Danie Krige medal for a qualifying geostatistics paper published in the SAIMM Journal of the previous year.

There were no qualifying papers for the period March 2013 to February 2014.

Gold and Silver Medals

Papers published in the *Journal* from March 2013 to February 2014 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 metallurgical field in the future.

Gold Medals were awarded to:

P.G. Gaylard, N.G. Randolph, and C.M.G. Wortley, for their paper published in the March 2013 issue of the *Journal* entitled 'Metal accounting in the platinum industry: How effective is it?' As non-member N.G. Randolph receives a certificate of merit.

P.G. Gaylard, N.G. Randolph, and C.M.G. Wortley, for their paper published in the January 2014 issue of the *Journal* entitled 'Metal accounting and corporate governance' As non-member N.G. Randolph receives a certificate of merit.

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:

M.F. Handley, for his paper published in the June 2013 issue of the *Journal* entitled 'Pre-mining stress model for subsurface excavations in southern Africa'.

H.E. Bartlett, L. Korff, and R.C.A. Minnitt, for their paper published in the August 2012 issue of the *Journal* entitled 'The allocation of gold production from multiple shafts feeding a common treatment plant using run-of-mine sampling of ore deliveries'.

Student Prizes

Prizes were awarded to the following students and were presented at faculty prizegiving ceremonies held at the respective universities.

The prize winners were as follows:

University of the Witwatersrand

Mining Engineering	M.J. Nong
Metallurgical Engineering	C.W. Mulaudzi
Prestige Prize	K.R. Malan
	D.G. Ngwarati

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University of Pretoria

Mining Engineering	R. Weber
Metallurgical Engineering	K.J. Kruger
Student Dissertation	T.S. Kagogo

University of Johannesburg

Mining	C.M. Gloster
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University of Cape Town

Mineral Processing	B. Jansen
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University of Stellenbosch

Mineral Processing	M. Lareman
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Cape Peninsula University of Technology

Mineral Processing	S. Shoko
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The prizes for the universities of Cape Town and Stellenbosch and the Cape Peninsula University of Technology were awarded at the Western Cape Branch Annual General Meeting on 7 August 2014.

1.5 SAIMM Scholarship Trust Fund

J.R. Dixon, Chairman

R.P. Mohring, Vice-Chairman

F.M.G. Egerton

W.H. van Niekerk

M.H. Rogers

Contributions to the Trust Fund by individual members and company affiliates amounted to R92 000. The SAIMM continued its support of the Trust Fund with a contribution of R200 000. Awards of R292 000 (R305 000 last year) were made to the universities supported by the Trust Fund. The money was allocated based on the number of students in the four years of study at a particular institution, as a percentage of the total of 2869 students, which is a remarkable number in itself.

The role of the Scholarship Trust Fund has become ever more important as student numbers continue to grow at an alarming rate. The Trust Fund is struggling to meet its mandate in supporting those needy students who do not have bursaries and depend on family, friends, and part-time work for funding.

The Trustees gratefully acknowledges both individual members and company affiliates of the SAIMM for their valuable contributions to the Trust in the past year, and urge those that did not respond to re-look at the request for donations, which can now be made electronically.

The mining and metallurgical industry currently benefits from the quality and numbers of graduates who have in the past received support from the Trust Fund. Students who receive support are the future innovators, engineers, and managers who will contribute to maintaining and growing the industry so that it remains a productive sector of South Africa's economy.

Members are reminded that contributions to the Trust Fund are tax-deductible and can be made on-line to the Trust Fund's bank account. (SAIMM Trust Fund, FNB, branch code 251705, account number 62227511286).

We look forward to your continued support.

1.6 Banquet Committee

M. Dworzanowski

J.L. Porter

R.T. Jones

G.L. Smith

C. Musingwini

The 2014 banquet was held in the Ballroom at the Sandton Convention, Sandton due to the Sandton Sun undergoing renovations during this time.

The guest speaker was Mr Max du Preez, a veteran South African journalist, author, and academic who shared his deep insights into the political dynamics of the past three decades. The Committee had agreed that this would be an appropriate choice, given the close proximity of the elections.

There were three VIP tables and 38 sponsors' and members' tables, with 490 guests in total. The evening was a great success, with many friends and acquaintances catching up with each other and the news within the industry.

2. Technical Meetings

Portfolio Holders: R.T. Jones and J.L. Porter

2.1 Technical Programme Committee—Mining

D.D. Munro, Chairman

R.T. Jones, Metallurgy Representative

A. Dougall

B. Ripp

C.R. Fredericks

S.M. Rupprecht

G. Guler

N.W. Searle

M.F. Handley

R. Sivalingum

W. Joughin

A.G. Smith

G.V.R. Landman

C.B. Smith

D. Limpitlaw

G.L. Smith

J.A. Luckmann

M.H. Solomon

A.S. Macfarlane

T.R. Stacey

N.J. McGeorge

J. Theron

I.M. Mthenjane

T. van den Berg

C. Musingwini

D.J. Van Niekerk

J. Ngoma

R.C.W. Webber-Youngman

G. Njowa

I.R. Wermuth

S.P.F. Nong

M. Woodhall

J.L. Porter

The 2013/2014 financial year has again seen a targeted effort by the members of the Technical Programme Committee – Mining and the Secretariat, resulting in the presentation of ten world-class conferences covering topics from base metals to rock engineering.

All conferences are convened by a committee of subject-matter experts who volunteer their time to identify speakers, invite and assess abstracts, review technical papers, and participate in the general organization of the events. Each conference is assigned a conference organizer from the Institute who is responsible for the day-to-day logistics as well as the intricacies of the conference on the day.

The bi-annual Base Metals conference was held in September 2013 and attracted 120 international delegates to the Ingwenyama Conference and Sports Resort in Mpumalanga. Topics discussed covered the entire value chain from exploration through to processing. The next event is scheduled for 2016, with organization already underway to ensure its success.

MineSafe 2013 proved again to be a highlight of the South African mine safety calendar, with a three-day event hosted by the SAIMM in conjunction with the Association of Mine Managers of South Africa (AMMSA), the South African Colliery Managers Association (SACMA), the Department of Mineral Resources, Chamber of Mines of South Africa, the National Union of Mineworkers, Solidarity, and the United Association

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of South Africa. This event, held in October 2013, incorporated two days of technical presentations and an awards day, and attracted 1234 people!

The annual Student Colloquium was held in November 2013 at the University of Johannesburg's Doornfontein campus. The event attracted 221 attendees, including students from other universities and industry representatives. The quality of the students' presentations was excellent and the 2014 event is eagerly awaited.

The inaugural Mining, Environment and Society Conference was hosted in November 2013 at Misty Hills, Johannesburg. This was attended by 53 professionals and focused on developing a better understanding of issues faced by society as a consequence of mining, exploring current practices of mining companies, and enabling mining companies to share their experiences and innovations with others in the sector. The planning of a follow-on event is already in progress.

The Mine Ventilation Society of South Africa (MVSSA), in conjunction with the SAIMM, hosted a conference on control and management of diesel engine exhaust emissions, including particulate emissions, in South Africa, in February at Emperors Palace. This one-day event secured the attendance of 90 people and provided an opportunity for the numerous stakeholder representatives to present views on the way forward that would provide an acceptable degree of protection to workers in the context of the newly introduced parameters.

In March 2014 a colloquium entitled '21st Century Challenges to the Southern African Coal Sector' was held at Emperors Palace. This conference considered thin seam mining, fines beneficiation, as well as bulk material handling from remote coalfields, over two days and was attended by 73 people.

Having identified a need in the industry for a conference targeted specifically at young professionals, the SAIMM convened the Young Professionals conference in March 2013.

With a committee comprised predominantly of younger professionals, this conference provided a forum where the life skills not addressed at university were discussed, and provided our younger members with an opportunity to present their poster and technical presentations to the audience. The 90 attendees enjoyed the atmosphere at The Pivot Conference Venue, at Monte Casino. A follow-on event is currently in planning for 2015.

To provide an international forum to share and discuss innovations in rock engineering, the South African Rock Engineering Symposium (SARES) 2014, with the by-line 'Creating value through rock engineering' was hosted at Misty Hills at Muldersdrift in May 2014. This event was undertaken as a collaboration between the South African National Institute of Rock Engineering (SANIRE) and the SAIMM. The 82 attendees gathered with the primary aim of identifying and discussing changes required in the mining industry to ensure it becomes safer and more efficient, while still addressing the challenges of labour costs, marginal ore, complex geology, and greater mining depth.

The final event for 2014 was organized on behalf of the Society of Mining Professors (SOMP) in July 2014. Professors of Mining Engineering throughout the world were invited to participate in the 25th such event, this year hosted in South Africa. Meetings were held at the University of the Witwatersrand, University of Pretoria, and the Maslow Hotel in Sandton, and the 93 delegates had an opportunity to visit selected local mines and the Kruger National Park after the conference.

The TPC: Mining is already busy organizing events up to 2016, and always encourages the submission of ideas for future events as well as volunteers to assist in the organization of these. Please contact the Secretariat for further information. For those members located away from Johannesburg, dial-in facilities are available.

Schedule of Mining/Metallurgy Technical Conferences, 2013/2014				
Type of Event	Date	Title	Convenor	Attendance
Conference	2-6 September 2013	Base Metals 2013	P. Fouche	120
Conference	16-18 October 2013	New Metals PGM	G. Patrick	97
Conference	22-24 October 2013	MineSafe 2013 incl. Industry Awards Day	T. van den Berg	1 234
Conference	13 November 2013	Student Colloquium 2013	Z. Botha	221
Conference	19-21 November 2013	Physical Beneficiation	M. Dworzanowski	128
Conference	29-30 November 2013	Mining, Environment and Society	I. Watson	53
Conference	25 February 2014	Mine Planning Reduce Diesel (MVS)	M. Biffi	90
School	19-20 February 2014	Underground Load & Haul - Gold	S. Rupprecht	0
Conference	4-5 March 2014	21st Century Coal	B. Ripp	73
Conference	11-13 March 2014	Young Professionals	H. Graham	90
Conference	8-9 May 2014	Strategic versus Tactical Mining	D. Stacey	0
Conference	12-14 May 2014	SARES 2014	W. Joughin	82
Conference	26-28 May 2014	Furnace Tapping 2014	J. Steenkamp	203
Conference	26 June 2014	SOMP	R. Webber-Youngman	93

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The TPC: Mining thanks the hardworking Secretariat for their tireless efforts in ensuring that our conferences are always of a world-class standard.

2.2 Technical Programme Committee—Metallurgy

R.T. Jones, Chairman

M. Dworzanowski, Vice-Chairman

H.E. Bartlett	J. Mishra
N.G.C. Blackham	J. Moema
Z. Botha	M. Motuku
T. Claassens	A.F. Mulaba-Bafubiandi
P. den Hoed	N. Naude
E. Dhlamini	S. Ndlovu
M. Erwee	D. Nyembwe
A.M. Garbers-Craig	H.A. Simonsen
H.L. Graham	K.C. Sole
D.R. Groot	J. Steenkamp
K.J. Hay	P.J. van Staden
A.S. la Grange	M. Valenta
C. Kruger	K. Vreugdenburg
T. Malefetse	B.S. Xakalashe
K. Mapasa	J.H. Zietsman

The Technical Programme Committee: Metallurgy has supported a good selection of topical technical conferences for the continuing education of metallurgical professionals throughout the year. These events provide an important forum for the efficient dissemination of information about new processes and techniques for improvements in the industry, as well as promoting networking between industry professionals working in the metallurgical field. SAIMM conferences generally receive accreditation from the Engineering Council of South Africa (ECSA) for the requirements of continuing professional development (CPD). The proceedings of these conferences provide valuable reference material.

Formal proceedings of high-quality peer-reviewed papers were published for the larger conferences (usually in book form with an accompanying CD). Conference proceedings are also fully published on the SAIMM web site, in order to make the information searchable and available to as wide an audience as possible. The SAIMM continues to make its website publications available free of charge (via open access) to the general public, in recognition of the time and effort freely contributed by authors and the organizations where they work.

Attendance figures this year varied from 90 (for a new topic) to more than 200. Sponsorship from industry has continued at a very significant level. The support of sponsors is highly appreciated, especially in light of the rather depressed economy.

The 2013/2014 year included a variety of events, and some highlights are mentioned below.

The Western Cape Branch of the SAIMM held the 31st event in their annual Mineral Processing Conference series at the Vineyard Hotel in Cape Town in August 2013. This well-established event features close interaction between the local universities and industry, and has come to be known as the 'Southern African Mineral Beneficiation and Metallurgy Conference'. A one-day workshop was also held on the subject of 'Innovation in extractive metallurgy: Ideas, exploration, implementation'.

The 7th Southern African Base Metals Conference was held at the Ingwenyama Conference and Sports Resort in White River (Mpumalanga), during September 2013, and was attended by 120 people. After the two-day conference, there was a one-day technical visit to Nkomati Nickel. This series of base metals conferences is now well established (having been held every second year since 2001), and the event was well supported by a number of sponsors. Previous events were held at Victoria Falls (Zimbabwe), Sun City (South Africa), Kitwe (Zambia), Swakopmund (Namibia), Kasane (Botswana), and Phalaborwa (South Africa).

The World Gold Conference was held this year in Brisbane, Australia during September 2013. This international forum on gold exploration, mining, and processing rotates between a number of countries, including Australia, Canada, and South Africa.

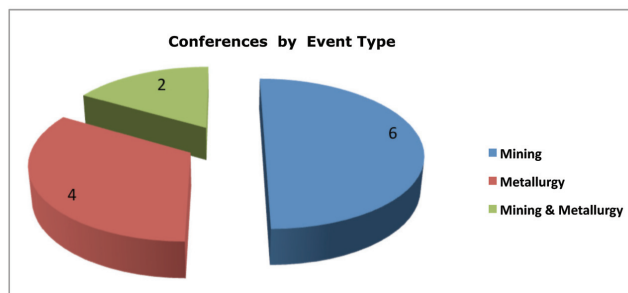
The Advanced Metals Initiative (AMI) of the South African Department of Science and Technology (DST) facilitates research, development, and innovation across the whole value chain in the field of advanced metals. In support of the Precious Metals Development Network, a conference was held at the President Hotel in Cape Town in October 2013, attended by 97 people. This event brought together researchers, industry, and government stakeholders to share and debate the latest trends, research, and innovative solutions in the field.

The annual Student Colloquium was held during November 2013 at the Doornfontein campus of the University of Johannesburg. The day was split into two parallel sessions – mining and metallurgy – with about 15 presentations in each. This event is subsidized by SAIMM from the surplus funds from other events, in support of the various tertiary educational institutions in southern Africa. This event has, since 2002, continued to provide a showcase for students to present their final-year projects, and this year's colloquium was attended by 221 people. The student presentations were generally of high quality, and some were subsequently published in the *Journal* of the SAIMM. Generous prizes were provided by SAIMM for the best mining and metallurgy presentations.

The 'Physical Beneficiation' conference was held during November 2013 at the Misty Hills Conference Centre, and was attended by 128 people. This conference was a follow-up to the SAIMM Physical Beneficiation conference held in 2010. Physical beneficiation covers not only the mineral processing areas of dense medium separation (DMS) and gravity concentration, but also magnetic and electrostatic separation. These processes are widely used in the southern African mining industry.

Conference by Event Type

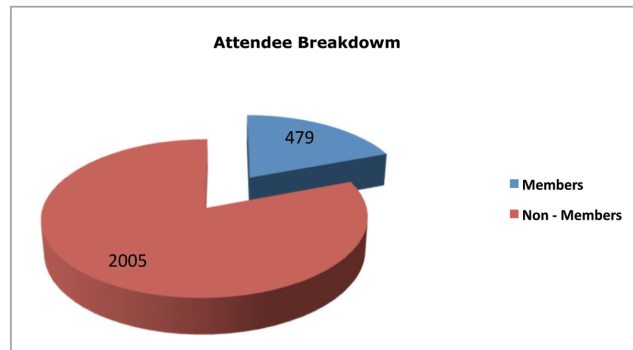
Mining	6
Metallurgy	4
Mining & Metallurgy	2
	12



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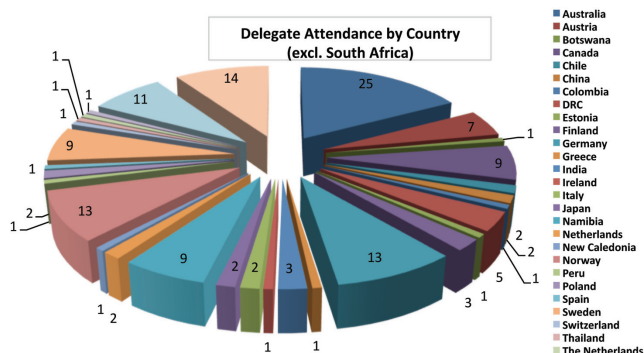
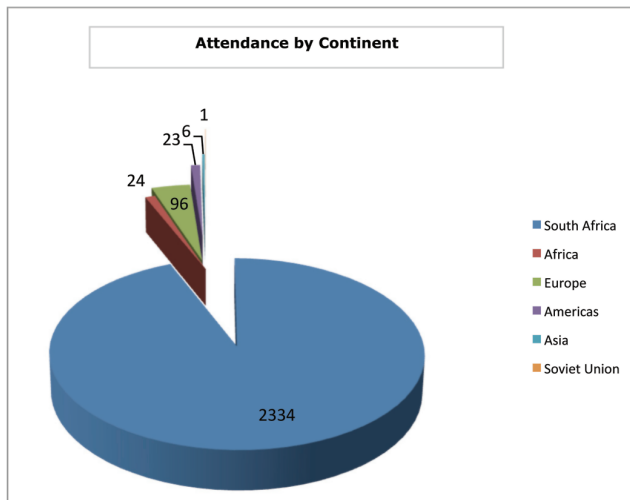
Attendee Breakdown

Members	479
Non - Members	2005
	2484



Attendance by Continent

South Africa	2334
Africa	24
Europe	96
Americas	23
Asia	6
Soviet Union	1
	2484



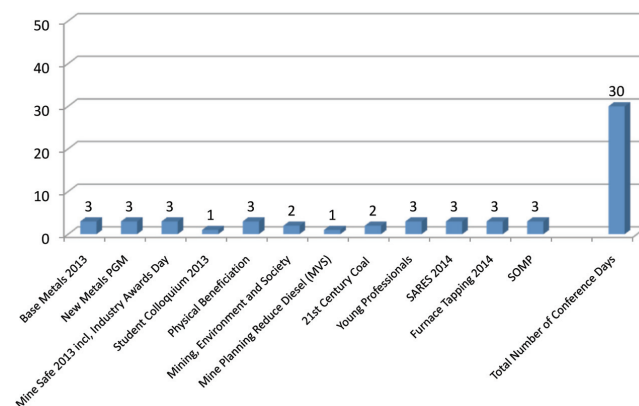
This year it was the turn of India to host the 9th Heavy Minerals Conference, which was held in November 2013 in the coastal city of Visakhapatnam. The event was well supported by delegates affiliated to SAIMM.

SAIMM had a strong presence at the TMS 'Celebrating the Megascala' symposium on pyrometallurgy, held in San Diego (USA) in February 2014. This event celebrated the

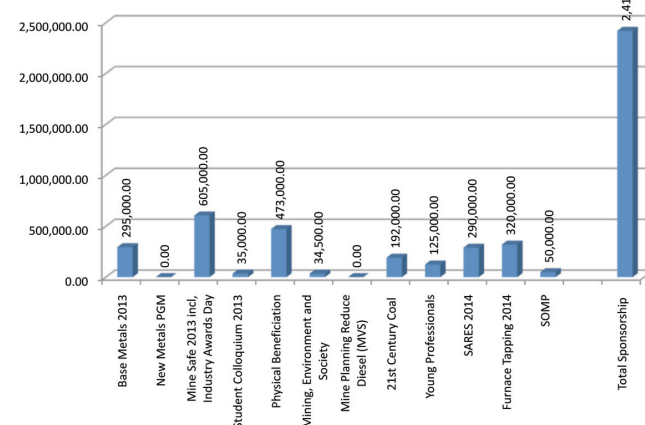
Countries in attendance at conferences

Australia	25
Austria	7
Botswana	1
Canada	9
Chile	2
China	2
Colombia	1
DRC	5
Estonia	1
Finland	3
Germany	13
Greece	1
India	3
Ireland	1
Italy	2
Japan	2
Namibia	9
Netherlands	2
New Caledonia	1
Norway	13
Peru	1
Poland	2
Spain	1
Sweden	9
Switzerland	1
Thailand	1
The Netherlands	1
Turkey	1
United Kingdom	11
USA	14
Zambia	5
Zimbabwe	4
Total	154

Conference Days - Per Event Jul 2013 - Jun 2014



Conference Sponsorship - Per Event July 2013 - June 2014



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pyrometallurgical work of David Robertson, Professor Emeritus of Metallurgical Engineering at the Missouri University of Science and Technology (formerly the University of Missouri-Rolla), who spent some time working in South Africa as well as supervising the PhD studies of a number of South African students. About 80 pyrometallurgists attended this event, which was part of the annual TMS conference attended by 4300 delegates from 64 countries.

The Young Professionals of the Minerals Industry Conference was held at Montecasino in Gauteng during March 2014. This new event was put together by a very enthusiastic organizing committee, and was very well received by the 90 delegates who attended. The conference provided the young professionals of our industry with an opportunity to share their experiences and ideas, forge ties with peers, and gain exposure necessary for career advancement. It assisted with the preparation of today's young professionals for the leadership role they will soon have to assume to address the current and future challenges in the minerals industry.

The subject of 'Furnace Tapping' was covered in a very well attended two-day event at the Misty Hills Conference Centre during May 2014, and was favourably received by 203 participants from 12 countries. Furnace tapping is a spectacular process, but also one where furnaces are most at risk. The main objective of this event was to advance the understanding of the design, safe operation, and maintenance aspects of tap-holes and related equipment through the exchange of knowledge between researchers and industrial operations. It was clear from the enormous interest in this event that this was an important subject to focus on.

There has continued to be greater co-operation between the various international mining and metallurgical societies, including those based in the USA (SME, TMS, and AIST), Australia (AusIMM), Canada (CIM), Chile, and Europe (GDMB). This has led to SAIMM participation in the organizing committees of a number of overseas international events, as well as co-sponsorship of events (which also entails publicizing the events to SAIMM members). These events included the Conference of Metallurgists (Montreal, Canada), the TMS Annual Meeting (San Diego, USA), the Copper International Conference (Santiago, Chile), and the Hydrometallurgy Conference (Victoria, Canada).

The Metallurgy Technical Programme Committee continued to be supported by a group of highly capable members, and many enjoyable meetings were held during the year. The SAIMM's conferencing team is to be commended for their highly professional approach in handling conference arrangements, resulting in many favourable comments from attendees. The combined efforts of all these people have resulted in a number of worthwhile technical events being provided for the benefit of the metallurgical community of southern Africa.

2.3 South African National Committee on Tunnelling (SANCOT)

H.J. (Ron) Tluczek, Chairman

G.A. Davis	T.R. Stacey
P.H. Ferreira	F.B. Stevens
W.C. Joughin	C. Viljoen
M. Lebitsa	J.W. Walls
J.L. Porter	M. Walnstein
D. Roos	

The International Tunnelling and Underground Space Association (ITA) held its 40th annual meeting in Iguassu Falls, Brazil, from 9 to 14 May 2014, in conjunction with the World Tunnel Congress (WTC) 2014 'Tunnels for a better life' organized by the ITA and the Brazilian Tunnelling Committee. More than 1500 delegates participated in the conference. The Association registered 12 new Affiliate Members in the preceding year, which resulted in a total of 71 Member Nations and 285 Affiliate Members (taking into account some resignations). Of the 71 Member Nations, 52 either participated or were represented in the General Assembly. Ron Tluczek, Chairman of SANCOT, represented South Africa at the General Assembly on behalf of the SANCOT Committee. Ron was elected as the new SANCOT Chairman on 9 April 2014 following the resignation of Andrew Wilson as the outgoing Chairman of SANCOT.

South African representatives participated in three Working Groups. Ron Tluczek participated in Working Group 2 (Research), Tony Boniface in Working Group 12 (Sprayed Concrete Use), and Monica Walnstein participated in Working Group 21 (Life Cycle Asset Management). With the assistance of Frank Stevens and Montso Lebitsa, Monica made a presentation to Working Group 21 on some aspects of life cycle asset management in South Africa.

Four reports were published by the ITA in the previous year, namely:

- *Refuge chambers* by ITA Working Group 5
- *Guidelines on monitoring frequencies in urban tunnelling* by ITA tech Activity Group on Monitoring
- *Guidelines on best practices for segmental backfilling* by ITAtech Activity Group on Excavation
- *An engineering methodology for performance-based fire safety design of underground rail systems* by ITA CUSUF Committee.

All these documents are available free of charge on the ITA website, and comments are invited.

After the tunnelling fraternity having been in the doldrums for a while, there are now several significant tunnelling projects on the horizon in South Africa. Some of the major projects include:

- a) The Lesotho Highlands Water Project, Phase II, which will include the construction of Polihale Dam and approximately 38 km of free-flow transfer tunnels to transfer the water to Katse Dam
- b) The uMkhomazi Water Transfer Scheme in KwaZulu-Natal, which will include the construction of Smithfield Dam and approximately 32 km of free-flow transfer tunnels to transfer the water to the Baynesfield Water Treatment Works to augment the Umgeini water supply
- c) The proposed extensions to the Gautrain Rapid Rail Link, Phase II, in Gauteng
- d) The upgrading of current Transnet tunnels, such as the recently awarded Overvaal tunnel.

With this increase in tunnelling activity, the active SANCOT membership is increasing. As a result, a number of Working Groups have either been resurrected or created within SANCOT, namely:

1. Site Investigation – Ron Tluczek and Gary Davis
2. Contract Practices / SANCOT Constitution – under the guidance of Andy Griffiths

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3. Vertical Tunnelling – Jeanne Walls, Danie Roos, and Jim Porter
4. Asset Management and Maintenance – Monique Walnstein, Frank Stevens, and Montso Lebitsa
5. Sprayed Concrete – Montso Lebitsa and Chris Viljoen under the guidance of Tony Boniface
6. RSA ITA WTC 2018 – Ron Tluczek, Raymond van den Berg, Monique Walnstein, Sakkie van der Westhuisen, and Danie Roos
7. Local SANCOT Seminar 'Strategic Asset Management' – Raymond van den Berg with the team from WG 6 above.

Working Group 6 will be looking at the possibility of hosting the ITA World Tunnel Congress in South Africa in 2018. This is as a result of numerous enquiries that Ron Tluczek received at the recent 2014 ITA WTC, and there would appear to be a lot of international support to hold a WTC in Africa, and specifically South Africa.

3. Publications

Portfolio Holder: M. Dworzanowski

D. Tudor, Chairman

R.D. Beck	W.C. Joughin
J. Beukes	J.A. Luckmann
P. den Hoed	C. Musingwini
M. Dworzanowski	R.E. Robinson
M.F. Handley	T.R. Stacey
R.T. Jones	R.J. Stewart

3.1 Journal

The major challenge that the publications team faced during the year was the production of the *Danie Krige Commemorative Journal*, which as it turned out required three volumes as a result of the tremendous response from the geostatistical fraternity worldwide to the call for papers to commemorate Danie Krige's work. Volume I was issued in March 2014, Volume II will be issued in August 2014, and Volume III in January 2015.

The breakdown of papers published during the year is as follows:

Year	Mining	Metallurgy	Other	Total
2013	46	73	12	131
2014	55	46	9	110

The average monthly print run during the year was 3850 copies.

Again, a large number of papers for consideration for publication in the *Journal* were submitted from non-South African sources. Of the 97 papers published in 2014, 37 were from outside South Africa.

The total advertising revenue of R1 981 309 was 13.2 per cent over the budget of R1 750 000 set for this year. The contribution from advertising on the SAIMM website amounted to R123 268, which is an increase of 72.5% for the same time last year, and it is increasingly evident that this area of advertising is gaining in popularity.

The 'open access' system for electronic communication and the retrieval of information is now well established. The SAIMM is served by the OneMine system (www.onemine.org),

the African Journal Archive (www.ajarchive.org), and SciELO SA (www.scielo.org.za).

The collation of 'raw data' for the referee database was completed and a programme for the development of the referee database system has been drawn up. There is a considerable amount of detailing and refinement of the system to be undertaken.

The publications team of Dawn van der Walt, Zulaikha Malgas, and Kelly Matthee has continued its good work in producing the *Journal*.

4. Regional Development

Portfolio Holders: G.L. Smith

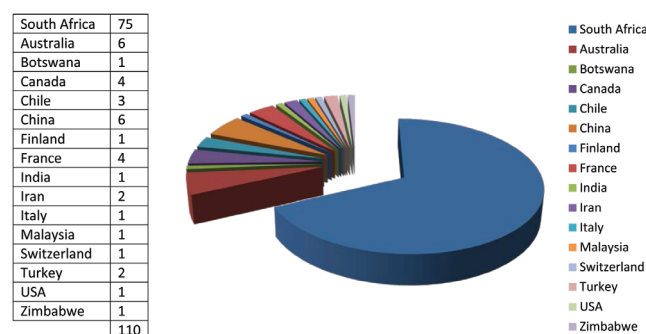
M. Dworzanowski	J. Porter
M.J. Mothomogolo	J.N. van der Merwe

Key Performance Areas

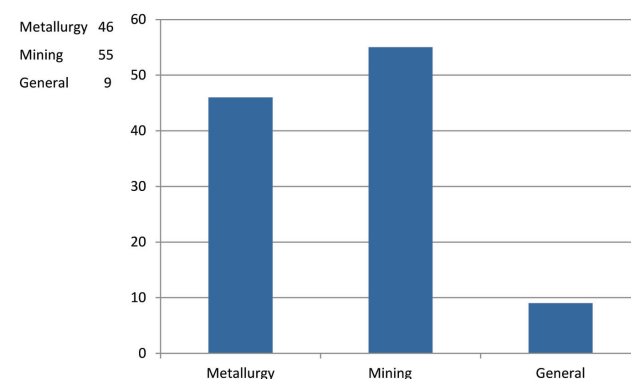
To promote the interests of members based in different regions, the SAIMM:

- *Supports the establishment and maintenance of branches to satisfy the local needs of its members for professional association and the exchange of technical information*
- *Co-operates with other member societies of AS&TS and with associations and interest groups that have close ties with operating mines and metallurgical plants by holding joint technical meetings and collaborating in the field of publication.*

Submission of *Journal* papers by Country



Journal papers submitted by categories, i.e. Metallurgy, Mining, and General



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Journal List of Referees

F. Abbasy	J. Du Plessis	G. Lyman	N. Shackleton
M. Abdellatif	R. Durrheim	C. Machio	G. Simate
M. Abzalov	M. Dworzanowski	A. Mainza	P. Simpson
F. Agterberg	X. Emery	F. Malan	C. Smith
G. Akdogan	L. Erasmus	D. Marcotte	K. Sole
C. Aldrich	R. Eric	H. Maree	S. Spearing
G. Assis	M. Erwee	S. Master	S. Spottiswoode
E. Baafi	E. Esterhuizen	S. McDougall	R.M. Srivastava
D. Bakker	R. Falcon	N. McGeorge	J. Stacey
N. Barcza	B. Farshadi	B. McKechnie	T. Stacey
I. Barker	P. Fatti	K. McMillan	J. Steenkamp
H. Bartlett	J. Felipe	B. Minasny	O. Steffen
R. Beck	R. Finkelman	D. Minney	R. Steinhouse
C. Bergmann	J. Forkes	R. Minnitt	A. Steinmuller
O. Bertoli	X. Freulon	C. Morgan	G. Stenzel
P. Beukes	M. Fullam	S. Murphy	R. Stewart
M. Biffi	L. Gardner	C. Musingwini	W. Stumpf
D. Blaine	A. Giblett	H. Myburgh	J. Sweet
G. Blight	I. Glacken	S. Naik	P. Swiridukr
M. Blinderman	D. Guibal	J. Napier	T. Thomson
S. Bluhm	M. Handley	C. Naude	M. Thursten
I. Bock	M. Harley	H. Nel	L. Tolmay
K. Bosman	R. Harris	L. Nelson	M. Topic
G. Bourgault	K. Hay	W. Nheta	T. Troutman
D. Breet	L. Herbert	M. Noppe	W. Truter
C. Brickhill	M. Hermanus	R. Olea	D. Tudor
J. Bunt	S. Heyns	G. Olivier	G. Van Aswegen
K. Buttemer	A. Hinde	J. Ortiz	W. Van Drunick
Q. Campbell	M. Hooman	T. Orton	J. Van Dyk
P. Carvill	M. Humphries	O. Oxtoby	M. Van Meirvenne
F. Cawood	E. Iguzquiza	H. Parker	D. Van Niekerk
V. Chamberlain	J. Jacobs	R. Paul Roger	H. Van Wyngaard
L. Chown	W. Joughin	J. Petersen Jochen	B. Van Zyl
G. Combrink	S. Kauchali	R. Pickering Rod	P.G. Van Zyl
A. Cook	E. Koortzen	F. Pitard Francis	N. Vegter
K. Corin	M. Kotze	D. Powell David	S. Venter
L. Cornish	M. Kriel	C. Prins Chris	G. Verly
M. Craddock	B. Kruger	H. Prinsloo	A. Vietti
M. Cresswell	C. Kruger	B. Qiu	J. Visser
B. Crompton	J. Kuipers	P. Radcliffe	F. Von Glehn
C. Cronje	P. Kyriakidis	N. Randolph	M. Vosloo
C. David-Howoses	S. Labram	D. Renard	K. Vreugdenburg
B. Davis	I. Labuschagne	Q. Reynolds	K. Waelbers
J. De Korte	G. Lane	J. Rivoirard	D. Walters
V. Demyanov	J. Le Roux	D. Roberts	J. Wates
P. Den Hoed	T. Leach	S. Rogers	I. Wermuth
J. Deraisme	S. Li	J. Rojek	J. Wesseloo
C. Deutsch	D. Limpitlaw	A. Roodt	R. Whyte
E. Dhlamini	Y. Liu	D. Rose	S. Ye
P. Dicks	H. Lodewijks	S. Rupprecht	H. Yilmaz
R. Dixon	J. Luckmann	S. Rymer	D. Young
A. Dougall	J. Lupo	S. Saydam	M. Zanin
		J. Schweitzer	

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4.1 SAIMM Branches

4.1.1 DRC Branch

S. Maleba, Chairman

Twenty members have joined the SAIMM from Lubumbashi and the Branch Committee is now focusing on attracting members from Kolwezi.

A technical visit to Ruashi mine was held on 22 November 2013 and went well. Mr Vaughn Duke represented the Council of the SAIMM and the Secretariat assisted with the registration and logistical issues.

There was still a challenge to get the *Journal* to the SAIMM members in the DRC and Mr Maleba was considering the use of a courier service to resolve this.

4.1.2 Johannesburg Branch

I. Ashmole, Chairman

J. Luckmann, Vice-Chairman

J. Clarke	M. Malatse
G. Dellas	M. Mostert
A. Dougall	M. Mthenjane
V.G. Duke	T. Nesengani
C. Heili	D. Porter
R. Heins	G. Ralph
H. Jantzen	G. Stripp
N. Magagula	

Introduction

The Johannesburg Branch's main activity is to organize technical presentations on a monthly basis between February and November each year. These are generally held on the third Thursday of each month, at the SA Museum of Military History.

The schedule of presentations for the 2013/2014 year was off to a promising start, with the July presentation scheduled to discuss AngloGold Ashanti's Deep Mine concepts. However, the departure of Mike Macfarlane from AngloGold led to the cancellation of this event at short notice, and the Committee was not able to find another speaker from AngloGold willing to present on this topic, even at a later date.

Our second technical presentation in August consisted of our (now annual) Student Debate, this year around the topic 'Powering our Future' in which three teams of students debated the merits of coal, renewable energy sources, and

alternative non-renewable energy sources such as nuclear and shale gas as options for South Africa's future power requirements. Thanks must go to Andre Dougall and Graham Stripp for their assistance in organizing the debate, as well as to the University of Johannesburg's Mining Department for sponsorship.

Given the current state of the economy, particularly in the mining industry, we struggled to find sponsored presentations for September and October, with two previously confirmed presentations being cancelled, and as a result, no presentations were held in these months. In November, Peter Major from Cadiz presented his insights into investment in mining in Africa, entitled 'Where the smart investors are investing'.

2014 opened with a bang, with Ernst Venter's 'NEXT (New Exxaro Tomorrow) Generation Mining', a discussion of Exxaro's strategic roadmap to business sustainability. This is simply a world-class exercise in scenario planning, business strategy, and sustainability. If the Exxaro team delivers on this strategy, expect a chapter devoted to Exxaro when Jim Collins writes his book on business sustainability. We fittingly had a record attendance at this event – in excess of 230 people.

We were again unable to secure sponsored presentations for March and April 2014. However, at the April 2014 SAIMM Council meeting, Council expressed a vote of confidence in the Johannesburg Branch by undertaking that the SAIMM would support financial shortfalls in our technical presentations, given the Branch's role as a feeder for new student members from Wits and the University of Johannesburg, and provided that technical quality of our presentations remained a priority. The Committee is also investigating alternative sponsorship models, as well as looking at options to reduce the costs of our events (although under strict admonishment from Council that quality should remain top priority given our status as a flagship branch).

Our May presentation, by Daniel Ambros of Cronimet, featured the hybrid photovoltaic/diesel power solution at Cronimet Chrome's Thabazimbi mining operation. Our June presentation from DetNet will discuss 'The future of electronic initiation'.

Happily, looking forward, we have a full schedule of presentations up until the end of 2014, with even some alternatives, so we should be in a position to have the full schedule of five presentations between now and December 2014. All of these are either fully or partially sponsored.

Johannesburg Branch of the SAIMM: technical presentations 2013/2014					
Date	Title	Presenter	Sponsor	Responsibility	Venue
18 July 2013	AngloGold Deepmine Concept	M. Macfarlane	AngloGold	I. Ashmole	Military Museum
15 August 2013	Socio-economic issues around mining. How to turn around negative image and attract investment/ environmental issues?	Student Debate	UJ	All	Military Museum
21 November 2013	Where the Smart Investors are Investing	P. Major	Cadiz	V. Duke	Military Museum
13 February 2014	Exxaro: New Generation Mining	E. Venter	Exxaro	I. Ashmole	Military Museum
15 May 2014	Cronimet Mining-Power Solutions – Case Study 'ZIMBI': PV/Diesel Hybrid	D. Ambros	Chronimet	I. Ashmole	Military Museum
19 June 2014	The Future of Electronic Initiation	G. Landman	Detnet	I. Ashmole	Military Museum

Annual report

As reported last year, we have continued to focus on student attendance at our technical presentations, and I am pleased to report that we have had good continued attendance from the mining students at Wits and UJ. Thanks to Russell Heins's efforts, we now also have pleasing attendances from the Wits Metallurgy students on a regular basis.

AGM

The Branch AGM was held on 19 June 2014.

Committee

We welcome the following new members who were elected at the AGM to the Committee: Heinrich Jantzen, Maurice Mostert, Dave Porter, George Dellas, Jeremy Clarke, and Nomathemba Magagula, and congratulate John Luckmann on his election as Vice-Chairman. Thakani Nesengani joined the Committee as the Wits mining student representative at the beginning of the new academic year, and Maria Malatse has joined as representative of the Wits metallurgy students.

We would like to thank outgoing members Thompho Mativa, Jason Douwie, Diddi Bant, Xiaowei Pan, Udo Sachse, and Julian Upshall for their contributions.

Finances

Total costs of events came to R52 637.47, and sponsorship received was R40 386, resulting in a cost to the SAIMM of R12 251.47 for the year.

4.1.3 Namibian Branch

G.B. Ockhuizen, Chairman

H.N. Abraham	A.M. Mutileni
D. Chimanikire	N.M. Namate
S.S. Massipa	
T.G. Murasiki	

Our membership drive is continuing. A focused effort is being made to convert the student members who entered the workforce to Associate Members, as well as trying to get the existing members who have discontinued their subscriptions to reactivate them. We have created a Namibian Branch Facebook group in an effort to encourage more membership and to discuss issues faced in the mining industry. Increased efforts are being made to recruit new members from the mining companies that are currently developing new projects (Swakop Uranium and B2 Gold).

Owing to the depressed commodity prices, especially uranium, some members are being affected by retrenchments, which could have an effect on our membership numbers.

The Drill and Blast school that was scheduled to take place in May 2014 has been postponed to September 2014, due to limited registrations and the depressed market. Efforts are still being made to host more events.

4.1.4 Pretoria Branch

N. Naudé, Chairman
G. Ngema, Secretary

K. de Wet	R. Mabapa
W.W. de Graaf	C. Siyasiya
D. Powell	J. Steenkamp

The activities of the Branch continued with the format of previous years. A number of seminars were organized in conjunction with the Department of Mining Engineering and the Department of Material Science and Metallurgical Engineering at the University of Pretoria's main campus. Presenters from both industry and a private consultant were hosted, with the audience being mainly mining engineering and metallurgical engineering students, university personnel, and industry professionals.

One of the core functions of the Pretoria Branch is to grow the SAIMM membership numbers through student membership. This is achieved through hosting events on relevant topics, and it also gives the students an opportunity to mingle with industry professionals on an informal basis.

The following mini-colloquia were hosted on campus

- ▶ A presentation by the incoming President of SAIMM, Marek Dworzanowski, on 'The role of metallurgy in enhancing beneficiation in the South African mining industry'. Dr N. Naudé was elected as the new Chairman of the Pretoria Branch at this event
- ▶ Dr Herman Prinsloo gave a presentation on 'The use of change management and behaviour-based training in an improvement project aimed at creating organizational sustainability in a multicultural mining environment in Zambia'.

All the sessions were well attended and the events were followed with cocktail functions. A special word of thanks goes to the sponsors for providing snacks and refreshments.

Finally, thanks to the Committee, the SAIMM Secretariat, and lastly a special word of thanks to Daleen Gudmanz and Gabi Ngema for playing a key role in making sure that all the events ran smoothly.

4.1.5 Western Cape Branch

T.V. Ojumu, Chairman

L. Bbosa	J.-P. Franzidis
R.D. Beck	G. Hangone
S. Bradshaw	A. Mainzar
J.A. Cruise	C. O'Connor
D.A. Deglon	J. Petersen
C. Dorfling	

2013/2014 was, as usual, a successful year of thriving activities for the Western Cape Branch. The three Engineering institutions, Cape Peninsula University of Technology (CPUT), University of Cape Town (UCT), and Stellenbosch University, comprise the bulk of our members. A few senior citizens that have retired to the Cape also participate regularly in Branch activities.

The year started with our usual annual conference, 'MinProc 2013', which was held at the Vineyard Hotel on 7 and 8 August 2013. Although the brand name of the conference is kept as 'MinProc', we have formally converted it to a metallurgy conference due to the increasing focus of conference participants in areas of metallurgy. As usual, the conference was preceded by a one-day workshop, on 'Innovation in Extractive Metallurgy – Ideas, Exploration, Implementation' held on 6 August, also at the Vineyard. The workshop, facilitated by Frank Crundwell, Director of CM Solutions, drew input from a large selection of people, including Frank Crundwell, Andrew Lane of Monitor Deloitte, Duncan Raftesath

Annual report

of Wits Enterprises, Llanley Simpson of the DST, Neville Plint of Anglo Platinum, and Peter Craven from Mintek, among others. The workshop attracted 30 delegates and was considered a good success. The conference consisted of two plenary sessions, 33 oral presentations (including 13 by Outotec entrants), 27 short (snapshot) presentations, and 19 posters. The event was attended by 140 delegates.

A special session of the conference was sponsored by Outotec, with a prize for the best presentation on a research project/idea that demonstrates how sustainability thinking informs research and development in the minerals industry, on either a fundamental or applied level. Five entries competed for the prize. The awards went to:

1st prize (R10 000) – Mehdi Safari: *The effect of energy input on flotation kinetics of sulphide minerals in an oscillating grid flotation cell (OCC)*

2nd prize (R 6 000) – Helene-Marie Stander: *Evaluation of downstream processing options for sulphide-rich coal waste tailings.*

Furthermore, Outotec also sponsored a conference travel grant to enable the author of the most promising contribution in the area of minerals research to attend an international or local conference. One award of R25 000 was made this year, to James Mwase for his paper titled '*Developing a novel two-stage heap leach process for extracting base and precious metals from PGM ore*'. Dr Markus Reuter of Outotec presented all the Outotec prizes.

Through Dr Reuter, Outotec has also supported the Branch by contributing generously to the tune of 20 000 euro. This has enabled us to provide two new postgraduate scholarships – a once-off payment of R100 000. The competitive scholarships are open to postgraduates at any of the four universities in the Western Cape who have demonstrated sustainability thinking in their research proposals. This year's scholarships went to:

K. Shaik (University of Cape Town) – *Formation of thiocyanate in bioleaching residues and its use for PGM leaching*

W.A. Rossouw (Stellenbosch University) – *Base metals recovery from waste printed circuit boards by mechanical pre-treatment followed by oxidative acid leaching.*

The awards were made at the conference dinner on the evening of the 7 August 2013. The two new postgraduate scholarships will be announced during the 2014 MinProc Conference in August 2014.

As per tradition, the incoming Chairman of the SAIMM, Marek Dworzanowski, presented a number of SAIMM prizes to the best final-year students in mineral processing and related subjects. The 2013 prizewinners were Deogratious Chawira (CPUT), Thobile Dube (UCT), and Alek Pieters (Stellenbosch). The MinProc Best Poster at the conference went to Elaine Govender and Yusuf Bello.

The conference dinner was preceded by the Branch AGM, at which the outgoing Chairman, Associate Professor Jochen Petersen, presented his report and the new committee was voted in. Associate Professor Ojumu from CPUT was elected Chairman, Dr Christie Dorfling as Secretary, and Associate Professor Aubrey Mainza as Treasurer.

The Branch held three meetings on 29 October 2013, 6 February 2014, and 27 May 2014. Some key areas of development are as follows:

- The annual Minerals Beneficiation and Metallurgy Conference (MinProc 2014) will be held on 7 and 8 August 2014 at The Lord Charles Hotel in Somerset West. The venue has moved closer to Stellenbosch as the tradition has been to alternate venues between Cape Town and Stellenbosch. The day preceding the conference, 6 August 2014, was chosen for a workshop with the theme 'Opportunities to improve energy efficiency in processes'. We are aiming to invite speakers from industry, academia, and government organizations to share examples of methods employed in real-life case studies in which energy savings are being actualized. Outotec has again increased their sponsorship of Branch activities, and more importantly, of research on sustainability or research in which sustainability thinking is being demonstrated, to 20 000 euro. The response in the way of submitted papers from academia has been extremely good, but concerns about the continuing decline in industry participation in this well-established event still remain
- Financial arrangements: although the Branch has decided to align its financial management with that of the main SAIMM body but maintain an independent current account, primarily to organize its events, the use of the accounting tool Pastel still remains a challenge. The Branch is currently making use of the consulting facility provided by SAIMM to enable it to master this software. The Branch's investment account has been integrated into the SAIMM'S investment portfolio at AFC and a sum of R300 000 was transferred to SAIMM for that purpose on the 21 May 2014. SAIMM has provided the Branch with an official letter to acknowledge the receipt of the said amount for the purpose of investment, as requested. SAIMM will also continue to send the Branch a monthly statement of the investment so that the fund can be properly monitored
- IMPC 2020: the Branch has decided to put in a bid to host this event, with the support of SAIMM. The preliminary bids for IMPC 2020 need to be submitted in October and a full bid in 2016, allowing 4 years' preparation time. The Branch has appointed Professor David Deglon to put together a committee comprising people around the country. Four committee members will need to be available to attend the IMPC Congress in 2016 to present our bid.

The Branch held its annual students' activities evening at Stellenbosch University on 14 April 2014. This was well attended by some 110 students. Dr Christie Dorfling, the Branch Secretary, opened proceedings. The guest speaker, Mr Hansie van Vreden (COO of Goldplat plc), emphasized the important attributes needed by young graduates for a successful career in the mineral industry. Professor Kim Clarke and Associate Professor Tunde Ojumu gave presentations on the need for students to join the South African Institute of Chemical Engineers (SAIChE) and the SAIMM. The event was well received by the students.

A Branch Committee Dinner was attended by a number of members of the Committee and their partners on 23 April June 2013 at Barriques Restaurant in Stellenbosch. The event was enjoyed by all.

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The Branch finances are in good order and we are set to run another conference this August. However, we remain concerned about the effects of the continuing economic decline and the recently ended mineworkers' strike on our industry. We hope we can regain more interest from industry in interacting with our students at our conference in the future.

4.1.6 *Zambian Branch*

H. Zimba, Chairman
A. Delaney, Vice Chairman
D. Muma, Secretary
W. Munalula, Treasurer

A. Mhone C. Ngulube
C. Mwale

The Zambian Branch held its Annual General Meeting on 2 August 2013 with a view to electing office bearers. The Chairman, Vice-Chairman, Secretary, Treasurer, and three committee members were elected into office.

The Branch has mounted a vigorous membership recruitment campaign. In the period between August 2012 and March 2014 membership increased by 49%. The Branch is now targeting a doubling of membership by August 2014, by recruiting 20 more extra members. To achieve this, the Committee has assigned each member to recruit five new members by August 2014.

The Branch held a successful event on 2 August 2013, which consisted of technical presentations in the morning and a site visit to Lubambe Copper Mines in the afternoon. A total of 27 delegates attended the event, three of whom applied to become members of the Institute.

4.1.7 *Zimbabwean Branch*

S. Gaihai, Chairman
S. Mandoza, Secretary

E. Matinde L. Shamu
S. Matutu O. Zvarevashe
S. Ndiyamba

Membership

During the year, the Zimbabwe Branch membership grew from about 150 members to over 200. The Branch membership continues to grow through committed stakeholder engagement and membership drive.

Networking events

The Branch successfully organized several networking and technical events during the course of the year.

Zimbabwe School of Mines Conference on Resource Nationalism

In July 2013, the Branch held a successful conference on resource nationalism at the Zimbabwe School of Mines. The event attracted speakers from the local mining industry and senior government officials, as well as from South Africa. Notable speakers include Dr Michael Solomon, keynote speaker and expert on resource nationalism, Professor Sehliselo Ndlovu from Wits University, Mr Pindukayi Musarandega of Zimasco, Mr Dave Matyanga from the Chamber of Mines Zimbabwe, Mr Valentine Vera from the Ministry of Mines, Mr Caston Mutevhe, and senior officials from the Ministry of Youth, Indigenization and Empowerment, among others.

Resource nationalism is not limited to Zimbabwe. Globally, resource-rich communities and states are demanding more participation in the manner in which resources are extracted and the way in which the resource rents and profits are shared. The impact of resource nationalism, if not properly managed, can be devastating to the sustainability and profitability of the mining industry. Stakeholder engagement, including our shareholders, the government, and the communities is essential if we are to come up with holistic solutions to problems affecting the mining industry.

The event was sponsored by Mimosa Mining Company, Virimai Projects, AEL Mining Services, Diamond Mining Company, and the Zimbabwe Mining Development Corporation.

How Mine technical tour

The day after the Resource Nationalism conference, the participants visited Metallon Gold's How Mine shaft re-deep project. The How Mine team gave a detailed technical presentation of the motivation for the project, and the technical challenges they had to overcome. The participants received an insight on how to manage such complicated projects. The presentation was followed by an underground tour to demonstrate the complexities of the project. It was a good learning experience for those who attended. Some participants opted to tour the processing plant.

Unki Mine technical visit

The Branch organized a successful technical visit to Anglo Platinum's Unki Mines operations in Shurugwi on 6 November 2013. The programme incorporated a split underground and process plant tour. The technical visit was aimed at understanding the PGM value chain in Zimbabwe, and appreciating the new developments and challenges in PGM mining and processing in the country. Over 80 participants attended the event, and four technical papers were presented. The visit attracted participants from various mining companies in Zimbabwe, the DRC, and South Africa.

The Committee would like to thank Dr Gordon Smith, the outgoing SAIMM President, for the keynote speech, Mr Caston Musa for the overview of Unki Mine operations, Mr Tony Nyakudarika of DRA Minerals, and finally Mr Hebert Mashanyare of the Platinum Producers' Committee. Once again, the Branch would like to thank the management team at Unki for making this event a success. Financial sponsorship was received from Andritz Separation Technologies, Vhecmore Enterprises, and the hosts, Unki Mine.

Bindura Nickel (BNC) technical visit

Over forty participants undertook a technical visit to Mwana Africa's Bindura Nickel Corporation in May 2014. The event included a split underground and process plant tour. Four technical papers covering the geology, mining, ventilation, and processing of base metals were presented by the BNC technical team. Financial sponsorship was received from BNC management and the management team of Whalebore Enterprises.

Branch registration

The Committee continues to make efforts to ensure that the Zimbabwe Branch is legally recognized in Zimbabwe. The Branch applied for, and was awarded, an Agency Category

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affiliation through the Engineering Council of Zimbabwe. The overall objective is to be recognized as a constituent body under the Engineering Council of Zimbabwe. In addition, the Branch has applied for affiliation through the Chamber of Mines Zimbabwe.

Forthcoming Events

22 July 2014	Zimbabwe School of Mines (Bulawayo) conference on local procurement and supply chain challenges in the Zimbabwean mining industry
23 July 2014	Mine Entra at the ZITF Grounds in Bulawayo
September 2014	The Branch to host the field excursion of the Platinum 2014 Conference
October 2014 (TBA)	Tour of the University of Zimbabwe, Departments of Geology, Mining, and Metallurgical Engineering
March 2014 (TBA)	Metal Accounting Conference.

4.1.8 Zululand Branch

C. Mienie, Chairman

E. Clare	R. Kutama
B. Cox	B. Maramba
W. Jordaan	

The SAIMM Zululand Branch had a good productive year in 2013/2014.

Christo Mienie was elected Branch Chairman, replacing Wynand Erasmus, who left Richards Bay for Johannesburg owing to a promotion.

The main focus of the year was to grow the SAIMM membership in the Zululand area, increase the number of committee members, and to increase attendance at technical presentations. Branch committee meetings were well attended by members during the year.

There were no major conferences in the area this year.

The Branch once again maintained its association with the other professional institutes in the KZN area. Members in the area are mainly from Richards Bay Minerals, Tronox KZN, Tata Steel, and BHPB Aluminium (Hillside and Bayside). Suppliers to the local industries, such as Spectrum Technical, have also given us support during the year.

The Branch Chairman attended the following SAIMM meetings in Johannesburg:

- 23 August 2013—AGM and Special Council Meeting
- 17 January 2014—SAIMM Council Meeting
- 11 April 2014—SAIMM Council Meeting.

Branch technical activities

- 26 March 2014—Magnetic separation (Eriez Magnetics (Pty) Ltd). 15 people attended
- 4 June 2014—Graphite electrodes and other carbon lining and manufactured products (SGL). 12 people attended
- 18 September 2013—Plant visit to Tata Steel. 17 people attended, and positive feedback was received.

Social activities

- 4 December 2013—End-of-year event - wine tasting. 12 people attended.

The year ahead

Activities planned for the year 2014/15 include:

- Technical presentation—Refractories - Verref Shaped Products (Pty)Ltd (23 July 2014)
- Technical presentation—Jindal Iron Ore Mine
- Technical presentation—Anthracite mining
- Other—Financial / investments
- Social—bird-watching event with family braai
- Social—end-of-year wine / whiskey tasting.

5. Engineering Council of South Africa (ECSA)

Professional Advisory Committees

The mission of ECSA is to ensure, through a co-operative process of quality assurance, that persons entering the profession are educated and trained according to widely accepted standards, so as to be able to render a professional service for the benefit of the public and the country as a whole. The Professional Advisory Committees (PACs) of ECSA contribute to this mission by considering matters specific to the discipline and also contribute to wider policy matters as required.

PAC Metallurgy

M. Dworzanowski, Chairman

K.C. Mistry, Vice-Chairman

N.A. Barcza	G. Jonck
R.D. Beck	R.T. Jones
L.A. Cramer	R.F. Sandenbergh
M. du Toit	J. Phiri
R.H. Eric	W.H. van Niekerk
I.J. Geldenhuys	M. Vermaak

PAC Mining

M.H. Rogers, Chairman

R.P. Mohring, Vice Chairman

J.J.L. du Plessis	G.L. Smith
M.J. Motomogolo	T.R. Stacey
C. Musingwini	V.P. Tobias
J.C. Ngoma	D.J. van Niekerk
R.C.D. Phillis	R.C.W. Webber-Youngman
V.O. Seboni	L. Zindi

PAC Metallurgy

During 2013/2014 the PAC Metallurgy again considered applicants for registration as Professional Engineers by means of paper evaluations and interviews, in which volunteers from the SAIMM participated. The requirement for Continuing Professional Development (CPD) of Professional Engineers for all registered persons opens up opportunities for the SAIMM to support the profession by offering seminars and conferences. This contributes to the CPD category 1 developmental activities. The Committee wishes to record its thanks to the organizing committees and the Secretariat of the SAIMM for the issuing of CPD certificates.

Dr W.H. van Niekerk and Professor M. du Toit both resigned from the Committee, and Mr G. Jonck and Dr L.A. Cramer both retired. The Committee extends its appreciation for all the years of service given by these four members. During 2014/2015 suitable replacements for these members will be sought with the assistance of the SAIMM and ECSA.

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PAC Mining

The Committee continued to review and recommend applicants for registration as Professional Engineers. The ongoing assistance of the SAIMM in arranging the peer reviews is appreciated.

The impasse between ECSA and the Council for the Built Environment in respect of the 'Identification of Engineering Work' continues, with little progress having been made. No input was required from the Committee

Work on 'Discipline Specific Training Guides' for candidate engineers progressed during the year, with the Committee focusing on the mining engineering discipline.

The SAIMM has been associated with ECSA and its forerunner, the South African Council for Professional Engineers (SACPE), as a founding Voluntary Association since their inception. The SAIMM provides input into the ECSA committees by nominating SAIMM members to stand on those committees on a voluntary basis. The Institute also proposes nominations for persons representing mining and metallurgy to stand on the ECSA Council.

ECSA has implemented a Transformation Programme in order to achieve racial and gender equality on its Council and sub-committees. This will involve the retirement of six members of the Committee with greater than twelve years' service at the end of their current terms of office. While it will be reasonably easy to appoint a more racially balanced Committee this is not the case for women, as there are only three women registered as professional mining engineers in South Africa. The Committee has adopted a strategy to achieve full transformation in two years. It is noted that 54 per-cent of Committee members are Black or Coloured.

6. State Liaison

Portfolio Holder: M. Dworzanowski

6.1 Outcomes-based Education and Training (OBET)

Portfolio Holder: D.J. van Niekerk

There were no new developments to report this year.

7. International liaison

Portfolio Holder: G.L. Smith

Key Performance Areas

To achieve its objectives, the SAIMM

- *Participates in and represents South Africa on bodies such as the Mining, Metals & Minerals Society (TMS), and together with Mintek on INFACON*
- *Appoints corresponding members in areas such as Australasia, Botswana, Brazil, Canada, Chile, Europe, the Far East, Ghana, New Zealand, the United Kingdom, and the United States of America, and interacts with sister institutions in other countries to promote international exchange of scientific and technical information.*

7.1 APCOM

F.A. Camisani-Calzolari, Chairman

M. Mattera

M. Wanless

APCOM symposia

The first APCOM Symposium was organized in 1961 by four American universities: Stanford, Arizona, Pennsylvania, and the Colorado School of Mines, for the purpose of promoting computer applications and operations research in the minerals industry. This event grew into an international forum for introducing, discussing, and examining the state-of-the-art technology in the minerals industry. The APCOM symposia are now an important driver of innovation, facilitating the advancement of computer technology and operations research methodologies applied to this sector, thanks to the personal commitment of the participants and loyal supporters.

The international APCOM Council currently consists of the following members:

Dr Andrej Subelj	representing the Institute of Mining, Geotechnology and Environment, Solvenia
Dr Antonio Nieto	representing Pennsylvania State University, USA
Dr Axel Preusse Germany	representing Aachen University,
Dr Eduardo Magri	representing the University of Santiago, Chile
Dr Ernest Baafi	representing the Australasian Institute of Mining and Metallurgy
Dr Evengy Kuzmin	representing Moscow Mining Institute, Russia
Dr Ferdi Camisani	representing the Southern African Institute of Mining and Metallurgy
Dr Kadri Dagdelen	representing Colorado School of Mines, USA
Dr Robert Hall	representing the Canadian Institute of Mining, Metallurgy and Petroleum
Dr Sean Dessureault	representing the University of Arizona, USA. (International APCOM Council Chairman 2011-2015)
Dr Sukumar Bandopadhyia	representing the Society for Mining, Metallurgy and Exploration, Inc., USA.
Dr Wang Yuehan	representing China University of Mining and Technology.

36th APCOM Symposium

The 36th APCOM Symposium was held in Porto Alegre, Brazil, during 4-8 November 2013. This was the first time in its 50-year history that the Symposium has been held in Brazil.

139 delegates representing more than 17 countries attended four pre-congress short courses and the APCOM Symposium at the Sheraton Hotel. The programme included the traditional areas of mineral exploration, mine planning, and mineral processing, including geostatistics, mine design, production planning, investment analysis, artificial intelligence (AI), simulation, mineral automation, rock mechanics, mineral processing, and data management systems.

The participation of professors, researchers, and students from universities around the world reinforces the significance

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and success of this forum, which takes place every two years. South Africa was well represented by attendees from the major mining groups and consulting firms.

The event was supported by Federal University of Rio Grande do Sul (UFRGS), the Luiz Englert Foundation (FLE), and generously sponsored by companies and institutions including Maptek, Leapfrog, CNPQ, CAPES, and Geovariances. The Chairman of the Conference was Dr João Felipe Costa of the Mining Engineering Department of UFRGS.

37th APCOM Symposium

The 37th International Symposium on the Application of Computers and Operations Research in the Mineral Industry (APCOM 2015) will be held in Fairbanks, Alaska, during 23–27 May 2015 at the Westmark Fairbanks Hotel and Conference Centre. The conference is co-sponsored by the Society for Mining, Metallurgy and Exploration (SME).

Important dates:

- 1 August 2014—Deadline for submission of abstracts
- 10 August 2014—Notification of abstract acceptance
- 15 November 2014—Deadline for submission of full papers
- 15 December 2015—Notification of acceptance of full papers
- 15 January 2015—Deadline for submission of full papers
- 15 February 2015—Deadline for early-bird registration.

The Chairman and contact person of the 37th Symposium is:

Professor Sukumar Bandopadhyay
College of Engineering and Mines
University of Alaska Fairbanks
Fairbanks, AK 99775, USA
sbandopadhyay@alaska.edu ; arcticminer@msn.com
Phone: (907)-474-6876

The conference website is www.APCOM2015.org.

7.2 INFACON

N.A. Barcza, Chairman

R.T. Jones, Secretary General

The INFACON Congress was founded in South Africa in 1974 by the SAIMM, Mintek, and the Ferro Alloys Producers' Association (FAPA) when the first INFACON was held in Johannesburg. INFACON has already been held three times in South Africa, the last being in Cape Town in 2004. The most recent Congress, INFACON XIII, was held in Almaty in Kazakhstan in June 2013. <http://infacon13.kz>

The International Committee on Ferro-Alloys (ICFA) was formed by the SAIMM, the FAPA, and Mintek. Mintek provides the secretariat for ICFA.

The primary objectives of ICFA are to promote the holding of the International Ferro-Alloy Congress (INFACON) every two to three years in appropriate locations, to ensure that the high technical standard of papers and presentations is maintained, and to increase and promote participation. ICFA also provides high-level assistance in the important process of transferring the hosting of INFACON from one country to the next, with the valued involvement of recent INFACON hosts.

ICFA arranges the meeting of representatives from ferro-alloy producing and consuming countries during each INFACON, to discuss the relevant technical content for

INFACON, and decide on the country that will host the subsequent Congress. Prospective host countries are invited to make submissions in advance to ICFA accordingly. Criteria for selection include the appropriate professional standing of the organizing entity, the suitability of the location, and the necessary level of local and regional support from stakeholders such as industry, government, and relevant technical institutions.

The current members of ICFA include: ABRAFE (Brazil), CSM (Chinese Society for Metals and the Chinese Ferroalloy Association – China), Euroalliages (Europe), IFAPA (India), JFA (Japan), CMI – Chemical-Metallurgical Institute (Kazakhstan), AIST (North America), Norway (FFF), Russia, FAPA (South Africa), UkrFA – Ukrainian Ferroalloys and other Elektrometallurgy Products Manufacturers Association (Ukraine). Turkey participated in the ICFA meeting in Almaty as an invited attendee.

INFACON has been held in the following countries and locations:

- Brazil—1986 in Rio de Janeiro (ABRAFE)
- Canada—2001 in Québec City (TFA)
- China—1998 in Beijing (CSM)
- Finland—2010 in Helsinki (Outotec)
- India—2007 in New Delhi (IFAPA)
- Japan—1983 in Tokyo (JFA)
- Kazakhstan—2013 in Almaty (CMI and National Center on Processing of Complex Materials)
- Norway—1995 in Trondheim (SINTEF)
- South Africa—1974 in Johannesburg, and in 1992 and 2004 in Cape Town (FAPA, Mintek, and the SAIMM)
- Switzerland—1980 in Lausanne (IFPEO, now Euroalliages)
- USA—1989 in New Orleans (TFA).

INFACON contributes to the exchange of research and development information by publishing refereed papers covering the major and minor ferro-alloys. Participants include universities, research and development organizations, suppliers of services, engineering, and equipment, and in particular the ferro-alloy industry.

The joint host organizations for INFACON XIII were the Abishev Chemistry and Metallurgy Institute based in Karaganda and the National Centre on Processing of Complex Minerals, Republic of Kazakhstan. Professor Manat Tolymbekov was the Chairman and Dr Sergey Kim the Congress Secretary of the Organizing Committee for INFACON XIII.

INFACON XIII was a great success, with close to 400 delegates and exhibitors representing 28 countries – 59 from South Africa, 40 from Norway, 35 from Russia, 32 from Kazakhstan, and more than 20 from each of Finland, Germany, and the Ukraine. The 120 papers were published in two volumes of the INFACON XIII Proceedings. Professor Manat Tolymbekov, Sergey Kim, and the INFACON XIII team can be justly proud of the excellent Congress.

The XIV International Ferro-Alloys Congress, INFACON XIV, has been awarded to the Ukraine. The decision was made during INFACON XIII at the ICFA meeting in Almaty held in June 2013. INFACON XIV will be held in Kiev from 1 to 5 June 2015. This timing is as a result of ICFA's decision to hold INFACON after two years, instead of the customary three years, in response to the high level of interest in the hosting of and participation at the Congress.

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INFACON XIV will be held under the auspices of the Ukrainian Association of Ferroalloys and other Electrometallurgical Products Manufacturers (UkrFA). The website and contact information for INFACON XIV is given below.

The UkrFA has extensive experience in organizing a number of successful local ferro-alloy conferences for CIS countries. This track record should encourage good support from prospective delegates from CIS countries and elsewhere to participate in INFACON XIV in Kiev in June 2015. UkrFA has support from the Ukrainian Government (including the Ministry of Industrial Policy) as well as from the National Academy of Science of Ukraine.

The Organizing Committee of INFACON XIV has approved the venue as the President Hotel, located in the centre of Kiev. The hotel has 370 standard rooms, suitable conference halls, and meets the criteria of the Congress. Two alternative hotels for delegates will also be available near the venue. The proposed venue for the Official Banquet is on board of the ship Rosa Victoria.

Post-congress tours are being planned with representatives of Nikopol Ferroalloy plant, Pobuzhje Ferronickel plant (both in the Ukraine), and ETI KROM (Turkey). Further details are awaited shortly. A contract has also been agreed with Wind Rose for travel arrangements for the proposed technical tours.

To date 12 abstracts have been received and the Programme Committee expects the submission of abstracts to increase significantly closer to the deadline of 31 October 2014. The Programme Committee has established a list of international experts who have confirmed their participation in reviewing and refereeing of the manuscripts.

The website is also being updated with information on the various attractions for delegates, sponsors, and partners who are planning to attend INFACON XIV.

The International Manganese Institute (IMnI) has confirmed their partnership, and meetings are planned with representatives of Euroalliances and the European Commission to inform them about the Congress and to promote the involvement of additional European organizations.

According to the Organizing Committee, the theme of the Congress – *'Energy efficiency and environmental friendliness – the future of the global ferro-alloy industry'* will be reflected in the plenary and technical sessions, following the tradition of INFACON. INFACON XIV has several aims, which are complementary. These include drawing attention to the importance of electrometallurgical considerations, particularly to the diverse contemporary and historical aspects. They also include reflecting on the applications and functions of ferro-alloys in the contemporary world, taking account the contributions, expectations, and gaps in electrometallurgical awareness. Consideration will also be given to the relationship with other disciplines such as the natural and human sciences, and with political, religious, social, and economic aspects.

A useful prelude to INFACON XIV was the holding of the Vth Annual International Scientific and Technical Conference in April 2014 in Kiev by the Ukrainian Association of Ferroalloys and Other Electrometallurgical Products Manufacturers (UkrFA) and the Public Association INFACON-14. Official support for the conference was provided by the National Academy of Sciences of Ukraine, the Ministry of Industrial Policy of Ukraine, and the International Committee

on Ferro-Alloys (ICFA), the National Metallurgical Academy of Ukraine, and the National Technical University of Ukraine 'Kiev Polytechnic Institute'.

The Conference was attended by 40 experts from ferro-alloy enterprises, scientific research and design organizations, academic institutions, and universities from the Ukraine, Kazakhstan, and Georgia. The President of NASU, Academician Boris Paton, mentioned that the event was held in preparation for the upcoming INFACON XIV.

The holding these events in the Ukraine is considered to be an important step in solving complex problematic issues of re-tooling and modernization of electrometallurgical production and its promotion at an international level, primarily in terms of energy saving and environmental protection.

The Conference was opened by the Chairman of the Board of Directors of UkrFA and Chairman - Director of Zaporizhia Ferroalloys plant, P.A. Kravchenko, and was chaired by the Chairman of the Extended Programme Committee of INFACON XIV, Professor S.G. Grischenko. The conference topics were largely consistent with the those of INFACON XIV, and included issues related to the theory and practice of ferro-alloy production, improvements in the production of ferro-alloys, ecology, and environmental protection, recycling and disposal of waste products, ways to achieve energy saving and improving energy efficiency, raw materials and their preparation for smelting, quality, and prospects of production of new types of ferro-alloys.

The published conference proceedings include 23 articles, reports, and presentations as well as reports from leading scientists and industry experts. The conference also included presentations of the best reports from young scientists, researchers, young plant professionals, and students. These included the winners of the Youth Science and Technology Conference *'Participation of Scientific and Student Youth in the Decision of Actual Problems of Development of the Ferroalloy Industry'* that was held in March 2014 by UkrFA and the National Metallurgical Academy of Ukraine in Dnepropetrovsk, as part of preparations for INFACON XIV. It is planned to hold this conference annually with the objective of encouraging young technologists to generate papers for future INFACON Congresses.

On the first day of the Conference, the delegates visited the very interesting laboratories of Research Center NTU – Kiev Polytechnic Institute, which is equipped with modern facilities and instruments for research in the field of metallurgy and materials science as well as a museum, and is part of one of the largest universities in the Ukraine.

The Ukrainian organizers received extensive assistance from Professor M.J. Tolymbekov, Chairman of INFACON XIII, and this event provided a very useful 'dress rehearsal' for INFACON XIV.

Video conferencing facilities were provided for members of the International Committee on Ferro-Alloys (ICFA) to participate in the conference. This facility was also used by a representative of Euroalliances, Iva Ganev, to present her report entitled *'Energy efficiency: a hint of the status at EU level'*. The Executive Director of UkrFA, S.L. Kudryavtsev, informed ICFA members and Chairman Nic Barcza, via the video link, about the work that has been done by UkrFA on the preparations for INFACON XIV by the Organizing Committee. ICFA members were given a glimpse of the President Hotel as the venue of the next Congress. Information was also provided regarding the

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satisfactory progress, the call for papers, formulating the structure of the Congress, the preparations for technical tours to the various plants, and other current considerations.

Members of UkrFA will also provide support for the post-Congress technical tours to their ferro-alloy plants in Ukraine. Ukraine is mostly focused on the production of manganese alloys. However, consideration will be given to the possibility of expanding the technical tours to include nearby Turkish chrome producers.

One of ICFA's main roles is to encourage prospective participants in INFACON XIV to use this excellent opportunity to get to know the Ukraine, its people, scenery, and nature, and to experience its traditions, excellent cuisine, and wonderful hospitality. The lead time is one year less than for previous Congresses, so authors need to start to plan their abstract submissions in the next few months and contact the organizers to ensure that they are on the mailing list, especially if their contact details might have changed.

The SAIMM is the custodian of the INFACON Bursary Fund, which supports research and development in the field of ferro-alloys. The fund was established from the surplus generated from the previous INFACON XI Congress in South Africa. Contact the SAIMM directly for further details at <http://www.saimm.co.za>

Sponsorship of INFACON XIV

The Organizing Committee has provided for several sponsorship opportunities in the categories Platinum, Gold, Silver, and Bronze. Details are available on the INFACON XIV website and from the contacts below. The Platinum sponsorship has already been taken by SMS Siemag.

INFACON XIV contacts	ICFA contacts
Ukrainian Ferroalloys and other	Mintek
Electrometallurgy Products	Secretary General
Association (UkrFA)	Rodney Jones
Executive Director	rtjones@global.co.za
Sergei Kudryavtsev	Chairman
ukrfa@ukr.net	Dr Nic Barcza
INFACON XIV web site:	nicb@mintek.co.za
http://www.infacon14.com.ua	ICFA web site link:
http://www.pyrometallurgy.co.za/Infacon/	

INFACON XIV Organizing Committee Members

Organization:

Natalia Legkaya, Director of the Public Association
INFACON XIV
Tel. +38(056) 791 12 91
Tel. +38(056) 736 02 69
Mobile +38(067) 564 90 47
E-mail: infacon14@gmail.com

Organization and technical:

Sergey Kudryavtsev, Deputy Director of the Public Association
INFACON XIV
Mob. +38(044) 209 28 61
E-mail: sk.ukrfa@gmail.com

Scientific and technical:

Sergey Grishchenko
Mob. +38(067) 465 85 45
E-mail: infacon14@gmail.com

7.3 SAMREC/SAMVAL

F.T. Cawood, *Chairman*

A. Bals	D. Kruger
R. Becker	K. Lomberg
M. Booyens	C.D.A. Loxton
A. Clay	A. Macfarlane
K. Davies	G.L. Smith
A. de Bruyn	E. Swindell
J.R. Dixon	D. van Niekerk
S. Foya	J. Visser
S. Grobler	

Report for the period June 2013–July 2014

The SAMREC/SAMVAL Committee (SSC) met regularly during the period. The terms of reference of the SSC provide for a system of rotating Chairs between the GSSA and SAIMM. At the start of 2014 the chairmanship changed to the SAIMM and Professor Cawood was requested to chair the Committee during this term. The SSC is very appreciative of the work done under the guidance of Mr Swindell during his term as Chairman, and who is still an active contributor to SSC business.

The principal activities of the SSC during this period were as follows.

SAMREC Working Group

Under the Chairmanship of Mr K. Lomberg, the SAMREC Working Group (WG) met on a monthly basis. The process of revising the Code continued and an explanatory note was prepared for publication in the SAIMM Journal and GSSA Bulletin. The target date for ratification of the updated Code by the SSC is early 2015. The revision process provides the opportunity for the minerals community (including the Department of Mineral Resources – DMR) to be consulted and inputs to be considered. It is the WG's intention to visit many of the areas outside of Gauteng in an attempt to engage as many stakeholders as possible in the work of the WG. The intention is to use the SAIMM and GSSA structures wherever possible.

The SAMREC WG has addressed a number of aspects that have been brought to its attention. These form the basis for going forward and revisiting the Code. The new draft is substantially different from current Code and continuous engagement is part of the writing process. The revision issues include:

- i. Reporting of Inferred Resources
- ii. Reporting Standard and format of Mineral Resources
- iii. Competence
- iv. Independence
- v. The definition and reporting of Exploration Results
- vi. The standardization of terms and definitions with CRIRSCO
- vii. The reporting of saleable product
- viii. Clarification as to legal aspects and permit approvals for Resource and Reserve declaration
- ix. Inclusion of consent forms in the Code
- x. Alignment with international Codes.

SAMVAL Working Group

Under the Chairmanship of Mr A. Macfarlane, the SAMVAL WG has been busy with a review and update of the SAMVAL Code.

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This is as a result of certain deficiencies identified in the current Code, and also a need to align and harmonize the Code with other National Mineral Asset Valuation Codes, such as VALMIN and CIMVAL.

Through a public participation process, key issues for review were identified, and condensed into the broad areas of Scope, Definitions, Principles, and Competency. Revision issues include value definition, CV statutory registration, and alignment with international Codes. These have identified a considerably wider stakeholder base, and new stakeholders are now being drawn into the consultative process. The final draft is currently being circulated for internal comment and it is anticipated to have the new Code ready for ratification by the SSC before end of 2014. The implementation process includes a SSC workshop on Competency and a roadshow.

In addition, the SAIMM has been the lead and Chair in the formation of an International Group (IMVAL) to harmonize global Mineral Asset Valuation Codes. This work has included the CIMVAL, VALMIN, and SAMVAL Groups, as well as the International Valuations Standards Committee (IVSC), the Royal Institute of Chartered Surveyors (RICS), the International Accounting Standards Board (IASB), the Society of Mining Engineers (SME), and the American Institute of Minerals Appraisers (AIMA). The result is that the SAMVAL review is informed by the International process, and *vice versa*, allowing for harmonization.

Oil and Gas Working Group

Under the Chairmanship of Mr A. Clay. In late 2012, the Oil and Gas Committee was provided with a new mandate from the SSC to reactivate its work and create an Oil and Gas Reporting Standard for Public Reporting in South Africa. The SAMOG Code is to be the output document, and the SAMOG Committee included international and local experts and interested and affected parties in the industry to undertake this work. The Committee established a relationship with the Alberta Securities Commission as the custodians of the National Instrument 51-101 reporting code, and Part 5 of that code has been adopted with minor modifications to create the Draft SAMOG Code. The Petroleum Resources Management System (PRMS) is the internationally accepted classification system for the petroleum industry and is the anchor of the new SAMOG Code for reporting Resources and Reserves as well as global definitions.

The JSE is involved in the process and the Draft was circulated in 2014 for comment. Section 12 of JSE Act was redrafted to accommodate oil and gas, and the change is being considered by the JSE EXCO for approval. Ratification by the SSC is expected before the end of 2014.

Reporting on Environmental, Social, and Governance parameters

Under the Chairmanship of Ms S. Dyke, the SSC gave its provisional blessing to an initiative to explore the possibility of developing a Guideline document for Environmental Reporting (SAMEC). A final decision on whether the Guideline should become a Code will be taken at a later stage.

Revision of SSC Terms of Reference

The current TOR document is dated June 2009, and permission for revision was approved by SAIMM Office Bearers on 11 April

2014. The new TOR document is likely to be submitted to the GSSA and SAIMM for approval towards the end of 2014.

8. Management and Administration

Portfolio Holder: M. Dworzanowski

The Secretariat consists of:

Miss Sam Moolla (Manager)

Mr Alf Bettoni (Accountant)

Miss Jacqui E'Silva (Head of Membership and Branch administrator)

Mrs Camielah Jardine (Conference Co-ordinator)

Miss Portia Malatji (Accounts Assistant)

Mrs Zuliakha Malgas (DTP Operator)

Miss Nazli Mamdoo (Conference Publications Co-ordinator)

Miss Kelly Mathee (Journal and Subscriptions Co-ordinator)

Mrs Anna Panana (Conference Assistant)

Miss Yolanda Ramokgadi (Conference Co-ordinator)

Mrs Apathia Sello (Administration Clerk)

Miss Keabetswe Shumba (Receptionist/Assistant to the Institute Manager)

Mr Raymond van der Berg (Head of Conferencing)

Mrs Dawn van der Walt (Head of Publications)

Miss Naomi Wernecke (Membership Application Processor)

The SAIMM, office bearers, and Council record their appreciation to the above for their service.

8.1 Finance

J.L. Porter, Honorary Treasurer

For a number of years the SAIMM has been expecting more challenging times in terms of operating income and expenditure. With the challenges experienced in the gold and, especially, the platinum sectors, it should be no surprise that our operating cash flow came under pressure. However, as most of you will recall, the financial management of the Institute has been focused for many years on building up sufficient investment reserves so as to be able to ensure that we can be consistent in the delivery of services to our members. This longer term view has really started to come into effect in the year under review, and it is expected that this will continue into the new financial year..

Nonetheless, it is still pleasing to report that your Institute has performed well in its overall financial objectives. However, as mentioned above, the effects of the mining strike, the cancellation of the Strategic vs Tactical conference, and the postponement of some other technical programmes for the new conference year would impact negatively on the operating surplus. For this reason, during the year, downward adjustments were made to the projected year-end results and cost budgets were managed accordingly.

Highlights

- Revenue declined 6.0% year-on-year
- Total costs increased by 6.7% year-on-year
- Total Reserves grew 20.5% year-on-year

Despite the intervention during the year we still experienced cost increases, but these were as a result of clear decisions to support projects and the increases could well have been higher if the budget revision had not been conducted. As is normal, the financial performance of the Institute is determined by four fundamentals:

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- 1. Membership fees
- 2. Conferences
- 3. Projects
- 4. Investment

As mentioned by our President, membership has grown by approximately 10% during the year, despite the hard times referred to above. Overall, income from membership has grown by 18% in rand terms. This is underpinned by more pro-active collection of these fees. Our members’ patience in this regard is much appreciated, as this consumes an inordinate amount of administrative time during the year. Office bearers will be investigating more effective ways in which to maintain our billing database so that collections are less onerous.

Key metrics for the year relative to 2013 are as follows:

	2014	2013	% change
Assets	R38.9m	R32.3m	20.4
Equity	R36.8m	R31.1m	18.3
Liabilities	R2.1m	R1.2m	75.0
Revenue	R17.1m	R18.2m	- 6.0
Cost of sales	R11.2m	R11.6m	- 3.4
Operating Exp	R8.1m	R6.6m	23.4
Operating surp	R0.2m	R2.5m	- 9.2
Total surpus	R5.5m	R5.6m	- 1.8

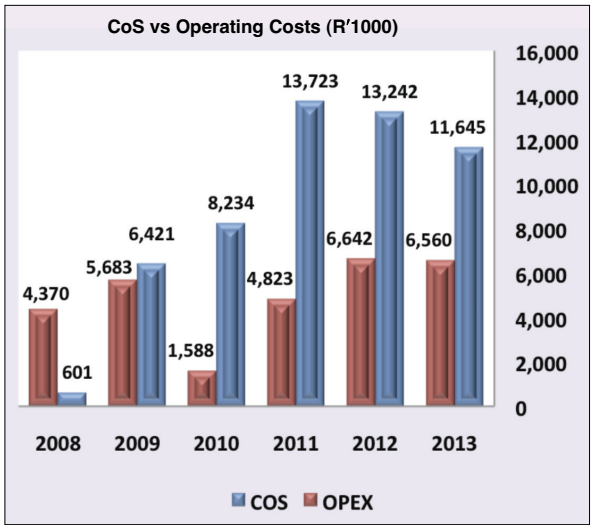
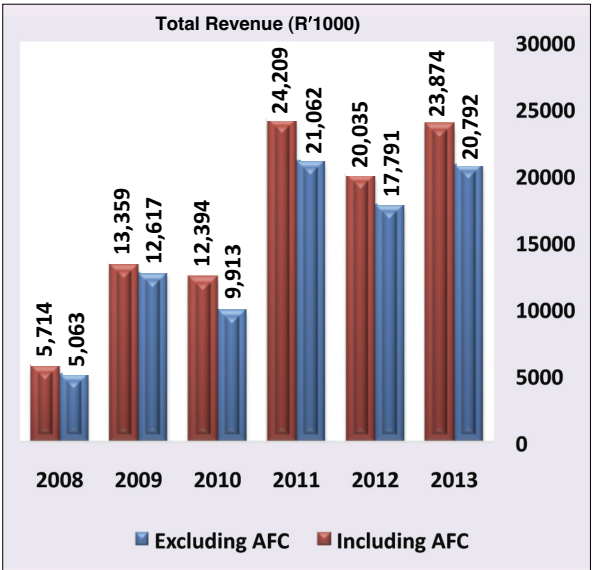
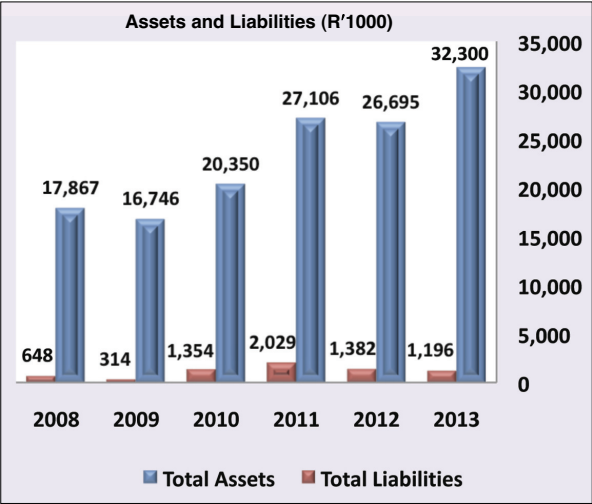
What is obvious from the numbers above is that your Institute continues to develop substance and stability to establish a solid base from which to pursue the next level of growth. These growth plans were outlined last year in terms of regional development and the possible purchase of office and conference space as part of our investment portfolio. These plans continue to move forward with the approval of Council.

A closer look at the results reveal the following:

- *Assets:* the impressive increase of R6.6 million was driven predominantly by the investment portfolio, while our cash and cash equivalents decreased by R1.0 million in order to fund daily cash flow. The table below indicates that our total asset base has more than doubled over the past six years while our liabilities remain consistently low. This is a picture of stability and our foundation for the growth plans.

Asset growth (R million)		
Year	Current	Total
2008	3.7	17.9
2009	5.3	16.7
2010	6.7	20.3
2011	7.2	27.1
2012	6.2	26.7
2013	0.8	32.3
2014	8.8	38.9

- *Revenue:* while conferences saw an actual decrease in activity of 10.5%, there have been some questions raised about the pricing policy of conferences, in particular whether the SAIMM should reduce its conference fees in order to boost attendance. The Treasurer undertook an analysis of this, and the following table indicates clearly that in real terms, over the past five years, the conference fees have already been reduced quite considerably.



Five-Year Conference Analysis

	Members	Non-members
1-Day Conference	-32%	-23%
2-Day Conference	-11%	-15%
3-Day Conference	-1%	-14%

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- *Cost of sales:* an ongoing review of conference venue hire rates and other costs has meant that our income generating activities continue to contribute to keeping actual SAIMM membership fees and conferencing fees as low as possible.
- *Operating expenses:* here we have seen an above-inflation increase over 2013. However, these costs include extraordinary items that are deemed to be projects. On a yearly basis the SAIMM works to fund these smaller projects out of surplus income, and in 2014 we achieved this without drawing down funds from our investment accounts. Extraordinary expenses included:
 - R250 000 sponsoring Sci-Bono
 - R200 000 to the Scholarship Trust
 - R48 000 Global Mineral Professional Alliance participation
 - R58 000 Global Mining Standards Group
 - R27 500 *Infacon* expenses
- *Debtors:* these have increased over the past year but are not a cause for concern at this time. Ongoing initiatives to improve collections will be concluded in the year ahead in conjunction with a significant re-design of the Institute's web site.

The total surplus for the year stands at R5.5 million, almost unchanged from the previous year. As at the time of writing most of these funds have been applied to our AFC investment fund, while we retain R798 000 in current bank accounts and R6.3 million in short-term call accounts.

AFC Investment Portfolio

The Institute's investment portfolio continues to perform well, with a July 2013 value of R26.5 million and closing in June 2014 at R32.1 million; an overall gain of R5.6 million. This includes:

- *Fair value adjustment:* R4.67 million
- *Dividends:* R0.60 million
- *Interest income:* R0.74 million

As mentioned above, the work to determine how to spread investment risk is ongoing in terms of a potential property investment. However, Council has directed that other forms of investment should also be considered. This investigation will start with the new Office Bearers' Committee.

Thank you to Alf Bettoni, our accountant; Robert Kitching, our auditor; and Sam Moolla, our Office manager. Also, Dee Campouroglou (AFC Account Manager) and all of the wonderful SAIMM staff for assisting me as your Honorary Treasurer.

New Members

Members

A.O. Adegbenjo, M. Ali Mohamed, N.K. Anasthas, A.G. April, C.W. Archer, K. Banabotlhe, K. Banda, M. Banda, T.M.G. Banda, N. Barkhuizen, A. Berejena, K. Bertin, G.J. Bezuidenhout, F. Bibbey, G. Bogale, R.J.W. Bold, B. Bototeng, B.A. Bruce, M.M. Bwalya, S.A. Bylevelot, L.M. Celestin, D.M. Cartwright, D. Chabayanzara, C. Charuma,

S. Charumbira, R.M. Cheeba, F.A. Chereni, D.R. Chetty, S.T. Chitambo, N. Chitsamatanga, G.S. Chiunda, A. Cizek, M. Cooks, P.M. Couto, P. Dawson, L. Dekeshera, A.J. de Klerk, F.J. De Klerk, J. De Kock, P.R.W. de Kock, C.G. Denivelle, F. Diamond, J.M. Dungu, A. Du Toit, S. Dyke, G. Dzinomwa, B. Dzumbunu, I. Esmaila, C.H. Esterhuizen, S. Faba, A. Fourie, W. Gambiza, S. Ganapathy, O.B. Gilika, D. Gounden, D. Govender, V. Guchu, G. Gundani, C.I. Guvakuva, A. Gwaze, W.A. Heyneke, K.P. Hol, B.M. Iitawa, O.E. Itholeng, D. Janse van Rensburg, G.J. Janse van Vuuren, M.J.U. Jasper, A. Jhamba, A.C. Johnstone, J.I. Kabamba wa Kabamba, S. Kadzviti, D.K. Kakengela, B.G. Kalamba, N.P. Kapalata, S.C. Kearns, T. Kingsley, M. Kotze, A.J. Kruger, P. Kunda, P.G. Laurens, W.M. Langenhoven, N.M. Lebusa, R.B. Lechuti - Tchalerwa, K. Lefifi, E.C. Lennox, M. Lukwesa, D.J. Macauley, T.G. Magure, W. Magwani, P.M.S. Makgatche, N. Maloba, C.L. Manaka, O.Z. Manyarara, M.R.M. Masango, B.R. Maseko, T.T. Masiya, T.M. Mathode, G.I. Mclaggin, K. McMillan, I.J. Meyer, G. Mhere, A. Mhone, D. Miso - Mbele, V. Modise, F.L. Moorosi, S. Moyana, M.A. Mphelo, J.M. Mthimunya, E. Mudoti, E. Mugiya, J. Muguwe, N. Mugwathi, G. Mukansi, A.E. Mukombachoto, S. Mukombe, K.E. Mukosera, T. Mundiya, K. Mutazu, K. Mutsago, C. Mutsvanga, M. Muusha, D. Muyendeka, L. Mwase, T.K. Mwata, N. Naicker, P. Naicker, G. Naudé, S.Z. Ndlovu, C. Ngoma, M.B. Nicolle, F.C. Niewenhuys, M. Ntshole, T. Nyikavaranda, M. Nyirenda, D. A O'Donoghue, V.T. Ojumo, G. Oosthuizen, T.C. Orford, H. Ozok, A. Pahwaringira, K. Pontien, K. Poonan, P. Potgieter, J. Prinsloo, J.P. Pywell, A. Quaye, B. Rajamanickam, N. Ramadubu, Q. Reynolds, B.V. Roberts, J. Sahib, C.G. Sam, J. Sigogo, G.W. Skinner, C.N. Steenkamp, M.B. Stevens, J.G. Steyn, J.E.P. Stoffels, E.L. Swartz, J.H.J. Tacken, M. Tandree, F. Tarehwa, M.N. Tetteh, J. Tjitauiza, M.M. Tshabalala, J. Tshutimedi, H.J. Unanisa, J. van der Bijl, C. van Niekerk, W. van Wyk, P.G. Van Zyl, J.J. Velleon, A.V. Visser, J.H. Welthagen, A.M. Wessels, S.N. Wild, R. Zengeni, B.D. Zhao, X.B. Zwane, M. Zwaraya.

Associates

T.K. Aipanda, N.L. Ayres, S.S. Bagheri, M. Barnard, A.M. Bauristhene, E. Bond, H. Britz, J.A.H. Campbell, J.B.M. Chabey, N.A. Chapman, N.P. Chikunya, C.M. Chong, M. Coleman, J. De Klerk, E. Demirok, L.R. Dube, J.E. du Toit, N. Enslin, J. Fletcher, F.J.J. Fourie, K. Gabositwe, S. Gapara, L.J. Gardner, N. Gounder, L.L. Groenewald, L. Gyffenberg, P.F.D.A. Hopp, C. Human, G. Jansen, M. Jan Sesane, M. Kalemba, O.D. KaMakaleng, S.K. Makuza, M.O. Makwarela, S.M. Malimi, L. Malla, L. Maluleke, M. Manamela, Z.F. Maphumulo, E.G. Maseko, V.G. Maseko, T.C.L. Masike, L.N. Mbatha, V.N. Mkhaliphi, J.F.J. Mkhario, T.M. Mmola, B. Moatlhodi, V.R. Modimola, I.L. Modongo, N. Moemise, L.S. Mogashoa, P. Mogoera, G.P. Mogotlhong, D.J. Mohoase, M.M. Mohuba, M.Y. Mokoatlo, M.P. Molabe,

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M.K. Mosmeu, L. Mpetsane, R. Mubuwa, W. Munalula, J. Mupinga, S.K. Murphy, A. Mwaswebwe, N.N. Mzinyane, B. Ngwenya, L. Njenge, H. Nkobeni, C.F. Nkomba, L.H. Norlund, C.O. Ntshese, D.N. Nxumalo, H.S. Nyakunhwa, K .R. Nyanto, M. Nyararai, B.D. Olivier, R.W. Opperman, M.C. Outule, K. Philippe, T. Phiri, T. Pillay, S. Radebe, A. Ras, D.J. Robinson, V.A. Rocher, J. Roux, P.B. Sagwette, B. Schoevaarts, M.S. Sebaeng, L.C. Sebata, G.S.K. Segaetsho, O. Selei, L.T. Shiburi, N.D. Sithole, T.R. Sithole, S. Stuurman, R.D. Sutherland, E.L. Swartz, T.C. Tanjane, R. Taute, W.R. Taylor, O. Tsiakara, B. Tshijuke, K.A. Tshoganetso, F. Tyhalithi, A. van den Berg, J. van der Merwe, H. van der Walt, J.P. van Heerden, O.W. Warschkuhl, S.L. Xulu, Z.T.P. Zikhali, B. Zvikonyo.

Students

N. Balayi, C. Baloyi, Y.O. Bello, C.B. Bhiya, D. Chabalala, T.M. Chagwedera, T.M. Chagwredera, T. Chirinda, R.J. Coetzee, G.F. Dube, N.D. Duma J.H. Greeff, M. Gustin, A.E. Halwagy, T.D. Hlangwane, D.M. Malatji, R.C. Mafunzwaini, N.B.S. Magagula, M. Hlongwane, M. Hlungwani, W.H. Holtzhausen, G. Kleyn, K.M. Khosana, D. Khoza, M.L. Khumalo, M.N. Kgwete, S. Khumalo, M.E. Khunothi, O. Khunou, D. Kleynhans, C. Kwindi, M.D. Kyembo, D.B. Lawrence, M. Mabatha, H. Mabengetse, L.K. Mabunda, N.M. Mabunda, C. Madikizela, M.P. Mafurutu, R.M. Magagula, G. Magutshwa, S. Mahamba, T.S. Mahlangu, R.E. Mahlatji, T. Mahomed, F.A. Maimela, V.E. Makambeni, T.M. Makgolane, T. Makgopa, D. Makhubele, L.C. Makunyane, F.J. Malatji, T. Malatji, M.M. Malatse, M.M. Malefo, N. Malivha, B.M. Malomane, T.E. Mampuru, K.M.S. Masemola, M.J. Mashilwane, S.R.A. Mashimbye, K.T.N. Mashingaigaidze, N.A. Masoga, T.N. Masoga, L. Matakanyi, H. Mathebula, R.A. Mavhungu, N.N. Mbatha, N.P. Mbatha, N.W. Mbhalati, N. Mbidlana, S. Mambi, F.S. Medupe, T. Medupe, C. Mgiba, M. Mhlongo, M. Minyuku, T.S. Mithi, N.T. Mkhwana, I.K. Mmolotsi, I.K. Mmolotsi, A.X. Mncube, F.M. Modau, S. Modisha, O.M. Moeng, F.M. Mohale, G.T.M. Mohale, N.L. Mohale, S.C. Mohale, D.B. Mokoena, R.T. Mokoka, R.M. Molepo, P.P. Moletsane, L. Moloto, T. Moropene, T.K.M. Moshokoa, L.G.I. Motsepe, R.B. Motswadi, R.B. Mousse, P. Mpanza, T. Mphuti, L.S. Msibi, N. Mtolo, N. Mukudzavu, Z.F. Mulaudzi, P.A. Mulenga, A.A. Murivhami, L. Muromo, A. Nasilela, T.L. Ncube, R.R. Nemaagovhani, F. Nesengane, V. Netshituka, M. Netshivhazwahlu, E. Ngema, T.A. Ngwenya, R. Nkhoma, P. Nompumelelo, K.C.A.A. Ntem, B.B. Ntlhaile G. Nxumalo, L.W. Nyalunga, N. Nyathi, T. Nyengera, W.E.N. Nzuza, F.A.P. Okouma, M.L. Papale, M.G. Pakgadi, M.E. Phetla, T.D. Phohu, G.W. Rabey, T.M. Ralebala, R.I. Rambiyaya, R.E. Rampa, M.L. Ramunongo, T.G. Ranoto, M. Safari, D.M. Saidi, A. Samba, O. Sanni, L.L.L. Sedibe, N. Sefiti, R.I. Sekabate, K.M. Sekgarametso, T.M. Shabangu, A.T. Sibanda, P.M. Sibanda, S. S. Sigede, B. Sihlangu,

H. Sithole, E.T. Sono, S.B. Sulman, N.G. Tabane, P.C. Thantsha, K.B. Tladi, D. Tshike, N. Tshimanga, K.D. Ukabhai, W. Zaba.

Company Affiliates

Aveng Moolmans, Axis House Pty Ltd, Becker Mining South Africa (Pty) Ltd, Hall Core Drilling(Pty) Ltd, Herrenknecht AG, Jennmar SA, Sebilo Resources (Pty) Ltd, Scanmin Africa (Pty) Ltd.

Resignations

Fellows

R.I. Graupner.

Honorary Fellows

None.

Retired Fellows

B.G. Bell, J.J. Coetzee, J.S. Hope, D.E. Minnaar, H.J. Nel, G.R. Still.

Members

R. Addinall, I.M. Bratt, C.R. Deacon, W. van Deunick, J.S. De Vos, M. Du Toit, G.D. Fairbairn, F.E. Leygonie, V.M. Matshikiza, G.J. Mkhabela, F. Ngidi, C. Pogisho, M. Robins, B. Rossini, R.G. Wienand, B. Zhao.

Retired Members

N. Kamp, J.A. Robertson.

Associates

M.J. Bauwens, G. Billingsley, C.J. Brill, R. Chiume, J. Christowitz, D.S.S. Denton, L. de Wit, N. de Wet, J.W.D. Dowsley, L. du Plessis, A. Fourie, S. Gayaparsad, Z. Halifa, V. Homela, D. Kalilima, M. Kasonde, A. Kasozi, T. Keating, N. Kerstin, R.G. King, A. Koning, J. Kruger, K. Ledwaba, M.B. Ledwaba, E.O. Makinen, Z.C. Marlowe, D.E. Minnaar, T.C. Montong, R.A. Morgan, R.G.T. Moyana, R. Munandi, S. Mutavhatsindi, D.L. Nardini, J. Naude, P.M. Ndou, F. Nkuna, M. Radzilani, T. Ratau, H.W. Scriba, U. Vosloo, M.D. Wanless, J.J.J. Zaayman, J. van Zyl.

Students

I. Huysamen, S.R. Nichol.

Company Affiliates

Buffelsfontein Gold Mines Limited, Columbus Stainless (Pty) Ltd, Trucking and Engineering.

Members transferred to Higher Grade

Transfer from Member to Fellow

I. Ashmole, J. Campbell, E.J. de Jager, J.R.L. Edward, L.W. John,

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M.S. Kumvenda, A.E. Lewis, R.Z. Machowski, S.M. Mandoza, C. Musingwini, S. Naik, J.D. Steenkamp, W.J. Theron, C. van Zyl, Z.J. van Zyl, E. Vardar, D.R. Young, J. Wesseloo.

Transfer from Associate to Member

K.L. Adams, M.W. Atkinson, M.J. Barnard, C.R. Barnes, A.W. Bester, S. Boodhraj, Z. Botha, C. Brian J. Burger, M. Buthelezi, D.J. Campbell, J.A.H. Campbell, N.A. Chapman, M.J. Cockram, M.L. Daniels, O. de Beer, D. De Bruyn, D.J. De Swardt, A.E. Dhlamini, Y.S. Docrat, P.W. Erasmus, L. Fouché, H. Gopal, I.S. Hendry, W.A. Holding, D.P. Holm, B.D. Human, R. Huygen, N.P. Ivanovic, F. Jacobs, A.M. Kapito, R.B. Khumalo, J.W. Knight, V. Korzynski, B. Lalla- Sewboolam, B.G. Lord, D.P.M. Lourens, M. Lundt, L.A.B. Mabhali, C.A. Magalhaes, N. Majeke, B.T. Majola, N.S. Malapane, W. Maphosa, G.H. Marsden, T.A. Matsebedi, S.M. Mazubane, R.V.M. Mbhele, B.C. Melamu, J. Mishra, M.A. Mojaki, K.D. Mophuting, S.S. Mtambo, S. Mtombeni, H.K. Musiyarina, P. Muthaphuli, L.W. Netshikulwe, A.S. Nhleko, R.J. Nicholson, J.L. Niebuhr, W.T. Nyambi, M.H. Oosthuysen, G.J. Pitt, P. Ramsaywok, R. Roulstone, J. Schulze – Messing, P. Setshongwe (Dladla), I. Sibisi, R.I. Smart, F. Smit, M. Smit, T. Swanepoel, H.S. Swart, E.H.D. Tucker, H. Tukker, P.A. van der Heever, B.W. van der Nest, J.A. Venter, J.W. Venter, J.H. Weitz, C. Wienand, A.K. Williams, T. Williams, D. Wright, Q. Zaayman.

Transfer from Associate to Student

O.B. Abiodun, N. Andrew, D.E. Fiwoyife, D. Greyling, D.E. Möwes, T.P. Oladele, J.D. Pillay.

Transfer from Student to Associate

T.J. Baloyi, E. Behrens, X.I. Bhuda, J. Botha, H. Brodner, S. Fani, N. Fanuel, M.C. Feuti, H. Haghi, R. Kalumbu, L.M. Kgadima, F.O. Letlape, R.C. Mafunzwaini, S.R. Magege, S.T. Malebye, R.L. Mojela, E.L. Moleko, P.P. Moletsane, M. Montgomery, A.P.S. Moreno, J.M. Mukendwa, T.I. Mulambo, C. W. Mulaudzi, F.K. Mulenga, R. Munandi, R. Munyai, A.A. Murivhami, N.I. Mutilitha, A.K. Ndjendja, N. Netshivhazwalu, E.N. Nsiengani, J.M.L. Phahlamohlaka, D.R. Phaladi, L.T. Phasha, G.D. Phateng, O.J. Phefo, J. Radebe, M.M. Ramakokovhu, K. Ramasia, K.Q. Rampyapedi, K.Q. Ramyapedi, T. Saasa, M. Stewart, J. Shopho, A. Shereni, K.L. Selala, M.S. Thebe, S.M. Thema, T. Tholana, C.K. Thubakgale, F.D.L. Uahengo, D.V. von Kallon.

Transfer from Retired Fellow to Fellow

J.A. Wells.

Transfer from Student to Member

M. Smit.

Members who retired

Fellows

J.C.G. Baker, A. Francis B.G. Harvey, A.P. Klintworth, J. Klokow, F. Newall, A.V. Peake, A.V. Peake, D.M. Peatfield, C.A.F. Sweet, J.C. Thornton J.C. Thornton, A.J. van Zetten.

Members

R.J.T. Butler, U. Gerstmann, S. Lambert, P.J. Perkins, W.J.C. Pothas, P.W. Wilcock, G. Wilson.

Deceased

Honorary Life Fellows

D.G. Krige, L.W.P. van den Bosch.

Fellows

D.J. Arnold, J.L. Taylor

Retired Fellows

P.E. Bryant, J.F. Dear, M.A. Madeyski, E.T. Pinkney, H. Scott-Russel, A. Veress.

Members

M. Greyling, E. Gwarisa, J.G. Murgatroyd.

Retired Members

H.F. Bartels, M.J. Deats.

Associates

G.D. Louw, I.J. Theron.

Members who were reinstated

Reinstated as a Member

L.G. Bolivar, M.L. Hlahla, T.E. Kanyimo, S. Lawal, S. Machaka, R. Nsamba.

Reinstated as Associates

P. Chabalala, H. Marsden, P. Masimila, H. Mokwena, K. Muller, S.M. Nareetsile, M. van Rooyen

Reinstated as a Fellow

None.

Re-Admission

A.J. Basson, P.D. Bates, M.P.N. Chavunduka, M.G. Da Costa, C.N. David-Howoses, E.J. De Jager, D.R. Fenn, H. Grobler, R.E. Grunewald, E.S. Irvia, A. Kapito, I.L. Lister, L.L. Wando, D.L. Manenzhe-Ligiou, I. Marufu, S.B. Mbonani, K.C. Mistry, G.N. Ndamkou, L. Raaths, O. Ramogotsi, M. Smit, A. van Ghent, M. Visser, S. Zitha. ♦