Annual report

FOR THE YEAR ENDED 30 JUNE 2013

Council for 2012/2013

President
G.L. Smith

President-elect
M. Dworzanowski

Vice-Presidents

Senior	*Junior*
J.L. Porter	R.T. Jones

Immediate Past-President	*Honorary Treasurer*
J.N. van der Merwe	J.L. Porter

Members of Council

I. Ashmole
D. Andersen[j]
N.A. Barcza
H.E. Bartlett
R.D. Beck
N.G.C. Blackham
Z. Botha
M. Caryl
J.A. Cruise
W. de Graaf
J.R. Dixon
V.G. Duke
J. du Plessis[f]
M. Dworzanowski[c,g]
F.M.G. Egerton
W. Erasmus
S. Gaihai
A.M. Garbers-Craig
M.F. Handley
R.T. Jones
W.C. Joughin[i]
G.V.R. Landman
A.S. Macfarlane
S. Maleba
A.F. Mulaba- Bafubiandi[b]
M.J. Mothomogolo[m]
R.P. Mohring
M. Motuku
M. Mthenjane
D.D. Munro
C. Musingwini
S. Ndlovu
J.C. Ngoma
G. Njowa
A.R. Nundlall[k]
M. Nzimande[d]
G. Ockhuizen
R.G.B. Pickering
J. Petersen
J.L. Porter
S.J. Ramokgopa
M.H. Rogers
S. Rupprecht[a,b]
A.G. Smith
C. Smith[h]
M.H. Solomon
T.R. Stacey
D. Tudor[g]
J.N. van der Merwe
D.J. van Niekerk
M. Veti[e]
H. Zimba

[a]*Co-opted Members*
[b]*Representing non-corporate members on Council*
[c]*Observer MMMA*
[d]*Observer AMMSA*
[e]*Observer SACMA*
[f]*Observer SACEA*
[g]*Observer SACPS*
[h]*Observer GSSA*
[i]*Observer SANIRE*
[j]*Observer IMSSA*
[k]*Observer MVSSA*
[l]*Observer SAIEE*
[m]*Resigned during the year*

Branch Chairmen

DRC Branch	S. Maleba
Johannesburg Branch	I. Ashmole
Namibian Branch	G. Ockhuizen
Pretoria Branch	W. Degraaf
Western Cape Branch	J. Petersen
Zambian Branch	H. Zimba
Zimbabwean Branch	S. Gaihai
Zululand Branch	W.R.J. Erasmus

Past-Presidents serving on Council

N.A. Barcza
R.D. Beck
J.A. Cruise
J.R. Dixon
F.M.G. Egerton
A.M. Garbers-Craig
G.V.R. Landman
R.P. Mohring
J.C. Ngoma
R.G.B. Pickering
S.J. Ramokgopa
M.H. Rogers
T.R. Stacey

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: G.L. Smith

Key Performance Areas

What the SAIMM does and how it serves the interests of individual members:

- *Assesses the qualifications, experience, and the level of responsibility of applicants for membership, and allocates a membership certificate in an appropriate grade as a means of granting appropriate professional and technical status to individuals who practise in the minerals and metals sector*
- *Prepares and publishes career guidance brochures, bursary handbooks and audiovisual programmes, optional school curricula material, etc., and participates in activities to encourage learners to select careers in the minerals and metals sector of the southern African economy*

- *Arranges conferences, colloquia, schools, and seminars where technical information on mining, metallurgical, and related issues is disseminated. Both members and the general industry benefit from these interchanges*
- *Guards the professional interests of engineers, scientists, technologists, and technicians by providing a corporate voice and by representing their interests on bodies such as the Engineering Council of South Africa (ECSA)*
- *Through representation on ECSA, assists with the evaluation of curricula at universities and technikons with a view to improving the level of education of graduates and diplomates, and ensures that the courses are relevant to the needs of the minerals and metals sector*
- *Makes awards, in the form of medals, prizes, and certificates, in order to recognize technical excellence, to stimulate a sense of pride in high standards of performance, and to encourage individuals involved in the minerals and metals sector to share the results of their work through publication. The following are eligible for SAIMM awards: individuals for the very highest achievements in the southern African mining and metallurgical industry, SAIMM members and non-members for papers of the highest standard published in the Journal or other SAIMM publications, and students from universities and technikons for exceptional academic performance*
- *Arranges technical excursions, banquets, and other social events to create opportunities for professional association and fellowship for its members.*

1.1 Membership Committee

G.L. Smith

N.A. Barcza
R.D. Beck
J.A. Cruise
J.R. Dixon
A.M. Garbers-Craig
M.F. Handley
G.V.R. Landman
R.P. Mohring
J.C. Ngoma
R.G.B. Pickering
J.L. Porter
D.A.J. Ross-Watt
S.J. Ramokgopa
M.H. Rogers
G.L. Smith
T.R. Stacey
O.K.H. Steffen
J.N. van der Merwe
D. 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:

- 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

Table I

Summary of new applications and membership movements for 2012/2013 and comparison of membership grades and total membership 2012/2013

Membership grade	Members July 2012	New members	Transfers in	Transfers out	Reinstate-ments	Resig-nations	Deceased	Struck off	Net gain/ (loss)	Members June 2013
Honorary Life Fellow	34	0	0	0	0	0	0	0	0	34
Honorary Fellow	4	0	0	0	0	1	0	0	-1	3
Life Fellow	8	0	0	0	0	0	0	0	0	8
Fellow	408	0	19	4	1	3	3	3	7	415
Retired Fellow	128	0	4	0	0	1	5	0	-2	126
Life Member	1	0	0	0	0	0	0	0	0	1
Member	1 150	158	93	24	12	8	2	48	181	1 331
Retired Member	100	0	7	0	0	5	4	0	-2	98
Associate	1 137	187	65	95	11	40	1	101	26	1 163
Retired Associate	10	0	1	0	0	0	0	0	1	11
Student	549	185	1	65	0	2	0	0	119	668
Company Affiliate	126	1	0	0	0	2	0	5	-6	120
Total	3 655	531	190	188	24	62	15	157	323	3 978

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 3rd 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 the termination of their 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 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

S. Moolla, Chairperson

A.W. Dougall	J. Morgan
V.G. Duke	L. Petrick
P.J. Knottenbelt	A.G. Smith
G.V.R. Landman	I. Wermuth

The Career Guidance and Education Committee continued to focus on two main activities for the year; namely, the building of a mining and metallurgy exhibition at the Sci-Bono science centre in Newtown and attendance at school science festivals around South Africa.

The permanent exhibition at Sci-Bono science discovery centre in Newtown has been slow and steady in its progress. The super-tyre from a mine truck has been secured, together with core samples and a cocopan. The finalization of the exhibition was delayed due to Sci-Bono hosting an international exhibition from April–July. It is anticipated that the SAIMM exhibition will be completed by September 2013.

Julie Dixon resigned from the SAIMM, and the committee has lost a valuable contributor to its activities.

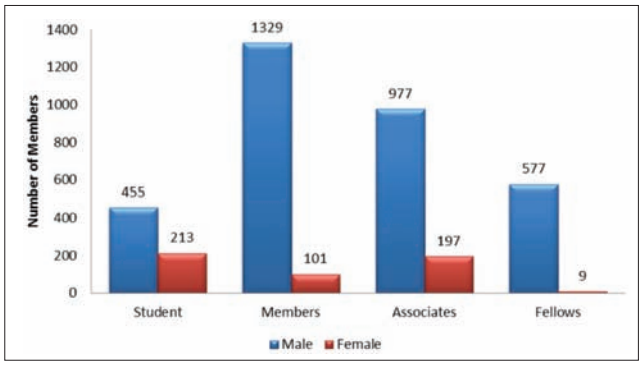


Figure 1—Gender split of the SAIMM membership

Australia	124	Mongolia	1
Austria	2	Mozambique	2
Belguim	4	Namibia	77
Botswana	42	Netherlands	4
Brazil	8	New Zealand	3
Canada	39	Nigeria	1
Cayman Islands	1	Papua New Guinea	1
Chile	8	Peru	5
Columbia	1	Phillipines	1
Dominican Republic	1	Russia	4
DRC	23	Rwanda	1
Egypt	2	South Africa	3215
Finland	5	Suriname	1
France	1	Swaziland	2
Germany	6	Sweden	1
Ghana	4	Switzerland	3
India	3	Tanzania	13
Indonesia	1	Turkey	5
Iran	4	UAE	1
Ireland	1	Uganda	1
Israel	3	UK	62
Kenya	1	US	42
Lesotho	10	Zambia	52
Mali	2	Zimbabwe	183
Mauritius	1	**Total**	**3978**

Figure 2—Geographical split of the SAIMM members

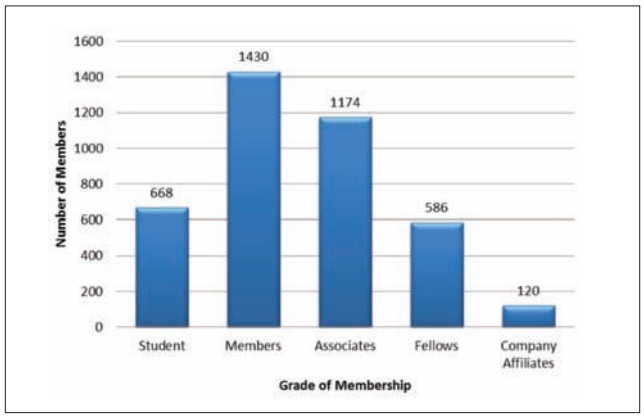
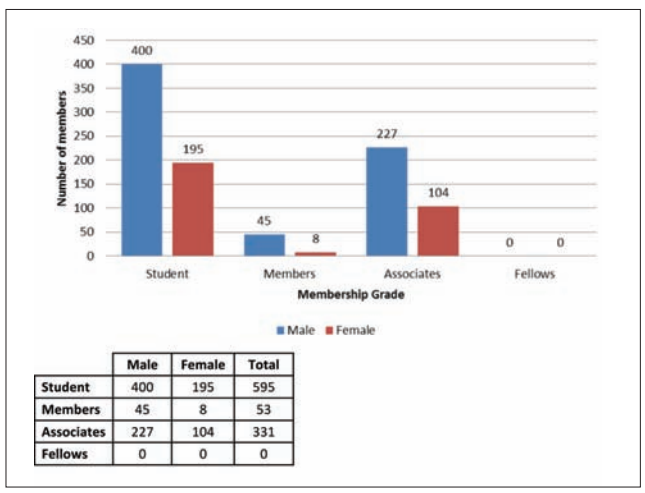


Figure 3—Grade split of the SAIMM membership



	Male	Female	Total
Student	400	195	595
Members	45	8	53
Associates	227	104	331
Fellows	0	0	0

Figure 4—Membership breakdown under 30 years of age

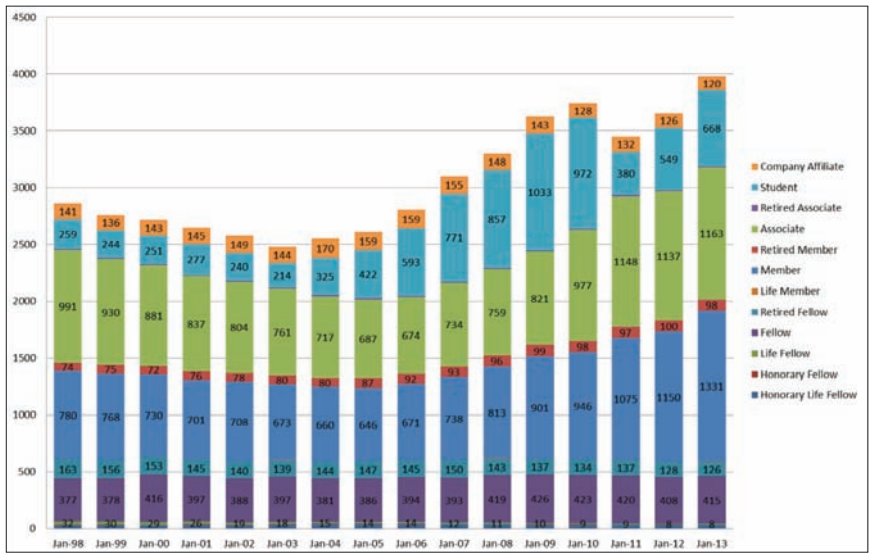


Figure 5—Membership trends

1.3 Promotion of the SAIMM

Portfolio holder: G.L. Smith

Despite the industry-wide uncertainty associated with widespread labour unrest, the interests of members were pursued through a number of on-going 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 was pursued largely through increased interaction with associated organizations such as the Institute of Mine Surveyors of South Africa and the Mine Ventilation Society of South Africa, in addition to the normal engagement with other professional associations.

International collaboration that was initiated in 2011-2012 between 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 the USA in September 2012. Further informal discussions were also held between the CIM and the SAIMM at the Mining Indaba in February 2013. This progressed to SAIMM membership of the Global Mining Professionals Alliance and membership of the Global Mining Standards and Guidelines Group.

Expansion across the southern African sub-region is critical to the future relevance of the Institute, as economies grow and the minerals and metals industries expand. The Institute actively supported the establishment and maintenance of regional branches and student chapters of the SAIMM so as to meet the needs of members for professional association and the exchange of technical information. Regional expansion during the year was focused largely on supporting the latest SAIMM branch in Lubumbashi, DRC. An event, attended by the Minister of Mines, was held at the Grand Karavia Hotel in Lubumbashi on 12 October 2012 and 68 people attended. Subsequently there has been steady growth of members from the DRC. The Zimbabwe Branch is expanding rapidly, with a number of successful events held during the year. Efforts to establish a Northern Cape Branch in the Kathu area are now bearing fruit, with an initial branch meeting being anticipated before year end.

Currently, total membership is around 4 000 with steady increases in numbers in the under 30 age group – the key drivers of our future sustainability. The number of women in the organization is steadily increasing, with around 25% representation in the under 30 age group. Importantly, many other industry technical disciplines are now joining the Institute, with membership not being simply ‘miners and metallurgists’. Continued growth of membership is a critical initiative, especially in a regional context.

Good progress has been made on updating of the SAMREC and SAMVAL codes, and an Oil and Gas Working Group has been established to define the approach to be taken by the SAIMM and GSSA in the reporting of oil and gas resources in the emerging shale gas and oil industry.

Management and Office Administration

Several changes to established procedures were initiated during the year. The Constitution of the SAIMM was updated at the 2011/2012 AGM. The number of Council meetings per year was reduced to one per quarter to facilitate better interaction with the Branch Chairpersons and improve overall attendance. The by-laws that enable the execution of the objectives of the Institute were sequentially reviewed, updated, and approved at each Council meeting. Branch Chairpersons, now full members of the Council, participated in Council meetings with transport support being provided as necessary. Governance and auditability of Office Bearer and Council proceedings were enhanced through the introduction of meeting packs and tighter control over agenda content. Finally the 2012/2013 Council election process was enhanced through on-line access and voting, resulting in an overall increase in participation.

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. Ms Sam Moolla returned, as

Manager, in May 2013 after an absence of nine years, replacing Ms Julie Dixon who resigned to pursue other opportunities after seven years as Manager.

Accounts

Accounting policy and procedure were further improved with the streamlining of management financial reports and the introduction of cash flow forecasts to facilitate cash reserve management and control operational expenditure. An operating surplus, in excess of that anticipated, was achieved.

Branch financial control was improved with the Western Cape Branch implementing Pastel accounts and harmonizing accounting processes with the Johannesburg office. This formal integration has long been overdue and will improve the availability of accounting data and facilitate governance, year-end reporting, auditing, and tax compliance requirements. All bank accounts are now accessible on-line and can be viewed directly by the accountant, improving overall governance.

Debtor management has been a key focus area with an overall improvement in debtor-days and collection of membership dues.

A US dollar account was opened and this has improved the ability to transact in dollars, either inward or outward, and to transfer funds to and from South African accounts as and when required. Advantage can also be taken of better exchange rates for inter-account transfers.

The 2012/2013 budget was developed, reviewed, and approved by Council on 19 July 2013 for execution.

Conferencing

The Conferencing department hosted a total of 17 events for the period July 2012 to June 2013 with a record attendance of 2 934 delegates. Ninety-one potential members were enrolled through the hosting of conferences. SAIMM events were hosted all over the southern African sub-region with delegates from across the globe, including Australia, Austria, Botswana, Brazil, Canada, Denmark, Democratic Republic of Congo, Germany, India, Italy, Madagascar, Namibia, Russia, Senegal, Singapore, Sweden, Switzerland, The Netherlands, United Kingdom, United States of America, Zambia, and Zimbabwe.

The SAIMM partnered with the Association of Mine Managers of South Africa (AMMSA) and the Colliery Managers Association (SACMA) for the MineSafe 2012 conference, which attracted a record attendance of over 1 250 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 5th MineSAFE conference in October 2013.

The partnership negotiated in 2010 with the Advanced Metals Initiative (AMI), as endorsed by the Department of Science and Technology, hosted Ferrous 2012: Ferrous and Base Metals Development Conference and the AMI Ferrous 2012 – Post-Conference Metallography Workshop. This partnership is scheduled to continue until the end of 2013, and hosts a special edition of the SAIMM Journal.

The SAIMM received 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, and although there was a slight delay in delivery of the January and February 2013 editions due to the postal strike, delivery is now back on track. The *Journal* includes the President's Corner by the Institute's current President, Dr Gordon Smith, and Professor Robinson's thought-provoking Journal Comment; to which R.L. Paul, R.T. Jones, C.T. O'Connor, J. Petersen, C. Dorfling, and T. Ojumu have all contributed this year. Both of these columns are featured on our website and attract commentary.

The proposed changes to the composition and format of the *Journal*, as mentioned in the 2012 report, were put into effect at the beginning of the year. Papers are no longer categorized for publication but are judged purely on merit by two referees, with a final review by the Publications Committee. All copies of the Journal dating from 1894 to 1968 have been scanned by Sabinet and will be placed on the website once a format has been devised to extract all relevant papers and information. Papers from 1969 to present are already available through the website. Journal advertising revenue exceeded expectation and the contribution from advertising on the website increased steadily – indicative of increased website relevance. According to the audit by the ABC Circulation Board, the distribution of the *Journal* is 3 629 units, which is consistent with the corresponding period last year.

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).

Membership

The SAIMM began the financial year with 3 702 members and ended with 3 962. A major effort was made to collect outstanding subscriptions; which included phoning, e-mailing, contacting companies directly, and sending registered letters to members. Subsequently, after engagement with and review by the Membership Committee, 160 members have been removed from the membership roll following non-payment of fees.

This loss of members comprises mainly expired free associate memberships from conferences and students who have transferred to Associate membership, with whom contact has been lost, or who have moved out of the industry. In order to minimize this loss of student members following graduation and prior to formal employment, a process has been established whereby new member applications, including students, are now captured with a cell phone number and an alternative personal e-mail account to prevent contact being lost.

Extensive effort was directed at reviewing the validity of Associate Members, including requests to upgrade to Member status where appropriate. This drive has been remarkably successful, with a steady stream of upgrade requests being processed at the monthly Membership Committee meetings. This will remain one of our focus areas for the upcoming year. The number of requests for upgrade to Fellow has slowed down following changes to membership by-laws requiring a supporting motivation indicating contributions to the objectives of the SAIMM or to industry. On-line archiving of all membership files has begun, with anticipated completion by the end of 2013.

The bulk e-mail service is being monitored to ensure that no duplicate e-mails are recorded and that membership is effectively engaged through the e-mail processes. An alternative to Majestic is being investigated that can communicate directly with Soft Audit, the membership database program, to streamline some of the membership functions.

Membership Committee processes have also been streamlined, with the review of applications being conducted electronically prior to the meeting and meeting discussions being limited to contentious applications. A web-based application process is currently being developed, with application testing anticipated by year end.

Strategy

The viability and significant growth of the SAIMM over the past five years can be attributed largely to the soundness of the current strategic thrusts. However, transition to the second phase of the strategy in now necessary to capitalize on the excellent progress to date and sustain growth as a regionally significant organization. The recent rapid growth of the Zimbabwe Branch and sustained, but not captured, interest in Zambia and Namibia has indicated the need for increased effort in creating and enabling regional branches.

The future of the Southern African Institute of Mining and Metallurgy is dependent on meaningful regional expansion. However, effective execution of this second phase of the strategy will require a different approach to that currently employed. There is an emerging realization that part-time, volunteer, office bearers are unable to apply the sustained, focused efforts necessary to create, enable, and support new regional branches. Consideration should be given to the appointment of a full-time Executive Officer with a specific mandate to establish and sustain regional branches to ensure relevance of the SAIMM for future generations. This issue and others will be addressed at the 2013 strategy session, with outcomes being deliberated with Council and shared with membership in due course.

We are at a strategically significant point in the history of the SAIMM with a need to remain relevant to the emerging regional minerals and metal industry.

1.4 Awards and Adjudication Committees

Awards and Adjudication Committee—Mining

M.H. Rogers, Chairman

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

Awards and Adjudication Committee—Metallurgy

M. Dworzanowksi, Chairman

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

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	
	J.S. Freer	
	H.G. Mosenthal	
1997	J.A. Cruise	
1998	D.A.J. Ross-Watt	
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	

No awards were made in 2013.

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

This year the award is made to H.R. Phillips 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
	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	
1947	G.H. Grange	J.D. Pollard

	W.B. Howe	V.C. Robinson*
	J. Marr-Levin	A.N. Shand*
	C.J. Parr*	G.R. Still
1948	D.F. Foster	J. Pope*
	M.H. Grusd*	N.A. Stacey
	P.A. Laxen*	J.A. Tyser
	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. Dear	B.S. Tatterson
	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. 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	

** Deceased since becoming members of the Club*

Gold and Silver Medals

Papers published in the *Journal* from March 2012 to February 2013 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.

No Gold Medals were awarded this year.

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:

J.A.L Napier and D.F. Malan, for their paper published in the August 2012 issue of the *Journal* entitled 'Simulation of time-dependent crush pillar behaviour in tabular platinum mines'.

Q.G. Reynolds, for his paper published in the August 2012 issue of the *Journal* entitled 'The dual-electrode DC arc furnace—modelling brush arc conditions'.

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.M. Phambane
Metallurgical Engineering	K.B. Tjatji
Prestige Prize	G. Peyton
	O. Motlogelwa

University of Pretoria

Mining Engineering	S.A.J. Potgieter
Metallurgical Engineering	W.F. Teessen
Student Dissertation	S.A.J. Potgieter

University of Johannesburg

Mining	M. Phasha
Extraction Metallurgy	S.B. Ndlovu

North-West University

Mineral Processing	D.W. Nel

University of Cape Town

Chemical Engineering	T. Dube

University of Stellenbosch

Process Engineering	A. Pieters

Cape Peninsula University of Technology

Chemical Engineering	C. Deogratious

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 2013.

1.5 SAIMM Scholarship Trust Fund

J.R. Dixon, Chairman
R.P. Mohring, Vice-Chairman

F.M.G. Egerton M.H. Rogers
W.H. van Niekerk

Contributions to the Trust Fund by individual members and company affiliates amounted to R68 550. The SAIMM continued its support of the Trust Fund with a contribution of R200 000. Awards of R305 000 were made to the universities supported by the Trust Fund.

The role of the Scholarship Trust Fund has become even more important as student numbers continue to grow at an increasing rate. The Trust Fund continues 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 acknowledge 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 have a re-look at the request for donations. Donations 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 to continue to be a productive part 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.

My thanks to Mike Rogers who retired as chair of the Trust for his hard work on behalf of the Trust over many years. Mike will continue as a Trustee.

1.6 Banquet Committee

G.L. Smith
M. Dworzanowski
J.N. Van der Merwe
R.T. Jones
J. Dixon

The 2013 banquet was held in the Ballroom at the Sandton Sun.

The guest speaker was Mr Tony Leon, the former Ambassador to Argentina, Paraguay, and Uruguay. A lot of good feedback was received from guests.

There were three VIP tables and 45 sponsors' and members' tables, with 494 guests in total. The evening was a great success, with many friends and acquaintances catching up with one another and the news in the industry.

2. Technical Meetings

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

2.1 Technical Programme Committee—Mining

D.D. Munro, Chairman
R.T. Jones, Metallurgy Representative

C. Deacon
A. du Plessis
A. Dougall
P.H. Ferreira
C. Fredericks
A. Hefer
A. Johnson
W. Joughin
C. Kuhl
G.V.R. Landman
M. Letlhogonolo
D. Limpitlaw
J. Lotheringen
L. Marumole
I. Matunhire
N. Meijer
M.J. Mothomogolo
C. Musingwini
J. Ngoma
G. Njowa
H. Nkosi
S. Nong
G. Olivier
R.G.B. Pickering
R.C.D. Phillis
J. Porter
D. Rungan
S. Rupprecht
B. Sekano
C. Smith
G.L. Smith
W. Snyman
T.R. Stacey
P. Terbrugge
J. Theron
J. Truter
T. van den Berg
I. Wermuth
M. Wertz
M. Woodhall
R.P.H. Willis

The past financial year has seen the Mining Technical Programme Committee (TPC) hosting seven mining-specific events, with a further four shared between the Mining and Metallurgy TPCs. Included in these were five schools, which are increasing in popularity with most being over-subscribed.

The year started with the Mineral Project Valuation School (2012), which was held over three days at the University of the Witwatersrand, Johannesburg (Wits) and attracted 81 delegates. This was driven primarily by new developments towards stochastic valuation techniques and was encouraged through the trend for previously mothballed projects to be re-evaluated for possible inclusion in the project pipeline.

Efficient Optimization in Mine Planning immediately followed the Project Valuation School on 6 July 2012, with guest lecturer Professor Jorge Amaya from the Centre for Mathematical Modelling (CMM) at the Universidad dé Chile. He presented experiences from the CMM in modelling and solving strategic mining problems using high-performance computing (HPC). This event was attended by 29 people.

The 2012 MineSafe event attracted a record 1275 attendees (400 of whom attended the technical presentations) over the three days at Emperors Palace. This annual event, hosted jointly with the Association of Mine Managers of South Africa and the South African Colliery Managers Association, has established itself as one of the Institute's flagship events, and MineSafe 2013 event promises to live up to previous successes.

In September the two-day Mine Planning School was hosted at Wits, with 134 attendees registering for the event. This school was organized against a backdrop of a generic description of the mine planning process, and provided a platform for the mine planning fraternity to explore best practices and share experiences. Presentations were given on best practice, and displays of state–of-the-art mine planning tools were also on show.

Electra Mining was used as the venue for the 2012 Surface Mining colloquium, which attracted an audience of 94 attendees. This event was unlike previous events, as the venue allowed the attendees access to the exhibition during the two days. The questions of how to mine faster, deeper, steeper, and cheaper while maintaining the highest safety and environmental standards were the focus. Industry operators, contractors, and suppliers were encouraged to share the challenges being faced, new trends being implemented, tools used, and value adding systems applied to unlock mineral potential in the current commodity cycle.

The bi-annual Platinum Conference was hosted at Sun City in September over four days (Including a site visit), and attracted 295 attendees at a very difficult time in the history of the platinum industry. This year's tagline was 'Platinum - A Catalyst for Change'.

The annual Student Colloquium followed on 10 October 2012 at Wits with presentations by the top third- and final-year students from the participating tertiary educational institutions. A total of 134 people attended the day, with a high calibre of presentations given.

The South African National Committee on Tunnelling (SANCOT) organized their annual Saint Barbara's Day event at the Royal Hotel in Ladysmith, and focused on the Ingula Journey. This was well attended by 51 delegates.

In March 2013, the bi-annual Diamonds conference was hosted in Johannesburg at Misty Hills, and attracted 108 delegates from across the diamond mining and processing

industry. A wide range of papers were presented over the two days, with the conference concluding with a site visit to Cullinan.

Optimization of Mine Value Chain from Resource to Market '13 was designed to help mining operations realize significant value by optimizing the total value chain from resource to market. The conference therefore focused on identifying optimization opportunities and how to sustain these processes over the duration of the mine's life. This event was held from 7–9 May 2013 at the CSIR facilities in Pretoria.

The final event for the year was held in June at the Orion Hotel in Rustenburg, where an Underground Load and Haul School was presented which focused on the platinum industry. This attracted 67 delegates over the two days, with follow-up schools focusing on the gold industry planned for 2013/2014.

The events organized by the Technical Programme Committees contribute greatly to the knowledge in the industry, and without the professionalism of the secretariat and organizing committees of each of these conferences, significantly less knowledge transfer would be possible.

I would therefore like to thank the Technical Programme Committee, contributors of technical material, and the SAIMM secretariat for their dedication and hard work during the past year, and look forward to another successful, educational year in 2013.

2.2 Technical Programme Committee—Metallurgy

R.T. Jones, Chairman
M. Dworzanowski, Vice-Chairman

H. Bartlett
N, Blackham
Z. Botha
T. Claassens
P. den Hoed
A.M. Garbers-Craig
H. Graham
D.R. Groot
K.J. Hay
C. Kruger
T. Malefetse
M. Motuku
A.F. Mulaba-Bafubiandi
N. Naude
S. Ndlovu
D. Nyembwe
J. Petersen
H. Simonsen
J.D. Steenkamp
P.J. van Staden
K. Vreugdenburg
B.S. Xakalashe
J. Zietsman

The Metallurgy Technical Programme Committee 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).

Attendance figures this year varied from approximately 50 (for a highly specialized topic) to almost 300 (for the well-established multi-day International Platinum Conference). Sponsorship from industry has continued at a very significant level. The support of sponsors is highly appreciated, especially in light of the somewhat depressed economy.

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 published in full on the SAIMM website, in order to make the

Schedule of Mining/Metallurgy Technical Conferences, 2012/2013

Type of Event	Date	Title	Convenor	Attendance
School	3-5 July 2012	Mineral Project Valuation	C. Musingwini	81
Workshop	6 July 2012	Efficient Optimization in Mine Planning: Sharing the Chilean and South African Experiences	C. Musingwini	29
Conference	1 August 2012	SAIMM Western Cape Branch: MinProc 2012	S. Bradshaw	158
Conference	1-3 August 2012	MineSafe 2012 Zero Harm—Transformation 'Heart of the Charter'	T. van den Berg	1275
School	4-5 September 2012	Mine Planning School	M. Woodhall	134
Conference	11-12 September 2012	Surface Mining	C. Fredericks	94
Conference	18-20 September 2012	Platinum Conference 'A Catalyst for Change'	G. Smith	295
Colloquium	10 October 2012	Student Colloqiuim 2012	Z. Botha	134
Conference	15-17 October 2012	Ferrous and Base Metals Development Network Conference	J. Papo	88
Workshop	18 October 2012	FERROUS 2012—Ferrous and Base Metals Development Network Conference Post Conference Metallography Worshop	J. Papo	52
Seminar	3-4 December 2012	South African Tunnelling 2012—Lessons Learnt on Major Projects	A. Wilson	51
Workshop	20-21 February 2013	Electrometallurgy: Opportunities and Challenges	D. Groot	69
Colloquium	12-13 March 2013	Diamonds—Source to Use 2013	D. Munro	108
Conference	3-4 April 2013	4th Sulphur & Sulphuric Acid 2013 Conference	T. Claassens	143
Conference	23-25 April 2013	Refractories 2013 Conference	A. Garbers- Craig	72
Conference	7-9 May 2013	Optimisation of Mine Value Chain from Resource to Market	N. Naude	95
Conference	4-6 June 2013	Sampling and Analysis: Best-practice in African mining	H. Bartlett	147
School	12-13 June 2013	Underground Load and Haul	S. Rupprecht	67

Mining	7
Metallurgy	6
Mining & Metallurgy	4
	17

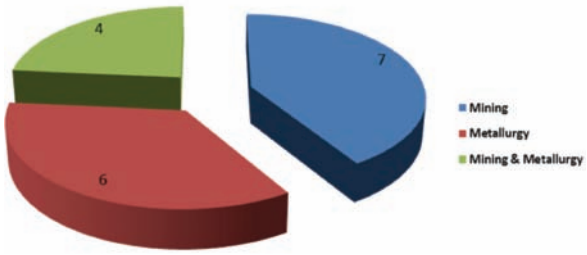


Figure 1—Conference by event type

Members	670
Non - Members	2264
	2934

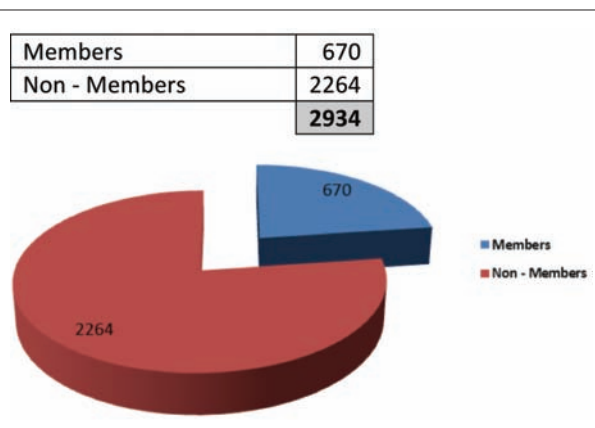


Figure 2—Conference attendee breakdown

South Africa	2761
Africa	67
Europe	56
Americas	40
Asia	8
Soviet Union	2
	2934

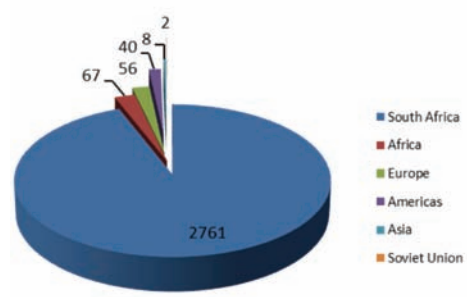


Figure 3—Conference attendee by continent

information searchable and available to as wide an audience as possible. The SAIMM continues to make their website publications available free of charge to the general public, in recognition of the time and effort freely contributed by authors.

China	1
India	1
Mozambique	1
Norway	1
Senegal	1
Singapore	1
Brazil	2
Chile	2
Madagascar	2
Russia	2
Sweden	2
Switzerland	2
Denmark	3
Finland	3
Italy	3
Netherlands	3
Democratic Republic of Congo	4
Turkey	4
France	5
Japan	5
Lesotho	7
Austria	8
Canada	8
Tanzania	8
Zambia	9
Germany	10
Zimbabwe	10
Namibia	11
Australia	12
United Kingdom	13
Botswana	14
United States of America	15
South Africa	2761
	2934

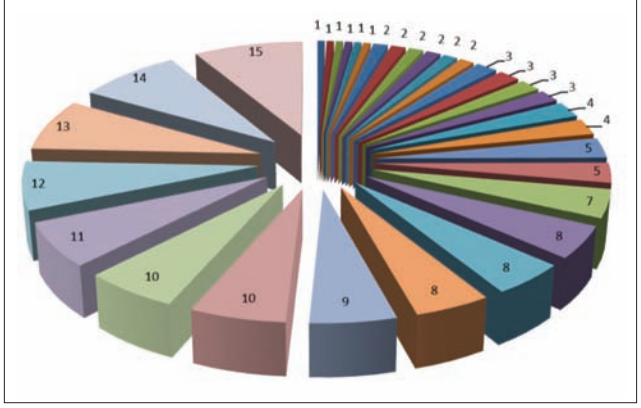


Figure 4—Delegate attendance by Country (excluding South Africa)

The 2012/2013 year has included a variety of events, and some highlights are mentioned below.

The Western Cape Branch of the SAIMM held their 30th annual Mineral Processing Conference in Cape Town in August 2012. This well-established event features close interaction between the local universities and industry, and has broadened its subject matter to become the 'Southern African Mineral Beneficiation and Metallurgy Conference'.

The largest metallurgical event of the year was the Fifth International Platinum Conference, held at Sun City in September 2012, where 295 delegates were present. The theme of the conference was 'Platinum: A Catalyst for Change'. The conference was held during a very turbulent period for the platinum industry, characterized by industrial unrest and high costs. Keynote speakers, including Chris Griffith from Anglo American Platinum, provided valuable perspectives from the point of view of their respective mining companies, and

Program	Days
Project Mineral Valuation 2012	3
Efficient Mine Plan 2012	1
Minesafe 2012	3
Mine Planning School 2012	2
Surface Mining 2012	2
Platinum 2012	5
Student Colloqiuim 2012	1
Ferrous Base Metals 2012	3
Metallography Workshop 2012	1
Ingula Journey 2012	1
Electro Metallurgy 2013	2
Diamonds 2013	3
Sulphuric Acid 2013	3
Refractories 2013	2
Mine value chain from resource to market 2013	3
Sampling 2013	3
Underground Load & Haul 2013	2
Total Number of Conference Days	40

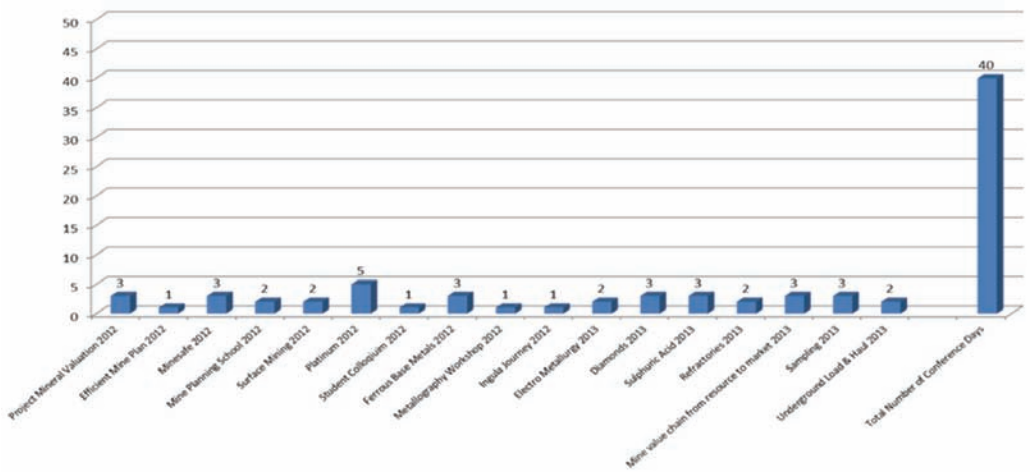


Figure 5—Conference days per event, July 2012–Jun 2013

contributed insight into the economic and political situation surrounding the industry and the resulting impact on the market for PGMs.

The annual Student Colloquium was held during October 2012 at the University of the Witwatersrand. This year the event was brought forward earlier than usual, in order to accommodate the University of Johannesburg, but this meant that the only universities who participated this year were Wits, Pretoria, and Johannesburg. (Historically, this Colloquium focused on tertiary educational institutions close to Johannesburg and Pretoria, but in 2011 it was opened up to a much wider range of southern African universities for the first time.) This event is subsidized by the SAIMM from the surplus funds from other events, in support of the various tertiary educational institutions in southern Africa. The Colloquium continued to provide a showcase for students to present their final-year projects. The SAIMM provided adjudicators to select the prize-winners, based on the criteria of importance, usefulness, innovation, quality, and communication. The student presentations were generally of high quality, and some were published in the SAIMM Journal. Generous prizes were provided by SAIMM for the best mining and metallurgy presentations.

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 'Ferrous and Base Metals', a conference was held at Mount Grace in October 2012. This event brought together researchers, industry, and government stakeholders, to share and debate the latest trends, research, and innovative solutions in the field. A student seminar (covering the full scope of the AMI) was held on the first day of the conference, and a metallography workshop was held on the day after the conference.

The subject of 'Electrometallurgy' was covered in a three-day event at the CSIR Conference Centre in Pretoria during February 2013, and was well received by 69 participants.

The Diamonds 2013 conference was held jointly with the Mining Technical Programme Committee during March 2013 at the Misty Hills Conference Centre. The event was the fifth in the Diamonds — Source to Use series, which targets the full spectrum of the diamond pipeline from exploration through to cutting, for both natural and synthetic diamonds, including extraction, processing, and beneficiation operations.

The 4th Sulphuric Acid Conference was held at Sun City during April 2013. This well established event was attended by 143 delegates, and was well supported by industrial sponsors.

The 3rd Refractories Conference was held at Misty Hills in April 2013, and was attended by 72 people. The main objective of this event was to advance the understanding of the production, installation, and use of refractory materials through the exchange of knowledge between raw material suppliers,

Program	Sponsorship Amount - R
Project Mineral Valuation 2012	25,000.00
Efficient Mine Plan 2012	10,000.00
Minesafe 2012	727,000.00
Mine Planning School 2012	75,000.00
Surface Mining 2012	125,000.00
Platinum 2012	1,311,000.00
Student Colloqiuim 2012	35,000.00
Ferrous Base Metals 2012	44,000.00
Metallography Workshop 2012	0.00
Ingula Journey 2012	28,000.00
Electro Metallurgy 2013	0.00
Diamonds 2013	368,000.00
Sulphuric Acid 2013	558,000.00
Refractories 2013	8,000.00
Mine value chain from resource to market 2013	113,000.00
Sampling 2013	428,000.00
Underground Load & Haul 2013	10,000.00
Total Sponsorship	3,865,000.00

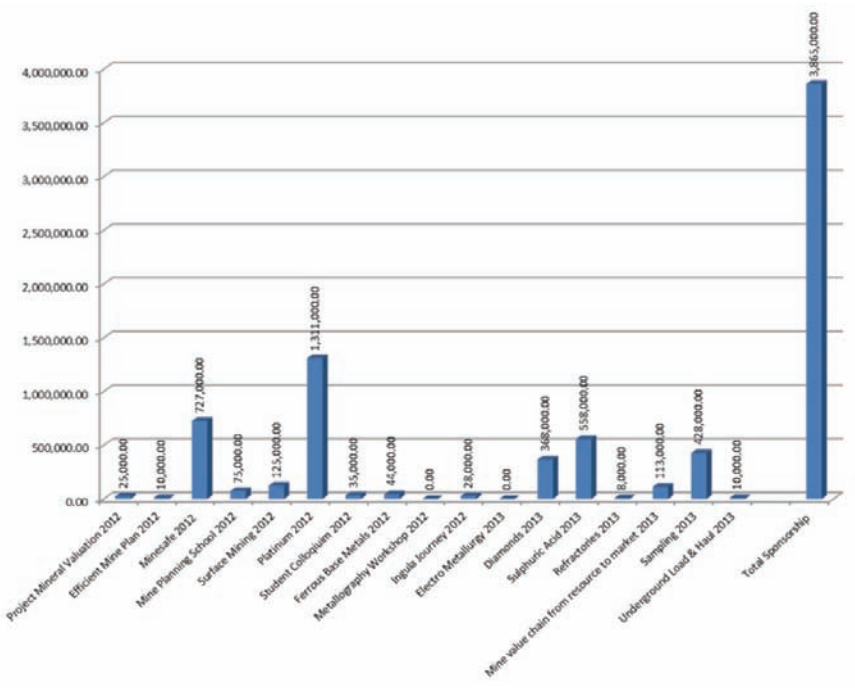


Figure 6—Conference sponsorship per event, July 2012–June 2013

refractory producers, installers, users, and researchers. A keynote address was given on castables – their history and current developments.

A conference on 'Optimization of the Mine Value Chain from Resource to Market' was held in May 2013 at the CSIR Conference Centre. The conference was attended by 95 people.

A conference on 'Sampling and Assay: Best Practice in African Mining' was held at Misty Hills during June 2013, and was attended by147 people. The most important commodities in the African mining industry are platinum group metals, coal, gold, iron ore, diamonds, copper, manganese ore, and mineral sands. For all of these commodities, sampling is required at all stages in the value chain, from exploration, through face sampling, blast-hole sampling, and in-mine grade control, ore processing and handling, metallurgical sub-sampling, sub-sampling in the laboratory, and finally quality control and standards used in the analyses of the final samples. This conference emphasized current best practice (the methods actually used), rather than keeping only to the theory. The papers presented will form the basis of the first ever 'Best Practice in African Mining' volume.

The SAIMM's participation in the 13th International Ferro-Alloys Congress (INFACON) is documented in a separate section of this Annual Report. This year's event was held in Almaty, Kazakhstan, and was very well supported by South African delegates.

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), 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 (Niagara Falls, Ontario, Canada), the TMS Annual Meeting (San Antonio, Texas, USA), and the European Metallurgical Conference (Weimar, Germany).

The TPC-Metallurgy committee continued to be supported by a group of highly capable members, and many enjoyable meetings were held during the year. The SAIMM conferencing team is to be commended for their highly professional approach in handling conference arrangements, which has resulted in many favourable comments from attendees. The combined effort of all these people has 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)

A. Wilson, Chairman

G.N. Davis	T.R. Stacey
P.H. Ferreira	F.B. Stevens
W. Joughin	H.J. Tluczek
M. Lebitsa	J.N. van der Merwe
J.L. Porter	C. Viljoen

SANCOT held its annual one-day seminar 'South African Tunnelling 2012 – Lessons Learnt on Major Projects' on 3 December 2012 in Ladysmith, KwaZulu-Natal. This was followed by a half-day visit to the Ingula Pumped Storage Scheme site the following day. The Ingula Pumped Storage Scheme is currently the largest civil tunnelling project in South Africa, and the aim of the seminar was to focus on the design parameters and the construction experience gained. This included the purpose and overview of the scheme, some of the construction challenges, the design of the underground works and steel liners, and a comparison of the anticipated and actual rock behaviour as measured by the instrumentation. In addition, there were presentations on other projects; namely, the Kabompo Gorge Hydroelectric Project in Zambia, Micro-tunnelling: the eThekwini Sewer Extension, and two papers on the anticipated Phase 2 of the Lesotho Highlands Water Project. This was followed by a report-back on the International Tunnelling Association's (ITA) World Tunnel Congress held in Bangkok. The site visit took place on St Barbara's Day, when site worked is stopped by tradition.

The Vertical Tunnelling (Shaft Sinking) working group continued to meet to prepare a document on best practice in this field. This initiative has been endorsed by the ITA and is intended to assimilate the knowledge gained in shaft sinking techniques to improve the industry's safety record by embracing the 'zero harm' philosophy.

Through the SAIMM, SANCOT was again represented at the ITA's World Tunnel Congress, which was held this year in Geneva. South Africa is a founding member of the ITA and has been represented at every Congress bar one since its inception. SANCOT continues to be represented on three of the ITA's working groups namely, Research, Contractual Practice, and Use of Sprayed Concrete.

3. Publications

Portfolio Holder: M. Dworzanowski

D. Tudor, Chairman

R.D. Beck	R.T. Jones
J. Beukes	W.C. Joughin
P. den Hoed	C. Musingwini
M. Dworzanowski	R.E. Robinson
M.F. Handley	N. Singh
A.M. Garbers-Craig	T.R. Stacey

3.1 Journal

Monthly publication of the *Journal* was maintained throughout the year, although the postal strike in early 2013 prevented the timeous delivery of the *Journal* to members. The monthly print run was 3 850 copies.

The proposed changes to the composition and format of the *Journal*, as mentioned in the 2012 report, were put into effect at the beginning of the year. Papers are no longer categorized for publication but are judged purely on merit by two referees with a final review by the Publications Committee.

The breakdown of papers published is listed in the accompanying table.

An increasing number of papers for consideration for publication in the *Journal* are being submitted from non-South African sources. Of the 131 papers published in 2013, 44 were from outside South Africa.

Advertising revenue for the year totaled R 2 041 705, which was a healthy 33.5 per cent increase on the figure for 2012. The contribution from advertising on the SAIMM website amounted to R 71 427, 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 publications team of Dawn van der Walt, Zuliakha Malgas, and Kelly Matthee has continued its good work in producing the *Journal*.

The Publications Committee gratefully acknowledges the contribution of the following people who have refereed and reviewed papers during the year.

The referees play a major role in maintaining the standard and quality of the papers that are published in the Journal.

Papers published in the SAIMM *Journal*

Year	Mining	Metallurgy	Total
2012	56	44	100
2013	46	73	131

Journal List of Referees

M. Abdellatif
G. Akdogan
I. Ashmole
G. Assis
L. Auret
D. Bakker
R. Baloyi
K. Banks
N. Barcza
R. Beck
C. Bergmann
J. Beukes
M. Biffi o
A. Birtles
G. Blight
M. Blinderman
S. Bluhm
T. Boniface y
J. Bosman
M. Bryson
I. Canbulatt
D.-H. Carlota
P. Carvill
F. Cawood
V. Chamberlain
A. Cohen
P. Cole
L.-F. Contreras
A. Cook
R. Cook
R. Cromarty
M. Crozier
F. Crundwell
C. Cunningham
T. Curr
P. Day
K. De Jager
J. De Korte
J. De Villiers
P. Den Hoed
G. Diener
R. Dimitrakopoulos
M. Dimond
R. Dixon
B. Du Plessis
C. Du Plessis
F. Du Preez
R. Du Preez
R. Dunne
B. Durant
R. Durrheim
M. Dworzanowski
R.H. Eric
M. Erwees
E. Esterhuizen
L. Falcon
R. Falcony
P. Ferreira
A. Fourie
J.-P. Franzidis
S. Govender
A. Guest
J. Gurney
M. Handley
J. Heyns
S. Heyns
A. Hinde
M. Holton
G. Howell
R. Hundermark
F. Hunter
S. Hunter
J. James
A.J.A. Janse
B. Janse
R. Jones
W. Joughin
M.W. Kennedy
M. King
P. Knupfer
J. Kramers
D. Krueger
B. Kruger
J. Kuijpers
I. Labuschagne
G. Laney
D. Laubscher
D. Limpitlaw
L. Linzer
P. Lloyd
H. Lodewijks
S. Lubbe
R. Lynch
A. Macfarlane
B. Madden
G. Makusha
F. Malan
J. Maree
S. McCullough
A. McDonald
B. McFadzean
J. McGill
A. Milev
D. Minney
T. Mokone
C. Moolman
M. Mthenjane
A. Muir
D. Munro
S. Murphy
C. Musingwini
N. Mutemeri
S. Naik
J. Napier
S. Ndlovu
J. Nell
M. Nichol
M. Nightingale
S. Nong
E. Nxumalo
M. Nyoka
C. O'Conner
O. Oxtoby
J. Papo
R. Parry
A. Paterson
R. Paul
M Pelser
J. Petersen
H. Phillips
R. Pickering
C. Pistorius
H. Potgieter
M. Powell
C. Prins
R. Ramsden
Q. Reynolds
D. Roberts
M. Roberts l
D. Rose
S. Rungan
W. Saungweme
R. Schmuhl
R. Schouwstra
B. Scott
G. Searby
E. Sellers
N. Shackleton
N. Smit
C. Smith
G. Smith
P. Smith
N. Snyders
M. Solomon
S. Spearing
S. Spottiswoode
T. Stacey
J. Steenkamp
O. Steffen
J. Stiefenhofer
W. Stumpf
A. Swart
H. Swart
M. Tacke
F. Terblanche
J. Terblanche
P. Terbrugge
D. Thomas
A. Thomson
I. Tonzetic
E. Topal
M. Valenta
N. Van der Merwe
W. Van Drunick
P. Van Staden
F. Van Wyk
A. Venter
J. Venter
F. Von Glehn
K. Vreugdenburg
D. Walters
I. Watson
R. Webber-Youngmann
I. Wermuth
M. Wertz
J. Wesseloo
M. Westcott
R. Whyte
J. Wiese
P. Willis
M. Woodhall
H. Yilmaz
J. Zietsmann

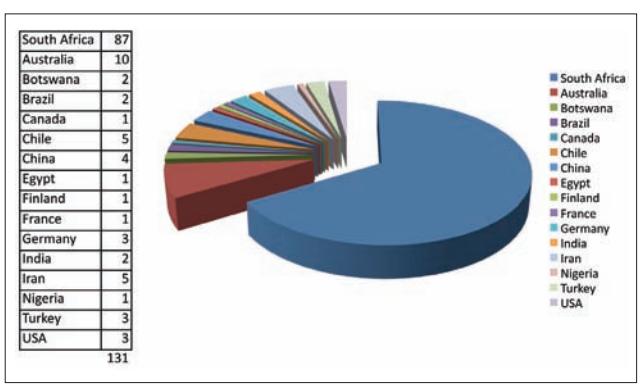


Figure 1—Submission of Journal papers by country

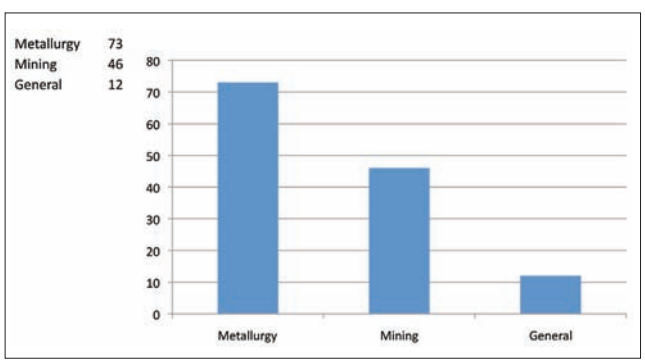


Figure 2—Journal papers submitted by categories, i.e. Metallurgy, Mining, and General

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.*

4.1 SAIMM Branches

4.1.1 Johannesburg Branch

I. Ashmole, Chairman

D. Bant T. Mathiva
A. Dougall M. Mthenjane
J. Douwie G. Oliver
V. Duke X. Pan
C. Heili G. Ralph
R. Heins G. Stripp
J. Luckmann J. Upshall
N. Makhado M. Woodhall

Introduction

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

The increased student attendance at these events that was reported last year has been maintained, and the committee has been in active contact with the universities in Johannesburg in this regard, with particular emphasis on getting involvement from metallurgy students from both the University of the Witwatersrand and the University of Johannesburg, as well as maintaining contact with the mining departments at these universities.

The increased numbers have continued to put strain on the budgets, and the committee has put measures in place to control the costs of each presentation and its associated cocktail party. Nevertheless, we continue to record small deficits at the events that have significant student participation (currently as many as 140 students at a presentation). In the current economic climate we have also found it difficult to increase corporate sponsorship for these events, and appreciate the support from the Institute in covering the shortfalls.

We have nonetheless managed in the current year to secure a number of very interesting presentations (listed below) which have been of great interest to both students and senior members, and have also introduced the innovation of a student debate on a topical subject – the first of these, held during August 2012 on the topic of 'Resource Nationalism', being very well received.

Committee

Membership of the committee has been stable. Andre Dougall, Jason Douwie, John Luckmann, and Thompho Mathiva joined the committee during the year and together with the rest of the committee supported our efforts, and I thank them for their contribution.

This being said, I would like to record my specific gratitude to Christian Heili, Russell Heins, Mzila Mthenjane, Vaughn Duke, Gary Ralph, Julian Upshall, and Graham Stripp for their commitment and active engagement on the committee, and acknowledge that without their efforts the year's pipeline of technical presentations would not have materialized.

Past year technical presentations: Johannesburg Branch of the SAIMM: 2012/2013

Date	Title	Presenter	Sponsor	Responsibility	Venue
2012-07-19	Radar technology - REUTECH Mining	A. Pienaar	Reutech Mining	G. Ralph	Military Museum
2012-08-23	Resource Nationalism debate. Students - Wits, UP, and UJ Mining Engineering	Students-Wits, UP, and UJ	Lonmin	V. Duke	Military Museum
12-09-20	Boseto Copper Project	C. Heil	Discovery Metals Botswana	C. Heili	Military Museum
2012-11-15	Introduction to mining and metallurgy of rare earth metals	D. Kenndy	Rareko	R. Heins	Military Museum
2013-02-21	Fuel additives: the case for significant reduction in emissions and fuel savings in the mining industry, as documented at Gem Diamonds and Jwaneng Diamond Mine	G. Campbell	Centron		Military Museum
2013-03-14	The Sintoukola Potash Project and a technical overview of potash mining	P. Kluge	Elemental Minerals	I. Ashmole	Military Museum
2013-04-18	Tax concessions available for research and development in the energy and natural resources sector	M. Jada	KPMG	M. Mthenjane	KPMG Auditorium
2013-05-16	The world's longest tunnel - experiences from the TBM Drives Speaker	J. Classen	Herrenknecht	I. Ashmole	Military Museum

I would further like to thank our catering team, Wow Caterers, and the staff of the Military Museum, who never fail to perform on the day and have all exceeded my expectations on every occasion. On behalf of both myself and the committee, I would also like to register a special thanks to Ginette Oliver and the SAIMM Secretariat for their dedicated support of the Johannesburg Branch.

4.1.2 Pretoria Branch

W.W. de Graaf, Chairman
D. Gudmanz, Secretary

K. de Wet	D. Powell
R. Mabapa	C. Siyasiya
N. Naude	J. Steenkamp

The activities of the Pretoria 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 & Metallurgical Engineering at the University of Pretoria's main campus. Presenters from both industry and the University 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 Branch is to grow the SAIMM member numbers through student membership. This is achieved by hosting events on relevant topics, which also give the students an opportunity to mingle with industry professionals on an informal basis.

The following mini-colloquia events were hosted on campus:

- A presentation by the incoming President of the SAIMM, Dr Gordon Smith. His topic, 'Strategic long-term planning in mining', was well received by the final-year students
- Professor Rian Dippenaar from the Wollongong University in Sydney gave a talk: 'Can research conducted within a university really be of value to industry? – some examples of collaboration'
- Terry Briscoe from ESCO – USA amused the audience with a very passionate 'close to the heart' talk on 'The evolution of dragline bucket design'
- Dr Heinz Nabielek from Germany, a world leader on nuclear fuels, gave a presentation on 'The quantitative performance, evaluation of HTR TRISO fuels'
- A presentation by Hennie Roets from RARE on 'Mine water treatment solution and pipeline rehabilitation' did not materialize due to a lack of advertising, and was postponed till further notice
- Professor P. Chris Pistorius, based at Carnegie Mellon University, also the former head of the Metallurgical Department at UP, hosted a seminar on: 'Three current issues in production of clean steel: dephosphorization, ladle desulphurization, and inclusion imaging'.

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.

During the last two years we have felt that industry attendance at the seminars was little disappointing. Traditionally, events are held at 16:00, mainly to accommodate the students, as many students rely on public transport to get home. Starting the events in the early evenings, we believe, would improve industry participation; however, we would see fewer students attending. After consultation with various key players and the SAIMM President we are now going to split the events throughout the year. Some of the events will be hosted on campus, mainly for the students (and industry delegates), and some off campus in the early evenings to increase industry participation. We will still encourage the students to attend the off-campus events.

Finally, thanks to the committee, the SAIMM Secretariat, and lastly a special word of thanks to Daleen Gudmanz for playing a key role in making sure that all the events ran smoothly. This ends my second year as Chairman, and I would like to wish the incoming committee everything of the very best for the future and the growth of the Pretoria Branch.

4.1.3 Western Cape Branch

J. Petersen, Chairman
T. Ojumi, Vice Chairman
C. Dorfling, Treasurer

G. Akdogan	T. Madzimbamuto
M. Aziz	A. Mainza
R.D. Beck	C. O'Connor
D.A. Deglon	J. Sweet
J.-P. Franzidis	E. Thyse

The Branch is looking back at another successful year of thriving activities in the area of minerals processing and extractive metallurgy research at the three tertiary institutions (the Cape Peninsula University of Technology, University of Cape Town, and University of Stellenbosch) that comprise the bulk of our members.

The year started, as always, with our annual Minerals Beneficiation Conference, 'MinProc 2012', held at the Vinyard Hotel on 2 and 3 August 2012, preceded by a one-day workshop on 'Pre-concentration in and Upgrading of Ores' held on 1 August, also at the Vineyard. The workshop, facilitated by Jeremy Mann of Anglo American, drew input from a large selection of people, including Chris Rule, Head of Anglo Concentrator Technologies; Marcelo Tavares, a visiting professor of metallurgical engineering from the Universidade Federal de Rio de Janeiro, Brazil; and Carl Bergman from Mintek. The workshop attracted 37 delegates and was considered a good success. The conference consisted of two plenary sessions, 39 oral presentations, 15 short (snapshot) presentations, and four posters. Attendance numbered 158 delegates.

A new special session was created, generously sponsored by Outotec, with a prize for the best presentation on a topic that investigates sustainability in minerals engineering. Five entries competed for the prize, with 1st prize (R10 000) going to Michael Kapembwa of UCT (Study of ice growth mechanisms in electrolyte aqueous solutions) and 2nd prize (R 6 000) to Neehal Mooruth of UCT (An overview of the integrated managed passive treatment system for the treatment of acid mine drainage (AMD)). 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. The winners were:

1st – Mohsen Karimi (CFD simulation of the gas holdup and flow dynamics in a laboratory scale Rushton-turbine flotation tank) – R25 000

2nd – Tsepang Khontu – (Comparative study of the flotation performance or ores treated in an IsaMill and a ball mill) - R20 000

3rd – Evan Smuts – (Methodology for coupled CFD-DEM modelling of particulate suspension Rheology) - R10 000.

All Outotec prizes were presented by Dr Markus Reuter, Outotec.

As is tradition, all prizes were handed over at the conference dinner on the evening of 2 August. A number of SAIMM prizes and awards were presented by the incoming President of the SAIMM, Dr Gordon Smith. These were the SAIMM Prestige Prizes for Best Final Year Student in Mineral Processing 2012. The recipients were Dineo Innocentia Kadi (CPUT), David Vogel and Mesuli Zondo (UCT), and Henri Cloete (Stellenbosch) and the MinProc Best Poster at the conference.

The conference dinner was preceded by the Branch AGM, at which the outgoing Chairman, Richard Beck, presented his report and the new committee was voted in. Associate Professor J. Petersen from UCT was elected Chairman (*in absentia*), Associate Professor T. Ojumu as Secretary, and Dr C. Dorfling as Treasurer.

The Branch held meetings on 21 November 2012 and 28 February 2013. Some key areas of development are discussed below.

- The annual Minerals Beneficiation Conference, the primary activity of the Branch, will be held on 7–8 August 2013 at the Vineyard Hotel again, preceded by a workshop on 'Innovation in Extractive Metallurgy – Ideas, Exploration, Implementation' on 6 August, at which we are aiming to have speakers from industry, academia, and those areas in between to explore how to maximize opportunities. Outotec has again agreed to sponsor prizes on sustainability in the minerals industry, and has encouraged this conference to be as open as possible in order to include a larger number of contributions than in the previous year. The response in the way of papers submitted from academia has been extremely good, but the Branch remains concerned about the increasing lack of participation from industry in this well-established event
- Financial arrangements. The Branch has decided to align its financial management with that of the main SAIMM body, especially in terms of accounting tools used, but to maintain an independent current account, primarily to organize its event. The Branch's investment account is to be integrated into the SAIMM'S investment portfolio at AFC, and discussions were held with Jim Porter to that effect on 6 February 2013. Transfer of funds is in progress. At the meeting a set of Standard Financial Operating Procedures was discussed and agreed. The Branch accounts will be managed in Pastel, to enable a smooth linking into the main organization's accounting structures, which should facilitate especially the compilation of an account audit
- SAIMM Journal Western Cape Special Edition. The idea of a Western Cape issue of the *Journal*, which had been mooted by Richard Beck the previous year, came to full fruition this year in the May issue of the *Journal*, with seven papers and contributions from all the Western Cape tertiary institutions.

In other Branch activities, a student evening was held at CPUT, Belville Campus on 11 April 2013. This was well attended by some 70 students. Proceedings were opened by Professor T. Ojumu, Branch Secretary. Guest speakers were Michael Halhead, formerly of Anglo Platinum, and Hein Potgieter of CPUT, who talked of their experiences around leaving university and entering the job market, followed by a discussion in which students expressed their concerns about a tightening job market. The event was well received by the students.

A Branch Committee Dinner held on 25 June 2013 at the Wild Fig Restaurant, Observatory, was attended by a number of members of the committee with partners, and was enjoyed by all.

The Branch finances are in good order and the conference is set to be another success. We remain concerned, however, about the continuing economic decline and the effect that this is having on our industry. We hope we can regain more interest from industry in interacting with our students at our conference in the future.

4.1.4 Zambian Branch

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

A. Mhone C. Ngulube

The Zambian Branch held an event on 2 August 2013. The event consisted of two parts – the first, held at the Protea Hotel in Chingola, involved presentations of technical papers. This was followed by a technical field visit to Lubambe Copper Mines.

Three papers were presented: 'Crushing plant design guidelines', by Jeffrey Waleng (Metso Minerals); 'The commissioning and optimization of the Lubambe milling circuit' by Alick Mhone (Lubambe copper mines); and a general overview of the Kansanshi Mine operation presented by Alan Delaney (Kansanshi mine).

A total of 27 delegates attended the event, three of whom applied for membership of the Institute.

4.1.5 Zimbabwean Branch

S. Gaihai, Chairman
S. Mandoza, Vice Chairman
W. Kutekwatekwa, Past President
E. Matinde, Secretary

T. Gowera L. Mabiza
M. Gumbie S. Ndiyamba
M. January O. Zvarevashe

Membership

The Zimbabwean Branch has managed to significantly increase its membership base. New and existing members are encouraged to update their membership. In addition, two members (S. Gaihai and W. Kutekwatekwa) were successfully upgraded to Fellows. The Branch has managed to boost interaction among prospective, new, and existing members through networking and technical events organized during the course of the year, and is building synergies and collaboration with other professional organizations by co-opting experts representing other professional organizations in various working committees.

Members are continuously being encouraged to write technical papers and publications for the SAIMM *Journal* and conferences, and efforts are being made to set up local technical committees to peer-review the papers before submission for publication.

In order to encourage interaction amongst members, the Zimbabwe Branch is embarking on networking activities, *inter alia*, conferences and technical visits to operations and projects, coupled with on-site presentations and discussion forums.

Networking events

The Branch members toured the Scientific and Industrial Research and Development Centre (SIRDC) on 13 July 2012, with a view to gaining in-depth knowledge and an understanding of synergies between the Zimbabwean mining sector and scientific and applied research and development institutions in the country. The event culminated in the inauguration of the incumbent Branch Committee.

On 22–23 March 2013, in collaboration with Zimbabwe's Mine Managers Association, a technical visit was made to Marange Resources. The purpose of the visit was to gain an understanding of the diamond value chain and demystify the diamond myths in Chiyadzwa. Marange Resources is 100% owned by the Government of Zimbabwe, and is mining alluvial and conglomerate-hosted diamonds using opencast mining methods. The visit was well attended, with about 30 SAIMM members and 13 Marange Resources staff in attendance. The visit included a tour of exploration, mining, and processing operations, and technical presentations on the diamond value chain from Marange Resources management. A question-and-answer session was held to address all the salient issues. A networking dinner followed, where participants were able to further deliberate on the future of diamond mining and processing in Zimbabwe, and also discuss challenges faced by the mining industry in southern African. Participants were also able to visit resettlement schemes in Arda Transau in order to appreciate the extent of the corporate social responsibility programmes of Marange Resources and other diamond mining companies, and also to highlight lessons learnt and opportunities for future improvement.

The Zimbabwe Branch organized a conference on 'Resource Nationalism and the Economic Role of the Mining Industry Value Chain in Zimbabwe', held at the Zimbabwe School of Mines auditorium in Bulawayo on 23 July 2013, with presentations from both local and regional speakers. A question-and-answer session provided plenty of opportunities for networking with colleagues from different fields of specialization. Ten speakers from different organizations and professional backgrounds presented papers. Some of the organizations represented included MEC South Africa; the Zimbabwe Ministry of Mines, Ministry of Indigenization and Empowerment, and Chamber of Mines; Zimasco; Africa University; the University of the Witwatersrand; and representatives from local mining and banking institutions. Sponsorship for the conference was provided by individuals, corporate stakeholders, and suppliers.

The technical visit to How Mine's Shaft Re-deep project on 24 July 2013 covered both the underground operation and processing plant. The purpose of the visit was to appreciate the challenges faced, and recent innovative developments, in the gold mining and processing sectors in Zimbabwe. The programme included on-site presentations from How Mine staff on technical aspects of the operations.

Members are also being encouraged to visit the Mine Entra Exhibition at the ZITF grounds to benchmark the local mining industry practices against international standards, and also to build on supplier networks.

The following events are planned for the third quarter of 2013:

September 2013: a proposed technical visit to Anglo Platinum's Unki Mine and Todal Bokai Project in Shurugwi. The objective is understand the platinum value chain, and to explore areas for synergies and growth. Negotiations with the respective mine authorities are in progress and tentative dates will be advised.

November 2013: visit to iron ore exploration projects in the Chivhu-Ngezi areas and discussion of opportunities for developing the iron ore and steel value chains.

Legal registration

The Committee is working with the Chamber of Mines and other stakeholders in order to register the Branch in Zimbabwe. This will enable the Branch to influence policy and other issues that affect the local mining industry.

4.1.6 Zululand Branch

W.R.J. Erasmus, Chairman

E. Clare	C. Minnie
B. Marimba	K. Selby

The Zululand Branch of the SAIMM had a fantastic year in 2012/2013, despite there being no major conferences in the area during this period.

The Branch once again maintained its association with the other professional institutes in the KZN area. Members from Richards Bay Minerals, Tronox have supported branch activities. Suppliers to these industries such as Mineral Technologies and Spectrum Technical have also given us great support.

Technical meetings

- Eskom presented their five-year strategy
- APT gave a presentation on gold recovery
- A technical discussion was hosted on fine grinding and the consequent improvement in liberation and recoveries.

No site visits took place during the year.

Branch socal activities

- In June Johan Gouws (Chairman, Birding KZN) conducted us around Richards Bay for some bird viewing
- In November the Branch hosted a golf day at the Muntinzini golf course, which turned out to be a great day that was really enjoyed by all participatants.

The year ahead

The following activities are planned for the year ahead.

31 July	Robo Lab – presentation on laboratory atomization
28 August	A whisky or wine tasting
2 October	Presentation on coal processing
26 October	Johan Gouws (Chairman - Birding KZN) will take us to Mtunzini for some bird viewing
16 November	Branch golf day.

4.1.7 Namibian Branch

G. Ockhuizen, Chairman

2012/2013 was a challenging year for the Namibian mining industry, with the Areva Trekopje Mine as well as Rio Tinto Rössing Uranium operations retrenching staff due to the low uranium prices and high unit costs. This placed a lot of strain on our membership recruitment process, but in spite of this, efforts are still being made to increase our Namibian Branch membership. Some of the student members have begun their employment, and an effort is now being made to convert these student members to Associate Members.

During the last quarter an effort was made to re-establish the Namibian Branch Committee. We managed to find three willing members to serve, and we are seeking more in order to reduce the risks of the committee falling flat, as it did in the past, when committee members left the country.

The 'Uranium Production: Beyond Fukushima' Conference will still be taking place. The dates are 23-24 September at the Windhoek Country Club, Namibia. This will be followed by a technical visit. We have started planning for a Drill and Blast school that is scheduled for March 2014, thus giving us more time to advertise the event.

4.1.8 DRC Branch

S.C. Mulenga, Chairman

The DRC Branch of the SAIMM held the inaugural event on the 12th of October 2012 at the Grand Karavia Hotel in Lubumbashi. Sixty-one people attended and there were seven papers presented. The event was opened by the Chairman of the Branch, Mr Susa Maleba and the Immediate Past President of the SAIMM, Dr Nielen van der Merwe welcomed all attendees. The Minister of Mines also attended the event. The Committee held a meeting on 15 February 2013 with company management, university authorities, and governmental departments to explain membership and the role of the SAIMM.

Meetings with potential members were held in Kolwezi from 13 to 15 May.

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

N.A. Barcza	G. Jonck
R.D. Beck	R.T. Jones
L.A. Cramer	K.C. Mistry
M. du Toit	J. Phiri
M. Dworzanowski	R.F. Sandenbergh
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 2012/2013 the PAC Metallurgical Engineering again considered applicants for registration as Professional Engineers by means of paper evaluations and interviews, in which volunteers from the SAIMM participated. The Committee also produced an updated version of the 'Discipline Specific Training Guidelines' (DSTG) for metallurgy, and are assisting with the detailing of 'identified engineering work' for the metallurgy discipline. 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 the offering of 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.

PAC Mining

The past Chairman, Professor John Cruise, and members Professor Nielen van der Merwe and Mr Frank Edgerton resigned from the Committee during the year. We record our thanks to them for services rendered – in particular to Professor Cruise, who served on the Committee with distinction as member, Vice Chairman, and Chairman for many years.

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 (CBE) 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.

The past term of office of ECSA has been fraught with non-engineering activities, two of which have had a marked effect on the activities of ECSA.

The first is the CBE's interference in the attempt to establish the Identification of Engineering Work. To clarify the situation by means of an explanation, the Engineering Council is a statutory body that falls under the CBE, which in turn falls under the Department of Public Works. The CBE is an umbrella body for six councils, namely Architecture, Engineering, Landscape

Architecture, Project and Construction, Property Valuation, and Quantity Surveying. Of these ECSA is by far the largest body. The fact that ECSA does not fall directly under the more appropriate government body, namely the Department of Science and Technology, and that it is one level removed from the Department has caused ECSA's effectiveness in engineering matters to be stifled. With regard to the Identification of Engineering Work (IdoEW), which is critical for the future of the professional engineer in South Africa, the CBE has attempted to shoehorn ECSA's requirement into a framework for all the councils, which does not fit in with ECSA's disciplines. Over the past five years there has been much to-ing and fro-ing between the CBE and ECSA over IdoEW, with the result that no progress has been made, and a lot of time and energy have been wasted. The engineering profession has suffered as a result.

The second is the fact that one of ECSA's voluntary associations, the National Society of Black Engineers of South Africa (NSBE), took ECSA, the CBE, and the Minister of Public Works to court because they objected to the manner in which the ECSA Council was elected. Although legal opinion was given that the NSBE did not have a case, the legal impasse proceeded for two-and-a-half years.

A further aggravating factor was the fact that due to the Government Cabinet reshuffles, there were three Ministers of Public Works in three years. In order to resolve the issue, the Minister at the time sought a compromise solution, which was to reduce ECSA's Council's term of office from four years to three years. Again, during this unnecessary process, much time and energy was wasted on matters not relating to engineering.

6. State Liaison

Portfolio Holder: G.L. Smith

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: J.N. van der Merwe

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, 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, Member

Report on the 36th APCOM Symposium

APCOM is an international forum for the presentation, discussion, and examination of state-of-the-art and emerging technologies in the fields of computer and operational research methodologies applied to coal mining and the minerals industry. The APCOM event series has become a major driver of innovation in the minerals industry, facilitating the advancement of computer and operational research methodologies applied to the minerals industry. Thanks to the personal commitment of APCOM's loyal participants and supporters, the APCOM symposia continue to be a thriving success.

In 2013, APCOM will be held in the Sheraton Hotel in Porto Alegre (Brazil) during 4–8 November. This is the first time in its 50-year history that the Symposium is held in Brazil.

The technical programme of this Symposium represents a balanced mix of traditional areas of exploration, including geostatistics, mine design, production planning, investment analysis, artificial intelligence, simulation, mine automation, rock mechanics, mineral processing, and data management systems.

The Chairman of the Conference is Dr João Felipe Costa of the Mining Engineering Department of the Federal University of Rio Grande do Sul, and queries can be directed to João at jfelipe@ufrgs.br.

The international APCOM Council consists of the following members:

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

The Symposium will be supported by the Brazilian Institute of Mines. It will run over three days, and will be preceded by five short courses/workshops. Rates for delegates will be R$2 200 and for authors R$1 800. Low rates will be offered to students with the aim to limit conference registration to no more than R$800. There will be a section of the Symposium devoted to 'Advanced Technology Relating to Mining', and a feature of the Symposium will be a panel discussion (open forum).

The official website is www.apcom2013.com.

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 Ferroalloy 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 Ferroalloys (ICFA) was formed by the SAIMM, FAPA and Mintek. Mintek provides the secretariat for ICFA.

The primary objectives of ICFA are to promote the holding of the INFACON Ferroalloy Congress every two to three years in appropriate locations, to ensure that the high technical standard 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 the previous INFACON host.

ICFA arranges the meeting of representatives from ferroalloy 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 INFACON 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), Kazakhstan (CMI – Chemistry-Metallurgy Institute), AIST (North America), Norway (FFF), Russian Academy of Science (Russia), FAPA (South Africa), The Ukraine (Ukrainian Ferroalloys and other Elektrometallurgy Products Manufactures Association (UkrFA)), and invited attendee Turkey.

INFACON has been held in the following countries and locations:

- Brazil (1) in 1986, in Rio de Janeiro (ABRAFE)
- Canada (1) in 2001, in QuébecCity (the TFA)
- China (1) in 1998, in Beijing (CSM)
- Finland (1) in 2010, in Helsinki (Outotec)
- India (1) in 2007, in New Delhi (IFAPA)
- Japan (1) in 1983, in Tokyo (JFA)
- Kazakhstan (1) in 2013, in Almaty (CMI and National Center on Processing of Complex Materials)
- Norway (1) in 1995, in Trondheim (SINTEF)
- South Africa (3) in 1974, 1992, and 2004, in Johannesburg (1), Cape Town (2) (FAPA, Mintek, and the SAIMM)
- Switzerland (1) in 1980, in Lausanne (IFPEO – now Euroalliages)
- USA (1) in 1989, in New Orleans (TFA).

INFACON contributes to the exchange of research and development information by publishing refereed papers covering the major and minor ferroalloys. Participants include universities and technical colleges, research and development organizations, suppliers of services, engineering, and equipment, and in particular the ferroalloy 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 counties. South Africa (59), Norway (40), Russia (35), Kazakhstan (32), Finland, Germany, and the Ukraine had more than 20 delegates each. The growth in participation from Russian speaking counties is noteworthy. There are 120 papers in the two volumes of the INFACON XIII Proceedings. Oral presentations and posters were included in the technical programme. These included a number of new and novel concepts as well as improvements achieved in the overall ferroalloy industry. Professor Tolymbekov, Sergey Kim, and the INFACON XIII team are to be congratulated on an excellent 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, probably in June in 2015 instead of in 2016 as originally planned. This is as a result of ICFA's recent decision to hold INFACON every two instead of three years in response to the level of interest in hosting the Congress and the numbers of manuscripts received. The website for INFACON IV is accessible from http://www.pyrometallurgy.co.za/Infacon.

UkrFA has extensive experience in organizing a number of successful local ferroalloy 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 2015.

UkrFA has support from the Ukrainian Government (including the Ministry of Industrial Policy) as well as from the National Academy of Science of the Ukraine.

Members of UkrFA will also provide support for the post-Congress technical tours to their ferroalloy plants in the Ukraine.

The Ukraine is mostly focused on the production of the manganese alloys. However, consideration will be given to the possibility of expanding the technical tours to include nearby Turkish chrome producers.

ICFA encourages prospective participants in INFACON XIV to use this excellent opportunity to get to know the Ukraine, its people and nature, and to experience its traditions, cuisine, and hospitality. The lead time is one year less than for previous INFACONs, 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 have changed or may change.

The SAIMM is the custodian of the INFACON Bursary Fund that contributes primarily to postgraduate research and development in the field of ferroalloys. The Fund was established from the surplus generated from the previous INFACON X Congress in South Africa. Contact the SAIMM directly for further details: http://www.saimm.co.za.

7.3 SAMREC/SAMVAL

E. Swindell, *Chairman*
G.L. Smith, *Vice Chairman*

A. Bals
D.H.L. Booysens
F. Camisani-Calsolari
A. Clay
K. Davies
A. de Bruyn
J.R. Dixon
S. Foya
S. Grobler
D. Kruger
K. Lomberg
C.D.A. Loxton
A. Macfarlane
O. Moumakwa
D. van Niekerk
J. van Zyl Visser

During the period in question the SSC met regularly. The principle activities of the SSC during this period were in respect of the following.

1. SAMREC Working Group

During the period in question the SAMREC Working Group met on a monthly basis to discuss the issues facing the SAMREC Code. A decision was made to revise the Code with the intention of reissuing it in 2013. This has turned out to be a very ambitious goal, which is more likely to be achieved in late 2014. The process included opportunities for the minerals community to add aspects to be reviewed to the list already being dealt with. Only one response was received. It is anticipated that once the Code has been revised, a further round of consultation will be required.

Attempts are being made to engage with some of the stakeholders, notably the Department of Mineral Resources (DMR). It is the Group's intention to visit as 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 Working Group has addressed a number of aspects that have been brought to its attention. These form the basis for going forward and revisiting the Code:

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 (new)
viii. The consideration of tenure and other legal aspects (new)

The work has included continued engagement with the Johannesburg Securities Exchange (JSE). An aspect that the JSE is looking for is a list of persons and their competences. Very little progress has been made towards provide this list, as no organization has the capacity to compile the list and keep it current. It is anticipated that the JSE will pursue providing such a list for persons interested in being Competent Persons for work relating to listed or listing companies.

The Chairman of the Working Group represented SAMREC and the SSC at the CRISRCO meeting in London in October 2012. Feedback was provided to the SSC and SAMREC. It is important that the SAMREC Working Group is represented on CRISCRO by an active member.

During the year revisions to the JORC and PERC Codes were issued. These revisions will be considered as part of the rewriting of the SAMREC Code.

2. SAMVAL Working Group

The SAMVAL Working Group has been busy with a review and update of the SAMVAL Code. This is as a result of certain deficiencies identified in the current Code, and also a need to align and harmonize 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. Each of these has been the subject of intense sub-group debate, culminating in position papers which are currently being submitted for ratification through the SSC.

These have identified a considerably wider stakeholder base, and new stakeholders are now being drawn into the consultative process. It is anticipated that the new draft will be complete before the end of 2013, for launch in 2014.

In addition to this, 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). This work is progressing well, and a draft Guidance Note is currently out among these groups for comment, before a wider consultative/exposure process. It is hoped that this Guidance Note will be complete by the end of 2013, and be the first of its kind.

This work has been done in parallel with the SAMVAL review. The result is that the SAMVAL review is informed by the International process, and vice versa, giving the SSC position a strong hand in the harmonization process.

3. Oil and Gas Working Group

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 for Distribution is complete ready for final SSC approval. This will be followed by a general industry distribution and commentary prior to ratification in 2013-14.

ROPO–All ROPO matters have been attended to.

Government liason-The SSC met with the DMR Mineral Policy group and informed them of the activities under way in an attempt to encourage the DMR to become more involved in the processes.

8.1 Finance

J.L. Porter, Honorary Treasurer

When setting out our plan and budget for the 2012 to 2013 financial year, the incoming President and I held a meeting with our office staff where we outlined what we thought would be some of the challenges in the year ahead. Up front and centre at the time was the need for financial discipline due to the challenging outlook for the southern African mining sector at the time. This translated to securing our revenue target and managing a firm cost budget relative to inflation.

It is pleasing to report that your Institute has met and exceeded its financial objectives for the year under review.

- Revenue grew 15.5% year-on-year
- Total costs reduced by 8.4% year-on-year
- Total reserves grew 18.6% year-on-year

While this level of performance has exceeded the record year of 2010/11, you will recall that the Institute made an operating loss of R2.094m in the 2011/12 financial year. The apparent erratic swings of the financial performance of the Institute is determined by two fundamentals:

1. *Conferences*: Some years have larger conferences e.g. the very successful bi-annual Platinum Conference. This is entirely under our control and the long-term conference planning should endeavour to manage this more effectively.
2. *Investment*: All of our AFC investments are deemed to be cash in terms of the financial report. We are blessed to have excellent people managing our portfolio. However, your Council is of the view that the Institute is now over-exposed to the level of our cash reserves. More on this later.

To get to the numbers:
Key metrics for the year relative to 2012 are as follows:

Heading	**2013**	**2012**	**%**
Assets	R32.3m	R26.7	21.0
Equity	R31.1m	R25.3m	22.9
Liabilities	R1.2m	R1.4m	-13.5
Revenue	R18.2m	R15.8m	15.5
Cost of Sales	R11.6m	R13.2m	-12.1
Operating Exp	R6.56m	R6.64m	-1.2
Operating Surplus	**R2.5m**	**- R2.1m**	
Total Surplus	**R5.6m**	**R0.05m**	

What is obvious when looking at the numbers above is that your Institute has developed substance, stability, and established a solid base from which to pursue the next level of growth. It is professionally run by a competent team and well able to execute the strategies set by Council.

A closer look at the results reveal the following:

- *Assets:* The impressive increase of R5.6m was driven predominantly by the investment portfolio (R4.3m), cash on hand (R1.9m) and control of debtors and other receivables (-R0.6m). Figure 1 shows that our asset base has virtually doubled over the past six years, while our liabilities remain consistently low. This is a picture of stability and our foundation for future growth plans
- *Revenue:* The larger conferences assisted performance during the year (R12.3m) and the conferencing team once again performed exceptionally well. However, special mention has to be made this year of the advertising (R2.2m) and publishing portfolios, which not only exceeded their budget but also achieved record levels of income. The continued growth of our membership also contributed R2.8m. Figure 2 indicates significant step changes in the level of performance of your Institute. However, owing to the influence of large conferences, indications are that next year will see a drop in overall revenue to levels similar to 2012. Note should be taken of non-recurring extraordinary income of R350 000
- *Cost of sales:* During the year a formal methodology was approved for the calculation of fair administration costs to be applied to joint conferences organized by the SAIMM. This led to some offset of CoS (R234 000). In addition, a review of conference venue rates led to substantial year-on-year savings in the hire of venues. Thus, better controls resulted in a drop of 12.1% year-on-year, excluding the effects of inflation
- *Operating expenses:* These were once again well controlled within budget and 1.2% below last year's actual, also well below inflation. Extraordinary expenses included:
  - R357 000 AGM platinum medals
  - R225 000 in donations
  - R151 000 OneMine.Org
  - R90 000 Server upgrade
  - R28 000 office renovations

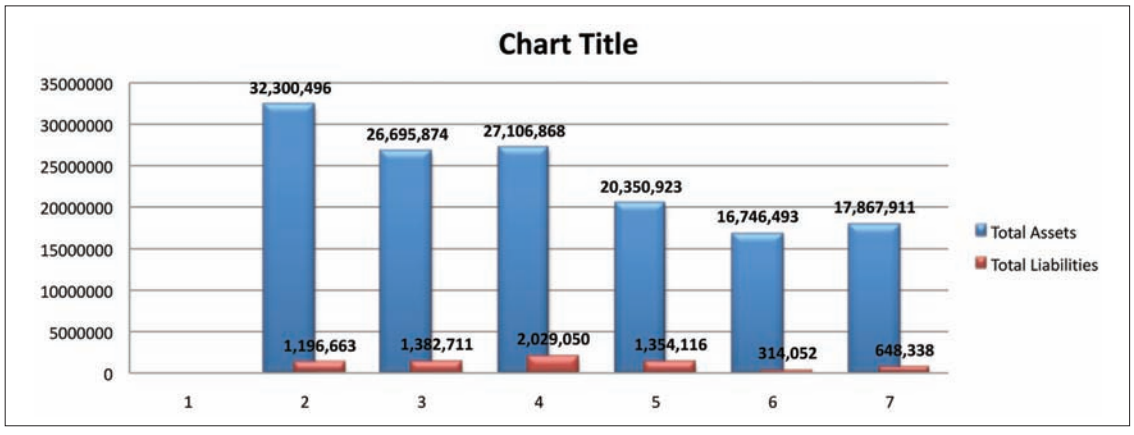


Figure 1—Assets and liabilities (R'1000)

Figure 3 reflects a similar pattern to Figure 2 indicating the strong relationship between cost of sales and conferencing income. Operating costs (OPEX) are well managed

- *Debtors:* At year end our debtor's position stood at some 4% - a new historical record low.

The total surplus for the year stands at R5.6m, up from R50 000 in the previous year. As at the time of writing most of these funds have been applied to our AFC investment fund while we retain R76500 in current bank accounts and R3.98m in short-term call accounts.

AFC Investment Portfolio

The investment portfolio had less of a roller-coaster ride this financial year than in the preceding three years. The portfolio opened in July 2012 at R21.3m and closed in June 2013 at R26.4m; an overall gain of R5.1m. This includes:

- Fair value adjustment: R2.44m
- Dividends: R0.56m
- Gain from sale of shares: R1.26m
- Transfer SAIMM to AFC: R1.00m

The asset allocation is:

- Equities 87.76%
- Cash 12.24%

It has been the stated objective and mandate of Council for the last three years to build its investments and cash reserves to the point where the SAIMM has a very secure and stable future. This target was originally set at R20m (Approx R24m in today's money). In addition, it has now become part of the budget process that some of the annual cash dividends from our investments are used for 'Special Projects' as directed by the President. From the perspective of Treasurer, it is my view that the Institute is faced with a pleasant challenge – how to change gear from 'piecemeal' or incremental projects to substantial activities that bolster our strategic initiatives for the long-term growth of the Institute? Furthermore, the Institute cannot continue to accumulate cash and run the substantial risk of having to take an impairment due to a downturn in the value of our assets. Following lengthy discussion within Office Bearers and subject to ratification by Council, after appropriate research, our sustainable future needs to be underpinned by applying our cash resources in two ways:

- Spreading our investment risk by considering fixed assets as part of the portfolio
- Developing our permanent staff complement to better address growing demands for:
  - A significant increase in membership from our Regional Branches
  - Managing the complexity of ensuring the sustainability of our Branch strategy
  - Technical representation of the Institute at meetings of global/international organizations
  - Focused attention on our growing youth membership

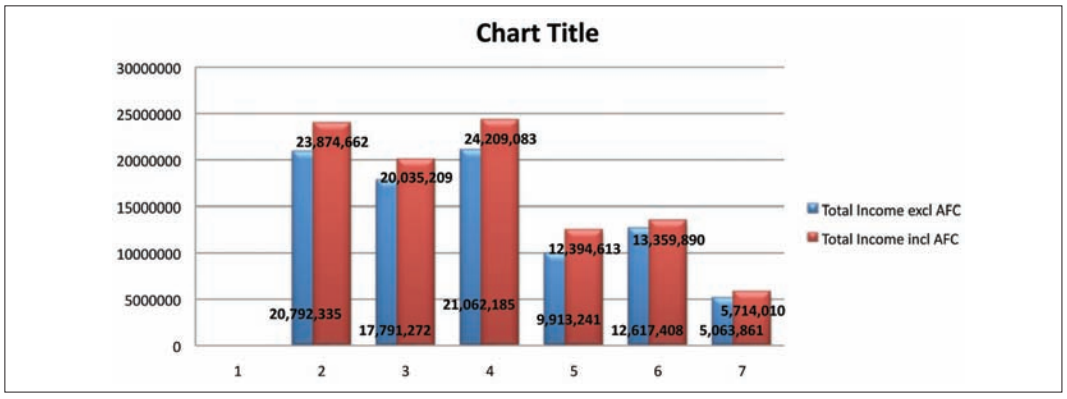


Figure 2—Total revenue (R'1000)

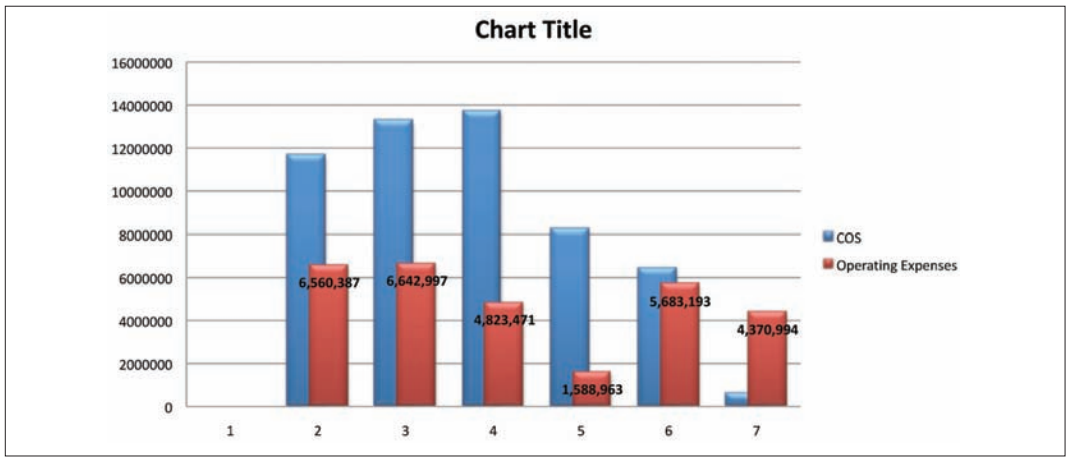


Figure 3—CoS vs operating costs (R'1000)

Annual report

Thank you to Alf Bettoni, our accountant, Robert Kitching, our auditor, Julie Dixon, our previous Manager and Sam Moolla who came in just in time for the budget, Dee Campouroglou (AFC Account Manager), and all of the wonderful SAIMM staff for assisting me as your Honorary Treasurer.

New Members

Members

B.P. Abilleira, A.A. Adeleke, S.W. Allen, R.J. Amata, B. Asbeck, O. Atlhopheng, N.C. Barnard, S.P. Bekker, C.P. Bemont, E. Bergh, A. Broekhuizen, A.W. Breed, R.M. Bvungidzire, C. Byakuku, D.J. Caizergues, E.C. Ceronio, P.M. Chamboko, K. Charles, K. Chatterjee, D. Chigerwe, F. Chimedza, J.Z. Chipunza, O. Chiyanawa, L.F. Contreras, J.A. Cotton, C.J. Cusack, A.A. De Beer, J.M. De Bruin, N. De Mesquita, V.K. Disashi, J. Dixon, K.L. Dladla, P. Dokie, I.T. Doku, E.M. Donda, Z.H. Duma, R. Du Plessis, J. du Toit – Styl, O.S. Fatoba, M.J. Gagiano, G.P. Geldenhuys, M. Golestanifar, L.T.J. Gowera, S. Gumbochuma, O. Gwede, C. Howard, R.H. Illingworth, D.G. Ireland, G.M. Jooste, J.M. Jansen van Rensburg, A. Kaserera, K. Kasongo, E.A. Kaswaya, G. Katsere, D. Kennedy, N. Khumalo, M.K. Kipampe, R. Kuchocha, B. Leonardo, P. Le Roux, P.R. Loudon, L. Lumbwe Wa Lumbwe, R. Mabika, C. Madungwe, M.E. Makhatha, S. Mandidi, M.C. Manyanhaire, S. Mapengo, M.A. Marcus, X. Maseko, M. Masvanganye, M. Matemba, H.M.N. Matengu, L.J. McMillan, C.L. Moffat, S.F. Mokeoena, S.A. Mokubung, M.A. Mokwena, C.M. Molefe, C.M. Molefe, L.C. Moller, S.M. Molokwane, S.M. Molokwane, J.J.M. Muaka, C.H. Mugova, C.H. Mugova, F.C. Mujuru, A.D. Mushonhiwa, F. Mutara, D.K. Muteba, S. Nagel, A. Naidoo, N.M. Namate, F.M. Nemaname, S.P. Ngcangca, L.B. Ngqulunga, W. Nheta, O. Nyamana, G. Nzoma, E.J. Oosthuizen, J.B. Oosthuizen, M. Phiri, R.J. Pieterse, V.M. Pillay, P.K. Pinisetti, A. Poppmeier, M. Prior, R.R. Raju, R. Rajwani, M.P. Ratshefola, J.A. Richards, M.K. Robert, N.N. Robert, J. Roussel, D. Sambwa, T.P. Shabangu, D.K. Shah, M. Shamu, P.R. Shava, T. Shekede, S. Shoko, A. Shumba, M. Sibanda, T. Sibanda, S. Simango, S. Siwela, L.M. Soni, P. Takaedza, K. Tau, W.A.M. Te Riele, I. Tetteh, T.M.O. Timothy, L.F. Torres Perea, K.D. Tsibanda, P. Tsibanda, L.E. Tukakgomo, E. Uludag, W.L. Van Aarde, J.W. Van der Merwe, L.B. Van Heerden, J.B. Vangu, J.J.L. Vardy, M. Verma, S. Viljoen, S.K.G. Vuppuluri, J. Vuta, A. Weissenberger, C.J. Whitford, A.J.T. Wilson, C. Zermatten, W. Zimba, T. Zvarivadza,.

Associates

N.J. Andrew, I. Ayodeji, M.J. Bauwens, M.A. Baxter, J. Beneke, R.N. Bertoni, J.J. Bezuidenhout, X.I. Bhuda, L.N.S. Boddupalli, K. Boekhoud, N. Buthelezi, E.N. Calitz, A. Campher, J.L. Casper, T.M. Chalwe, A.T. Chilli, F. Chimdeza, D. Chinwa, G. Chipfupi, N. Christelle, C. Coetzee, C.F.Z. Coetzee, K. Daniel, T. Didier, A. Du Preez, A. du Toit, R.H. Ehlers, E. Els, B.J. Fako, G.E. Farmer, D.E. Fiawoyife, D.J. Fourie, T.B. Franck, T.M. Gamnazi, R. Gomes, L.M. Guil, S. Gyaparsad, T.L. Hoshela, T.Z Hwingwiri, J.J. Idabu, M.M. Innocent, J. Janse van Vuuren, V. Jitov, J. Joseph, T.S. Kagogo, R. Kamba, D. Kannie, J. Kawala, K. Kekana, D.N. Komichi, A. Koning, L.E. Koto, C.S. Kucukkaragoz, T. Kufahakyrambwi, F. Kundanai, A.O. Kutika, K. Lerumo, R.I. Lingley, K. Louw, R.L.J. Mabaya, J.A. Mac Diavmid, T. Macha, S. McMahon, K.K. Magwaza, N. Mahlabe, M.M. Makhofane, E. Makola, D. Mande, M.G. Mangoma, M. Mapfuwa, M. Mapurisa, E. Maringe, M.M. Maruli, T.V. Masipa, C. Edmore Matanda, K. Matshika, S. Mazara, P.W. Mbele, E. Medupe, D.E. Minnaar, M.R. Modibela, T. Mohapi, S.M. Mokete, S. Moodley, Z. Morkel, C.L. Morrison, J.T. Mpinyuri, L.N. Mthwana, T. Mudau, H. Mudota, B.M. Mumba, M. Munyaka, T.C. Mupini, V. Murakwani, T.T. Musikavanhu, P. Mwamba, C.W. Mwapwele, Z.G. Mzobe, G. Nagel, N. Nala, H.T.P. Nashenda, C. Ncube, P.M. Ndou, H.M. Nel, K. Nestor, L. Netshipale, E. Ng, D. Ngkiarati, M.T. Ngonyama, W.G. Ngoro, S. Njengele, S. Nkosi, Z.M. Ntombela, M. Nyoka, T.P. Oladele, S.J. Osakuade, P.J. Petit, J.T. Phasha, Q.C. Phillips, H.B. Prinsloo, H.J. Prinsloo, P. Qeqe, M.J.P. Quiala, M.M. Rabapane, C. Radzivhoni, T.D. Ragolane, B. Ranjan, T.C. Raphiri, M.M. Reyneke, K.K. Rhonny, C.T. Rikhotso, T.S. Roestoff, A.E. Rowland, S.L. Ruraka, G.T. Rushwaya, F. Saloojee, J. Saunders, J.A. Schlegel, C.L. Shemkhande, C. Shereni, L. Shoke, I.N. Sibande, W.D. Silunde, I. Simataa, L.E. Sithole, S.S. Siyila, C. Smith, J.M. Snyman, N.C. Steenkamp, N.E. Tashayawedu, C.A. Taylor, B. Tshuma, D.T. Tsweleng, U.N. Uttams, H.J. Van der Merwe, M.S. Valio, Q. van Rooyen, T. Van Zyl, B. Veldsman.

Students

T.M. Abisai, M.K. Angulah, T.I. Baloyi, T.J. Baloyi, J.N. Bopape, I. Breedt, L. BusiswaP.J. Chauke, E. Chiyangwa, O.K. Debete, E. Develo, J.L. Dikgale, P.K. Dipela, J.E. Douwie, L.M. Eggl, M.P. Eliakim, U.K. Erol, N. Fanuel, L.D. Gaingos, D.M. Gama, J. Gelane, C. Gloster, S.K. Gumede, N.L. Gwebani, G.O. Haipi, S.T. Haludilu, M.V. Hianja, L. Itumeleng Goodwill, M. Jaca, T.S. Kagogo, R. Kalumbu, O.D. Kamyane, P.T. Kapitango, K. Kekana, K.L. Khalushi, M. Khoromizi, L.J. Kolberg, F. Kwangari, L.A. Langton, M.S. Lebitso, J. Ledwaba, C. Legote, M.L. Lepule, F.O. Letlape, M.E. Letsie, T.M. Letsoalo, C.M. Maake, R. Maapea, M.J. Maapoga, A. Maboeë, T.M. Madonsela, R.G. Madzivhe, K.J. Mafate, B.D. Mafuyeka, S.R. Magege, M.J. Mahase, N.T. Mahlangu, I.G. Mahumapelo, N. Makhado, X.S.N. Makae, M.A. Makhura, T.M.T. Malisa, M.C. Malotane, T. Malane, R.W. Maluleke, M.P. Mametja, S.F. Manjengwa, L. Mantirisi, L. Mapaila, M. Mapotsane, L Marape, W. Maredi, T.G. Marobane, M.P. Maruma, W.L. Mashaba, F.L. Mashigo, M.M. Mashilo, M. Mathalanga, N.N. Mathenjwa, T.T. Mathivha, C.A. Mathobela, T.M. Mathode, M.V. Matlapeng, M. Matlou, M.E. Matsebula, B.T. Matsomane, T.T. Mavimbela, M.I. Mawasha, F.T. Mdlongwa, F.T. Mdlongwa, S.K. Meruthanyane, S. Mkhabela, M. Mphahlele, D. Mo, I.O. Moeng, V.N. Mogakane, T.A. Mohoto, B. Moiloa, M. Mokgashi, S. Molekwa, P.J. Molise, M.K. Molokomme, B.C. Mongale, M. Montgomery, K. Mosai, T.F. Moseamedi, L.R. Motaumg, J. Motha, O.G. Mothogelwa, I.P. Motsoeneng, D.E. Mowes, M.J. Mudekereza, T.I. Mulambo, C.W. Mulaudzi, G.H. Mutombo, D.E.L. Mphatlele, O.P. Mwakutange, A.K. Ndjendja, M.V. Nedombeloni, P. Neluheni, T. Nesengani, N. Netshivhazwaulu, D.N. Nghimwenavali, P.L. Ngwenyama, P.M. Nkgomobang, C.A. Nkomo, N.P.F. Nkosi, K.O. Nkwana, E.N. Nsiengani, K. Ntsoyana, Y.Z. Ntshingila, T.P. Ntleru, R.W. Ntwampe, N. Nziyana, O. Overdipe, I. Phadi, M.M. Phambane, L.T. Phasha, G.D. Phateng, P.H. Rambasa, P.M. Ranwedzi, T.C. Raphiri, N.Y. Rens, A.T. Salom, T.C. Sandani, L. Schoeman, T.K. Seboka, T.L. Sehlabela, B.A. Sehume, K. Sehume, K.L. Selala, T. Seroke, B.S. Shabungu, F. Shepherd, G.M. Shilote, N. Shingombwe, V.N. Shinime, N.P. Shipandeni, L.E. Siko, J.T. Smopno,

M.M. Sinchembe, R.J. Tala, F. Thamsanqa, M.P. Thwala, N. Thwala, U. Tjaimi, T. Toozo, T.H. Tselane, N. Tshibubudze, R.J. Tshivule, L. Tukula, G.T. Uutoni, F.W. Viljoen.

Company Affiliates

Lull Storm Trading (Pty) Ltd T/A Wekeba Engineering.

Resignations

Fellows

M. Davis, G.C. Edwards, M.H. South.

Honorary Fellows

P.W. Botha.

Retired Fellows

C.R. Netscher, D.J. Theron.

Members

P.S. Aylward, R. Ebrahim-Trollope, P.W. Jordaan, J.M. Sabio, H.C. van Zyl, S.M. Wenhold.

Retired Members

B. Du Rand, D.J. Hugo.

Associates

L. Andrews, C.M. Armstrong, C.R. Ayers, E. Bauernschmitt, K.I. Björk, O.H. Bowers, T. Carter, J. C Du Toit, H.M. Ebrahim, G.C. Edwards, S. Engelbrecht, R. Gunter, Z. Halifa, R. Hattingh, Y. Janse van Rensburg, J.P. Jansen Van Vuuren, M.W. Kruger, G.J. Lee, N.D. Lombard, J. Mahlangu, M. Mawabeni, L. Munsamy, S. Nxele, P.J. Petit, D.H. Pullen, M. Ratshoshi, M.A. Ratshoshi, P. Refsnider, H. Schade, T. Singh, L.C. Smith, W.C. Southey, E. Van Heerden, M. van Rooyen, R.A. van Schalkwyk, W. Whittaker, H. Williams.

Students

F. De Vos, R.P. Letsoalo.

Company Affiliates

Deton Engineering (Pty) Ltd, SA Institution of Civil Engineering.

Members transferred to Higher Grade

Transfer from Member to Fellow

G. Bezuidenhout, J. Dixon, G.D. Farr, S.A. Gaihai, C.I. Griffith, M.J. Hill, W.C. Joughin, R.G. Leighton, S. Mabenge, M.McWha, D.D. Munro, E.J. Sellers, B.N. Scott, S.D. Thomson, M.M. Valenta, K.J.L. van Wouw, E. Wingate.

Transfer from Associate to Member

L. Andrew, S.O. Bada, T.E. Balintulo, K.D. Balt, A.M. Bantshi, E. H. Bekker, N. Benjamin, L.N.S. Boddupalli, M.F. Breed, K.T. Broekman, G.V. Brooker, J.R. Bunt, O.J. Buys, D. Claassen, G. Crawley, O. Demir, D. Dempers, S.H. Du Plooy, M.W. Erwee, M.W.D. Esterhuysen, J.C. Esterhyse, L. Eybers, D.A. Gallo, N.A. Groenewald, R.L. Goosen, M.L. Harris, J. Heystek, M.J. Hill, R.D. Hull, B.E. Khumalo, H. Kotze, J.T.F. Le Roux, S. Lungu, T. Madau, A.R. Maier, J. Malan, N.N. Malila, L.S. Maphaha, M.T. Maponopono, J.D. Mashudu, B.Z. Mbao, J.N. Mbhele, S.D. McCullough, N.J. McEwan,. N.J. McGeorge, E.M Mc Lintock, P. Mitchell, J. Morgan, W. Morell, M.M. Mtetwa, T.A. Muhlare, B. Mulcahy, N.V. Mwamba, B. Ndebele, X. Ndlovu, F. Ngidi, S. Nupen, L.T. Nyengerai, D.P. Oberholzer, O.M. Ojo, P.T. Pabwe, W.H. Pretorius, J. Rajan, S.G. Rymer, A.F. Saayman, H.A. Sandenbergh, J. Saunders, G. Scheepers, R.K. Schmid, J.L. Schoeman, M. Shoniwa, J.D. Singleton, B.J. Souter, J.J. Taute, M. Tacke, I.L. Thomson, E. Thorne, S.S. Tose, C.A. Van Wyk, D.J. van Wyk, D.S. van der Merwe, C.I. van Griffith, Z.J. van Zyl, M.K.G. Vermaak, J.P. Viljoen, R. Visser, C.F. Vos, B.R. Williams, K. Yathavan, N. Zwane.

Transfer from Associate to Student

J.N. Van der Linde.

Transfer from Student to Associate

P.A. Aluvilu, R. Chiume, S.R. Cullum, A. de Pretto, S.B. Dlungwana, N.D. Esterhuizen, Y.F. Ewembe, R. Gerber, F. Joel, J. Jonck, F.J. Joubert, A. Kasozi, B.T. Kelepa, A.Y. Kipayko, E.M. Lekota, S.S. Lephuthing, P.R. Lindsay, N. Makhado, S. Makhanya, Y. Maluleke, G.M. Mapele, J.J. Mare', Z. Maruma, N.D. Masehla, L. Masuba, K.P. Masuku, M.T. Matjeke, S. Matoko, B.M. Mfadala, I.S. Mnisi, K.O. Mogorosi, M.D. Moropeng, I.M. Motubatse, C.B. Musimhi, L. Ndwambi, T. Neduvhuledza, H.R. Neluheni, T. Nkhumeleni, P. Noah, T. Nyazama, C. Nyoni, B. Obadele, M. Opperman, T.J. Rakgole, R.A.N. Ramalepe, T. Ratau, S. Rawasha, A.D. Reddy, A.N. Redibone, M.S. Seabela, I.N. Serepa, E. Shikongo, P.R. Shiri, K.P. Simba, V.N. Tawane, D.K. Tesh, C.M. Thapelo, P.Q. Tjatja, D.J. Van Castricum, M. Yellishetty.

Members who retired

Fellows

D.H. Diering, K. Jones, J.D. Pollard, Y.K. Rao.

Members

C.S. Assad, J.C. Cloete, P.L. Odell.

Retired Members

J.P. Botha, Z.R. Charlton, S.J. Patchet.

Deceased

Fellows

C.A. Preece, G.J. Robbertze

Retired Fellows

W.P. Furusa, T.A. Newman, V.O. Steed.

Members

W.J. Visser, R.J. West.

Retired Members

B.C. Alberts, E. Braver, H.C. Iversen, G.C. Krafft.

Associates

H.J. Prinsloo.

Members who were reinstated

Reinstated as a Member

P.A. Greyling, V.V. Mashego, P.B. McCreadie, P.S. Mokgokong, J. Mutsengi, I. Nyenga, M. Rwekaza, N.A. Sikwa, K.J.L. van Wouw.

Reinstated as Associates

L. Andrews, R.H. Connan, S.S. Debedu, K. Mapasa, S.M. Mazubane, T.D. Meintjes, J. Mugala, R.S. Ngaka, M.J. Nkoana, E. Thorne, D. van Deventer,

Reinstated as a Fellow

R.E. Phillips. ◆