

Annual report

FOR THE YEAR ENDED 30TH JUNE 2007

Council for 2006/2007

President

R.P.H. Willis

President-elect

R.G.B. Pickering

Vice-presidents

Senior

A.M. Garbers-Craig

Junior

J.C. Ngoma

Immediate Past-President

W.H. van Niekerk

Honorary Treasurer

J.A. Cruise

Members of Council

D.C. Andersen ####

N.A. Barcza

J. Barton ##

R.D. Beck

N. Blackham ***

A.N. Brown

A.M. Clegg*

L.A. Cramer

J.A. Cruise

J.R. Dixon

M. Dworzanowski*

F.M.G. Egerton

P.H. Ferreira

A.M. Garbers-Craig

J.M.A. Geldenhuis

M. Handley###

H.E. James

R.T. Jones

P.J. Knottenbelt**

G.V.R. Landman

A.S. Macfarlane

N.C. Machingawuta

I. Matunhire

R.P. Mohring

J. Mothomogolo

A.F. Mulaba-Bafubiandi **

S. Ndlovu

J.C. Ngoma

R.G.B. Pickering

J.L. Porter

J.H. Potgieter

M.H. Rakale*

S.J. Ramokgopa

M.K.C Roberts

M.H. Rogers

D.A.J. Ross-Watt

E.U.H. Sachse

S. Simukanga

D.J. Smith

G.L. Smith

T.R. Stacey

C.A.F. Sweet

M.M. Valenta ***

T. van den Berg ****

J.N. van der Merwe

P. van der Plas

D.J. van Niekerk

W.H. van Niekerk

H.G. Waldeck

D. Walters #####

I.J. Walton

R.P.H. Willis

* Co-opted Members

** Representing non corporate members on Council

*** Observer MMSA

**** Observer AMMSA

***** Observer SACMA

Observer SACPS

Observer GSSA

Observer SANIRE

Observer IMSSA

Observer MVSSA

Branch Chairmen

Bushveld Branch

Johannesburg Branch

Namibian Branch

Pretoria Branch

Western Cape Branch

Zambia Branch

Zululand Branch

C.A.F. Sweet

E.U.H. Sachse

D.J. Smith

I. Matunhire

P.J. van der Plas

S. Simukanga

I.J. Walton

Past-Presidents serving on Council

N.A. Barcza

R.D. Beck

A.N. Brown

L.A. Cramer

J.R. Dixon

F.M.G. Egerton

H.E. James

R.P. Mohring

S.J. Ramokgopa

M.H. Rogers

D.A.J. Ross-Watt

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: R.P.H. Willis

Key Performance Areas

In the interests of individual members, the SAIMM

- ▶ *undertakes to assess 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*
- ▶ *arranges conferences, colloquia, schools and seminars where technical information on mining, metallurgical and allied issues is disseminated. Both members and the general industry benefit from these interchanges*

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- ▶ *undertakes to prepare and publish career guidance brochures, bursary handbooks, audiovisual and video programmes, optional school curricula material, etc., and participates in activities to stimulate scholars and students to select careers in the minerals and metals sector of the South African economy*
- ▶ *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*
- ▶ *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

R.P.H. Willis, Chairman

N.A. Barcza	M.H. Rogers
R.D. Beck	S.J. Ramokgopa
A.N. Brown	D.A.J. Ross-Watt
L.A. Cramer	G.L. Smith
J.A. Cruise	T.R. Stacey
J.R. Dixon	O.K.H. Steffen
F.M.G. Egerton	J.N. van der Merwe
H.E. James	D.J. van Niekerk
N.C. Machingawuta	W.H. van Niekerk
R.P. Mohring	H.G. Waldeck
R.G.B. Pickering	

Membership

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

Corporate members are classified as follows

HONORARY LIFE FELLOW: must have rendered services to the Institute, science, or industry.

FELLOW: (Minimum age 35 years.) A person eligible for election or transfer into the class of Fellow shall be any minerals professional employed for a minimum of five years in a senior technical position of responsibility provided that the candidate has had ten years' combined technical tertiary education and appropriate experience, or experience only.

MEMBER: (Minimum age 25 years.) A person eligible for election or transfer into the class of Member shall be employed for a minimum of two years in a technical position of responsibility provided that the candidate has had five years' combined technical tertiary education and appropriate experience, or experience only.

Non-corporate members are classified as follows

COMPANY AFFILIATE: companies associated with mining or metallurgical industries are eligible for membership.

HONORARY FELLOW: persons of distinction in public service, science, or the arts.

ASSOCIATE: a person eligible for election or transfer into the class of Associate shall be any person with a recognized industry qualification, within the disciplines of mining, extractive metallurgy, or metals technology.

STUDENT: a full-time student or postgraduate student at a university, technikon, or any other educational institution approved by Council, who is being trained to occupy a technical position in the mining or metallurgical industry or associated organizations.

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.

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Table 1

Summary of new applications and membership movements for 2006/2007 and comparison of membership grades and total membership 2006/2007

Membership grade	Members July 2006	New members	Transfers in	Transfers out	Reinstatements	Resignations	Deceased	Struck-off	Net gain/(loss)	Members June 2007
Honorary Life Fellow	42	0	0	0	0	0	4	0	-4	38
Honorary Fellow	4	0	0	0	0	0	0	0	0	4
Life Fellow	4	0	0	0	0	0	2	0	-2	12
Fellow	394	10	13	12	3	6	1	8	-1	393
Retired Fellow	145	0	12	0	0	4	2	1	5	150
Life Member	1	0	0	0	0	0	0	0	0	1
Member	671	126	11	14	6	9	1	52	67	738
Retired Member	97	0	5	0	0	1	1	1	2	93
Associate	674	104	38	15	8	7	1	67	60	734
Retired Associate	14	0	1	0	0	0	0	1	0	14
Student	593	218	0	39	0	1	0	0	178	771
Company Affiliate	159	4	0	0	0	8	0	0	-4	155
Total	2802	462	80	80	17	36	12	130	301	3103

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

G.V.R. Landman, Chairman

M. Adams	L. Petrick
S. Carthy	M.K.C. Roberts
P.J. Knottenbelt	B. Tait
A.F. Mulaba-Bafubiandi	P.J. van der Plas

The purpose of the career guidance committee can be summarized as follows:

- Develop and retain talent for the mining industry
- Create a mentoring programme that is effective and easy to execute
- Provide education material to establish a positive image of the mining industry among scholars
- Attract good talent for the future of the mining industry and its engineering disciplines.

To fulfil the purpose of the committee, the following two areas were focused on during 2006/2007:

Mentoring

Mentor and mentee relationships have been established. In order to assist the programme, professional input was sourced. This will lead to a symposium, that will equip mentors with the skills required.

Education

The ability to reach Southern African scholars with information about mining and metallurgy careers has been created by developing the SAIMM website. The website was populated with information about the mining industry, both for awareness and for career consideration. Fields of study, universities, possible bursaries and other relevant information are now available.

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Educational posters, depicting career activities within mining and metallurgy have been developed. Sponsorship from industry has been obtained to print and disseminate the poster. The poster will be sent to 10 000 schools in South Africa by August 2007.

1.3 Promotion of the SAIMM

Portfolio holder: R.P.H. Willis

Since its inception in 1894, the Institute is still going strong 113 years later. Membership currently stands at about 3 200.

The primary objective of the Institute is to attend to the needs of all its members. Their needs are ever changing due to the changing face of the metals and minerals industry, increasing diversity among members and the increasing shortage of trained human resources. The Institute responded to these challenges through the development and execution of a strategic plan in 2006. This plan was carried through into 2007 with the main emphasis on completing many of the initiatives started in previous years. The main thrusts of the strategic plan are discussed below.

- ▶ First and foremost a comprehensive survey was conducted to determine the needs of members and members-to-be. The results of the survey are used to determine the strategic direction of the SAIMM over the next few years. Main findings of this survey include:
 - The SAIMM should become more visible, by developing a comprehensive marketing strategy.
 - The SAIMM Mentoring Programme should be expanded.
 - The benefits of belonging to the SAIMM should be enhanced, and emphasized, especially to retain student members.
 - Information on the SAIMM should be made more readily available and accessible.
- ▶ An important pillar of the strategy is to promote the SAIMM. One of the drives here is to establish branches in neighbouring countries. In 2005 a branch was established in Zambia. New branches in Namibia and Botswana were launched this year and work has progressed well in establishing a branch in Zimbabwe. Other initiatives to promote the Institute include a new revamped website, a promotional article in *Mining Weekly*, deliberate communication with industry stakeholders such as the Chamber of Mines, heads of companies, etc., and improved communication with members. A promotional/marketing plan is being drafted, taking account of the survey results. Particular thanks must go to the Chamber of Mines for allowing the Institute to continue to use their premises.
- ▶ Training and development of people is an important role that the Institute plays. Our normal activities include arranging conferences and colloquia and supporting university departments with book grants and bursaries through the scholarship trust fund to postgraduate students. The Institute continues to accredit symposia and seminars on behalf of ECSA, as well as managing Continuing Professional Development (CPD) credits on

behalf of members. One of the more ambitious schemes launched this year is the SAIMM mentorship scheme where new graduates are brought into contact with experienced members of the industry in order to assist them with career guidance and personal development needs. A poster campaign was also initiated to promote the mining and minerals industry at school level. This was very generously sponsored by many industry stakeholders. An important decision made during the year was that all papers available on our website will be available free of charge to all users of the site—not just members. Also now available through our website is the catalogue of our library collection. All these initiatives are designed to provide enhanced access to information for the mining community as a whole.

- ▶ The back-office systems are also receiving an up-grade, which will allow for the seamless integration of the website, membership and financial databases. This allows members to update their own information through the website, improve our invoicing system (one hopes eliminating many of the problems experienced in previous years), and keep track of conference participation.

In summary, many of the initiatives started in previous years are now coming to fruition and the Institute is well positioned to continue to serve its members for many years to come.

1.4 Awards and Adjudication Committees

Awards and Adjudication Committee—Mining

M.H. Rogers, Chairman

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

Awards and Adjudication Committee—Metallurgy

M. Dworzanowski, Chairman

R.D. Beck	N.C. Machingawuta
A.M. Garbers-Craig	R.L. Paul*
J.M.A. Geldenhuis	

*Co-opted members

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

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	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	

No awards were made in 2007.

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

This year the award is being made to D.H. Laubscher 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:

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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. Mertincevic	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		

* Deceased since becoming members of the club

South African National Committee on Tunnelling Award (SANCOT)

The Alec Wilson Memorial award is awarded for the best tunnelling paper by a South African worldwide or presented in South Africa. The award of R1 000 is sponsored by GOBA (Pty) Ltd.

The 2006 prize goes to R.G.B. Pickering and K. Moxham for their paper entitled: 'The development and implementation of the Lonmin mechanized breast mining', published in the SAIMM publication: *International Platinum Conference—'Platinum Surges Ahead'*.

Gold Medals

O.K.H. Steffen, P.J. Terbrugge, J. Wesseloo, and J. Venter for their Transaction paper published in the July 2006 issue of the *Journal* entitled 'A risk consequence approach to open pit slope design'.

Silver Medals

W.D. Ortlepp and T.R. Stacey for their Transaction paper published in the May 2006 issue of the *Journal* entitled 'Assessment of the risk plug or water barrier failure due to

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seismicity as South Deep Gold Mine'.

T.R. Stacey for his Transaction paper published in the July 2006 issue of the *Journal* entitled 'Considerations of failure mechanism associated with rock slopes instability and consequences for stability analysis', and

A. Anyimadu, C. Rule, and L. Knopjes for their Transaction paper published in the January 2007 issue of the *Journal* entitled 'The development of ultra fine grinding at Anglo Platinum'.

Student Prizes

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

The prizewinners were as follows:

University of the Witwatersrand

Mining	B. Uugwanga
Metallurgy	M. Shongwe

University of Pretoria

Mining	C.H. Cloete
Metallurgy	N. Botha

University of Cape Town

Chemical Engineering	A. Schoeman
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University of Stellenbosch

Chemical Engineering	P.C. du Plessis
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Cape Peninsula University of Technology

Chemical Engineering	Y. Zhou
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The prizes for the universities of Cape Town and Stellenbosch, and the Cape Technikon are awarded at the Western Cape Branch Annual General Meeting.

1.5 SAIMM Scholarship Trust Fund

L.A. Cramer, Chairman

M.H. Rogers, Vice-Chairman

R.D. Beck R.P. Mohring

J.R. Dixon

The Scholarship Trust Fund has had another successful year and the trustees agreed to award R320 000 to the various tertiary institutions in the 2007 calendar year subject to receiving complete annual reports for 2006 from each department head. Contributions from individual members (R61 032) and from companies (R171 500) totalled R232 532 for the SAIMM financial year (1 July 2006 to 30 June 2007). Since the Trust's inception, the Trustees have increased the annual distributions to students at the Mining and Metallurgical faculties fourfold from R80 000 in 2004 to R320 000 in 2007. Based on the growing contributions received from companies and individuals, the distribution to tertiary institutions in 2008 will surely surpass the 2007 distribution.

The Trustees are thankful for the support received from

individual members and companies and would like to take this opportunity to express their sincere thanks and encourage more members or their companies to take advantage of the tax-deductible status of the Trust fund and to give generously to assist needy students through their first and second years of study. Those of us who have benefited from a successful career in the mining and metals industry should help to leave it in the future in the hands of well-educated South Africans. All companies working in the industry should also help to populate it with dedicated and well-qualified engineers.

The students who receive support from the Scholarship Fund are grateful for the confidence shown in their abilities. The best indication of this is the article by the University of Cape Town Chemical Engineering Department that was published in the February 2007 SAIMM *Journal*.

1.6 SAIMM Gold Medal Awards

The South African Institute of Mining and Metallurgy were pleased to assume the administration of the Gold Medals and Scholarships in 2001, which had previously been done by the Chamber of Mines. All contributions are held in a separate fund within the SAIMM accounts.

A total of four awards is presented to the universities of Pretoria and the Witwatersrand for the best student in the Faculty of Engineering and the best student in the branches of mining or metallurgy, as determined by the universities. The award comprises a gold medal and a postgraduate scholarship to the value of R25 000.

1.7 Banquet Committee

J.A. Cruise, Chairman

R.D. Beck

L.A. Cramer

J.R. Dixon

R.P. Mohring

R.G.B. Pickering

M.H. Rogers

The banquet was again held in the Ballroom at the Sandton Convention Centre in order to accommodate over 1 000 guests. The theme of this year's banquet was a masked ball with many varied and outlandish creations on show. During the banquet the background mood music was played by a saxophonist who moved like a minstrel among the tables.

The entertainment this year was theatre-in-the-round, with the stage in the centre of the banquetting hall. A rock opera was commissioned specifically for this year's function. It was called 'Mining—The Rock Opera' (A magical mining musical), which comprised five professional actors in three satirical scenes and ten songs lampooning the mining industry. The underlying theme was after Charles Dickens's *Christmas Carol* with the ghosts of mining past, mining present and mining future. It takes place down a fictitious gold mine—, Deep South, where the hero, a miner, has been trapped at the bottom of a shaft by a rockfall. He is visited by the aforementioned ghosts who remind him of his evil past, show him the gender transformation in mining, that is currently taking place and indicate the future of gold mining when the rock transmogrified into platinum ore.

Apart from two of the songs, which were 'borrowed' from *Chorus Line* and Tom Lehrer, all the other eight were written for the SAIMM banquet and sung to popular tunes. The band

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backing group then stayed on to play the music for the masked ball. The dancing went on into the wee hours of the morning.

A souvenir programme was published for the occasion and the evening was filmed and a CD was made and presented to the sponsors.

2. Technical Meetings

Portfolio Holder: A.M. Garbers-Craig

2.1 Technical Programme Committee—Mining

J.L. Porter, Chairman

A.M. Clegg	R.C.D. Phillis*
J.A. Cruise	R.G.B. Pickering
J. du Plessis*	M.H. Rakale
F.M.G. Egerton	B.C. Rip**
P.H. Ferreira	M. Seeger**
G.V.R. Landman	G.L. Smith
D. Limpitlaw*	T.R. Stacey
A. McFarlane*	F.W. Taylor**
J. Mothomogolo	J. Truter
M.P. Mullins**	H.G. Waldeck
J.C. Ngoma	J.N. Wallington*
K.C. Owen	R.P.H. Willis

*Co-opted members

**Resigned

The Technical Programme Committee—Mining has arranged thirteen events during the year under review. This is almost double the number of events held in the previous year.

An important part of the TPC—Mining strategy has been the specific intent to limit the number of events by focusing on the international and larger, proven format South African events. Underpinning this approach is a five-year schedule of defined and recurring events, used as a guideline for long-term planning. An unintended consequence of this plan has been greater visibility of topics, alignment with international trends and more efficient use of the local calendar.

Finally, the repositioning of the Institute to focus on Southern Africa and the investment of effort to build Branches in neighbouring countries has also resulted in a fuller workload for the Committee. Regardless of the number of events, our focus remains on relevant, quality events.

The year's programme started with two events at the Electra Mining Exhibition, quickly followed by the very popular International Platinum Conference that, with 275 registrations,

continues to grow in reputation for the excellence of the content, the organization and the venue. The year closed with the Student Colloquium, Mine Waste Disposal and the 8th International Corrosion Conference.

2007 started with a conference on Mineral Resource Management, which will form part of an ongoing series of events and was followed with the Resource and Reserve Reporting Conference. This latter conference was held in partnership with a commercial conference organiser, in part to test the viability of such collaborations. The Committee still has to deliver its final assessment.

The 17th International Conference on Hydrotransport was held in Cape Town, and two events have been held in Namibia: a conference on the Uranium Industry and the 4th Southern African Base Metals Conference. Lastly, the long anticipated colloquium on the Gautrain Project was held on 10 July, and filled the National War Museum venue to capacity.

Overall event attendance has exceeded 1 500 members and guests for the first time in many years and reflects an overall robust and successful year for the Committee. These efforts continue to assist in minimizing the cost of belonging to the growing membership of the SAIMM.

The hard work and commitment of the committee members and the secretariat is acknowledged and highly appreciated. Particular note should be made of the commitment of the event chairpersons and the success of the TPC—Mining depends on this dedication and willingness to devote time to advancing the objectives of the SAIMM.

2.2 Technical Programme Committee—Metallurgy

R.T. Jones, Chairperson

M. Dworzanowski, Vice-Chairman

T. Claassens	A.F. Mulaba-Bafubiandi
G.C.P. Donoghue*	J.H. Potgieter
M. du Plessis*	R. Suss*
P. Fouche*	W. van der Merwe*
A.M. Garbers-Craig	J. van Huyssteen*
N.C. Machingawuta	P.J. van der Plas

*Co-opted members

Technical conferences continue to provide an excellent forum for the continuing education of metallurgical professionals. This is especially important in the context of recently enacted South African legislation that now requires professionals registered with the Engineering Council of South Africa (ECSA)

Schedule of Mining Technical Conferences, 2006/2007

Type of Event	Date	Title	Convenor	Attendance
Conference	11–12 September 2006	Mining Second Underground Operators Conference	K.C. Owen	61
Conference	13–15 September 2006	Mining Achievements Records and Benchmarks	J. du Plessis	156
Conference	8–11 October 2006	Platinum Surges Ahead	M.H. Rogers	274
Colloquium	2 November 2006	Mine Waste Disposal	A.M. Clegg	63
Conference	8–10 May 2007	Hydrotransport—The 17th International Conference on the Hydraulic Transport of Solids	R. Cooke	149
Conference	22–25 May 2007	Reserve Estimation and Reporting Africa 2007	R. Croll	64

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to undertake such activities in order to remain registered. Conferences provide for the efficient dissemination of information about new processes and techniques for improvements in the industry, as well as promoting the networking of individuals working in the metallurgical field. Conferences held this year have enjoyed good sponsorship and have been well attended, with attendance figures ranging between 70 for smaller events, and 260 for larger multi-day international conferences. Numerous conference delegates have taken advantage of the offer of free SAIMM membership (if their application is successful) for the remainder of the year.

The job of the Metallurgy Technical Programme Committee is to ensure that a good selection of topics is covered, and to find ways of improving the flow of information to members. Formal proceedings are published for most conferences (in book form with an accompanying CD), and these are refereed for many conferences. It is worth noting that all conference proceedings are now fully published on the SAIMM website, in order to make the information searchable and available to as wide an audience as possible.

The 2006/2007 year has included a variety of events, and some highlights are mentioned below.

A two-day conference on DMS and Gravity Concentration Operations and Technology in South Africa was held in July 2006. The conference was well attended with a total of 142 registrations.

The Western Cape Branch of the SAIMM held their annual Mineral Processing Conference and Workshop in August 2006, attended by over 100 delegates. This event has become a well-established one on the metallurgical calendar.

A half-day conference on Environmental Challenges facing the Metallurgical Industry was held in conjunction with the Electra Mining show in September 2006. The event was attended by 103 delegates, of whom 47 were students.

The Second International Platinum Conference was held as a combined mining/metallurgical event at Sun City during October 2006. This conference has grown nicely since the first such event two years ago, with attendance increasing from 150 to 260. This conference attracted a great deal of sponsorship and support from industry (over 20 companies).

The annual Student Colloquium (subsidized by the surplus funds from other events) was held in October 2006, and

attracted participation from a number of the educational institutions in Johannesburg and Pretoria, with 175 people attending. Unfortunately, not all local institutions could attend this year because of conflicts with examination scheduling. This event provided a showcase for students to present their final-year projects.

A two-day conference on Analytical Challenges in Metallurgy was held in Randburg during November 2006, and was attended by about 70 people.

The 8th International Corrosion Conference was held in November 2006, as a joint venture with the Corrosion Institute. There were about 70 delegates, including some from overseas.

A uranium colloquium was held in Namibia during May 2007 and covered both mining and metallurgical topics. This event attracted quite a bit of media coverage in Namibia.

A conference on SO₂ Handling and Sulphuric Acid Manufacture was held in Muldersdrift in April 2007, together with the South African Sulphuric Acid Producers' Society (which has now joined the SAIMM as a Special Interest Group on the production of Sulphuric Acid). Approximately 150 people attended the conference, one-third from outside of South Africa. Thirteen of the eighteen speakers were from overseas. This event was a very successful one and is likely to be repeated every few years.

A one-day conference on Flotation Cell Technology in the 21st Century was held in June 2007, attended by more than 100 participants.

Between the time of writing this report and its publication, the Fourth Southern African Base Metals Conference is due to be held (July 2007) in Swakopmund, Namibia. This conference follows the previous successful events at Victoria Falls (2001), Sun City (2003), and Kitwe (2005). The theme of this year's conference is Africa's Base Metals Resurgence, and technical visits are planned to Ongopolo Mining (Tsumeb), Rosh Pinah, Skorpion Zinc, and Rossing Uranium. Approximately forty papers will be presented at this event.

In addition to the events actually organized by the SAIMM, support was also provided to a number of overseas conferences such as the Sohn International Symposium (TMS) (August 2006, San Diego, California, USA), the Infacon XI International Ferroalloys Conference (February 2007, New Delhi, India), and the European Metallurgical Conference (EMC2007) (June 2007,

Schedule of Metallurgy Technical Conferences, 2006/2007

Type of Event	Date	Title	Convenor	Attendance
Conference	18–20 July 2006	DMS and Gravity Concentration Operations and Technology	M. Dworzanowski	142
Colloquium	14 September 2006	Environmental Challenges facing the metallurgical industry	G.C.P. Donoghue	103
Colloquium	19 October 2006	Student Colloquium	P.J. Knottenbelt	155
Conference	14–15 November 2006	8th International Corrosion Conference	J.H. Potgieter	73
Colloquium	22 November 2006	Analytical challenges in metallurgy	A.M. Garbers-Craig	70
Conference	19–20 April 2007	SO ₂ Handling and Sulphuric Acid Manufacture Conference	J. van Huyssteen	135
Conference	14–16 May 2007	Uranium in Namibia	A.M. Clegg	86
Colloquium	29–30 March 2007	Mineral Resource Management	A.S. Macfarlane	100
Conference	20 June 2007	Flotation Cell Technology	M. Dworzanowski	126

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Düsseldorf, Germany). There was SAIMM participation in the organizing committees for these events, as well as publicity provided to SAIMM members.

The enthusiasm of the TPC–Metallurgy committee has resulted in a successful year of technical programmes being provided for the benefit of the metallurgical community of Southern Africa. The professional way that the secretariat has handled the arrangements for the conferences has resulted in events that have functioned smoothly and that have generated favourable comments from those attending.

2.3 South African National Committee on Tunnelling (SANCOT)

J.A. Cruise, Chairman

A. Boniface	R.G.B. Pickering
G.N. Davis	E.J. Sellers
P.H. Ferreira	T.R. Stacey
A.L. Griffiths	F.B. Stevens
E.A. McCarter	H.J. Tluczek

SANCOT continues to be the active tunnelling arm of the SAIMM, catering for both mining and civil tunnels. SANCOT organizes colloquia and presentations on current tunnelling in South Africa and also maintains strong ties with the International Tunnelling Association (ITA) through correspondence and physical representation at ITA's annual conference. SANCOT is a founder member of the ITA.

This year's ITA conference was its Thirty Third Annual Conference and it was held in Prague from 5 to 10 May 2007. South Africa had four attendees, of which one is an Honorary Member (Norman Schmidt) and two are on the SANCOT committee (Tony Boniface and Ron Tluczek). Tony Boniface reported back on proceedings at the conference in a presentation to the full SAIMM Council at their June meeting.

Following a successful visit to the Durban Harbour Tunnel reported on last year, a presentation was made to the Johannesburg Branch on the design and construction of that tunnel. There was an excellent turnout at the Military Museum Conference Centre for that event.

With the start-up of the Gautrain Project, a series of colloquia is planned over the next few years—the first one commencing in July 2007 on the *raison d'être* and the planning of the tunnelling sections of the project, presented by the client, the consultants and the contractors.

SANCOT is moving from strength to strength.

3. Publications

Portfolio Holder: J.C. Ngoma

R.D. Beck, Chairman

F.M.G. Egerton	R.E. Robinson
P.H. Ferreira	G.L. Smith
A.M. Garbers-Craig	T.R. Stacey
R.T. Jones	J.N. van der Merwe
J.H. Potgieter	H.G. Waldeck

3.1 Journal

The large number of papers and monthly issues published continued the good practice started last year.

Ninety-eight papers were presented. Three special issues were published on *Rockslopes* (July 2006), *Platinum* (January 2007) and *Hydrotransport* (May 2007). A student issue was published in April 2007, which contained papers written on project work carried out in partial fulfilment of their degrees.

Forty-five Transaction papers, 44 *Journal* papers, 7 student papers and 3 comments on papers were published. The table below shows the transaction papers, which are peer reviewed and represent the peak of technical quality and *Journal* papers published over the last seven years.

	00/01	01/02	02/03	03/04	04/05	05/06	06/07
Journal	30	29	23	13	14	40	44
Transaction	16	23	31	46	55	54	45
	46	52	54	59	69	94	89

In 2006/07, 14 possible transaction papers were rejected of which only one came from South African authors. The number of papers from outside South Africa published was 22%, in line with previous years, representing 10 countries.

The table below presents the number of mining and metallurgical papers:

	00/01	01/02	02/03	03/04	04/05	05/06	06/07
Mining							
Transactions	8	20	12	23	19	35	23
Journal, Student, Tech Notes, Comments	13	25	15	10	8	30	22
Total	21	45	27	33	27	65	45

Metallurgy

Transactions	2	2	14	16	35	15	17
Journal, Student, Tech Notes, Comments	10	14	20	9	12	18	27
Total	12	16	34	25	47	33	44

The number of papers published per issue remained at the maximum that can be published without additional binding costs.

Advertising revenue increased this year and was 18% above the previous year.

This is due to the effort and professional approach brought to advertising by our new agent Barbara Spence of the Avenue Company. She and her team are thanked for their work. Other publication costs were below budget and the previous years.

Professor Robbie Robinson has continued with his thought provoking *Journal* Comments throughout the year, for which we are very grateful. It is pleasing to report that he can now attend publication meetings and we thus have direct input from him.

The DTP department has again maintained the high standard of *Journal* layout and thanks go to Dawn van der Walt and Zuliakha Malgas.

I should like to thank Nazli Mamdoe, the *Journal* Secretary and Publications Co-ordinator for her hard work, the members of the Publications committee for their advice, and all the staff at the secretariat for their input during the year. Finally thanks go to all those who gave of their time as referees, without whom the standard of the *Journal* could not be maintained.

Discussions on the publication on two books have been held this year. A book on South African Mining Practice and one on Mineral Property Valuations and Considered Impacts. No decisions had been reached at year end. Miscellaneous sales were good.

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4. Regional Development

Portfolio Holder: R.G.B. Pickering

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 Bushveld Branch

C.A.F. Sweet, Chairman

Recruitment of new members continued during the year with some results. A number of new members have completed their documents, with a lot more still in the process.

A number of activities are planned for the year ahead. Several mines have been approached to host visits this year, and Eland Platinum mines has agreed to host a visit.

The Eland Platinum mine visit is planned for September this year. It will be interesting for members to see how they are faring in getting this mine operational again and what the plans are for the future.

Talks are in progress with a smelter and granite works for visits this year as it seems we are able to generate more interest in organized visits.

4.1.2 Johannesburg Branch

E.U.H. Sachse, Chairman

J. Pooley, Vice-Chairman

G.C.P. Donoghue

X. Pan

V.G. Duke

J.L. Porter

C. Heili

W. Taylor

C. Ian

P. Thulane

G. Oliver

M. Woodhall

Introduction

Overall, the membership of the Branch Committee has

remained stable and the level of support and commitment by the committee members was excellent during the year under review.

A new initiative was concluded during the year, in that the University of Johannesburg has now officially joined the Johannesburg Branch, and has nominated a representative each from the Mining and Metallurgical departments.

Attendance by the students has been excellent, with overall attendance at many of the presentations totalling over 100 persons.

Committee

The Chairman and portfolio members will be elected at the first Branch Committee meeting in August 2007.

Finances

The branch activities have been well sponsored and if all amounts invoiced are received, the branch will be self-funding.

Towards the end of the year, the enthusiastic participation of the students has meant that the cost of providing refreshments has escalated to the point that many sponsors have felt that the cost became too high.

Council then passed a resolution that the sponsorship would be capped at R8 000 per event and additional costs would be carried by the Institute.

Technical presentations

The presentations tabled below give a good indication of the active and varied participation by all.

The year-end family outing to the Vredefort Dome was particularly well attended and enjoyed by all.

Technical visits

No technical visits were held during the year under review.

Acknowledgements

As chairperson, I would like to thank the Committee for their work during the year. Having regular committee meetings prior to the evening presentations has assisted with the overall co-ordination of the branch function.

I would like to thank Ginette Oliver for her hard work during the year and the secretariat in general for their support and the

Past year Technical Presentations: Johannesburg Branch of the SAIMM: 2006/2007

Date	Title	Presenter	Sponsor	Responsibility
2006-07-20	The Process of Mineral Rights Applications	A. Cronje	Various	V. Duke
2006-08-17	The Durban Harbour Tunnel	F. Stevens	M&R Cementation	J. Cruise
2006-10-19	Gold Mine Resource Rents	D. Minnitt	HPE	U. Sachse
2006-11-16	PBMR	F. Laubscher	Gijima AST	M. Woodhall
2006-12-09	Vredefort Dome	M. Coetzee	JIC	U. Sachse
2007-01-18	Australia visit report-back	T. Ngobo	COM	U. Sachse
2007-03-15	Extra Low Profile Mechanized Stopping: Latest Developments	G. Harrison	SMC	U. Sachse
2007-04-19	Eland Platinum	C. Sweet	Eland	U. Sachse
2007-05-17	The challenges facing de Beers	D. Noko	de Beers	X. Pan

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excellent co-ordination of events.

I would also like to thank our speakers for their valuable contributions, as well as the audiences and sponsors. It is always gratifying to see Council members and past-presidents in our audiences, as well as students.

4.1.3 Namibian Branch

No report was submitted this year.

4.1.4 Pretoria Branch

I. Matunhire, Chairman

L. Barlow	T. Mahlangu
F. Breedt	B. Ndlovu
W. Geysers	R. Raphukula
D. Gudmanz	R. Webber-Youngman
S. Havenga	

From July 2006 to June 2007, the SAIMM Pretoria Branch organized a number of events, which were well attended by students, lecturers and to some extent, members from industry. The branch, together with the departments of Materials Science and Metallurgical Engineering and Mining Engineering at the University of Pretoria, presented a series of mining and metallurgical forums and mini colloquia (see Table below).

The highlights of the year were presentations by (a) the incoming President of the Southern Africa Institute of Mining and Metallurgy, Mr. RPH Willis, (b) international speakers from as far afield as the USA and France, and (c) the Research Seminar of the School of Mining and Mineral Sciences at the University of Pretoria.

Cocktail parties were held after each seminar and served as a get-together and networking opportunity for the members. I am very pleased to announce that in May 2007 the SAIMM Council very kindly offered to sponsor the Pretoria Branch to the tune of fifty per cent of our cocktail expenses on production of official receipts. The SAIMM also provides the Pretoria Branch with gifts as tokens of appreciation to our guest speakers. Pretoria Branch appreciates all the support we are

getting from the Council.

I would like to thank my committee (see Office Bearers' Table below) for their dedication and support. I would also like to thank Professor Nielen van der Merwe (and now Dr Ronny Webber-Youngman), Head of the Department of Mining Engineering and Professor Chris Pistorius, Head of the Department of Metallurgical Engineering, University of Pretoria, for their continued moral and financial support. Last, but not least, I would specially like to thank the people that worked behind the scenes and really put in a special effort to keep the SAIMM Pretoria Branch alive, namely Sarah Havenga and Daleen Gudmanz.

4.1.5 Western Cape Branch

P. van der Plas, Chairperson
A. Burger, Vice-Chairperson
D. Deglon, Secretary

M. Aziz	J. Petersen
V. Fester	C. Sweet
A. Lewis	J. Sweet
A. Mainza	E. Thyse
A. Nesbitt	A. van der Westhuizen

The Western Cape Branch of the SAIMM has two main activities. The first is the promotion of mineral processing through the annual Mineral Processing Conference. The second main activity is the promotion of mineral processing among students along different avenues.

Mineral processing conference

The annual Mineral Processing Conference organized by the branch has reached its 25th installment in 2007. The Conference was established after the need was identified for a forum where colleagues from the mining and mineral processing industry could interact with academic researchers and postgraduate students at the universities of Stellenbosch and Cape Town, both of which at that time were setting out on a venture into mineral processing. The first Conference was

Mini colloquia, past year events, and future planning: Pretoria Branch of the SAIMM: 2006/2007

Date	Title	Presenter
2006-07-26	The uranium story – an update	R.P.H. Willis, <i>Incoming President, SAIMM</i>
2006-08-23	The nano revolution: An integration of science, engineering, technology and business	I. Claassens, <i>Mintek</i>
2006-09-06	Fundamental design principles of submerged-arc furnaces	J. Malan, <i>Pyrometallurgy</i>
2006-10-17	Sanlam Auditorium	Research Seminar & Poster Session: <i>University of Pretoria</i>
2006-10-24	Spectroscopic study and environmental implications of radiation induced defects in minerals—zircon	E. Balan, <i>Universites Paris</i>
2007-02-21	Managing your future	P. Radcliffe, <i>Rand Refinery Ltd</i>
2007-03-14	Block thrust failure mechanism in open pit coal mines	K. Karparov, <i>National Dept of Agriculture</i>
2007-04-05	Use of vanadium in steel	P. Mitchell, <i>Vanitec</i>
	A review of recent developments in micro-alloyed forging steels for automotive applications	D. Milbourn, <i>Vanite</i>
	Modelling of precipitation in V-containing steels	P. Maugis: <i>Arcelor (Vanadium Award Winner)</i>
2007-04-24	Modular dynamic simulations for the analysis of interfacial chemistry in selected flotation systems	J. Miller, <i>Univ. of Utah, Salt Lake City, USA.</i>
	The 3D analysis of multiphase particles and parked particle beds by cone beam X-ray micro CT for improved understanding of mineral processing systems.	J. Miller, <i>Univ. of Utah, Salt Lake City, USA.</i>
2007-05-16	Compliance and reporting of mining projects	A. Clegg, <i>TWP Consulting</i>

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attended by, among others, Richard Beck and Ronnie Snodgrass, Rob Dunne and Ian Corrans from Mintek, Brian Loveday from AARL, Cyril O'Connor, Geoff Hansford and Brian Paddon from UCT, Jimmy Green and Jannie van Deventer from US, and Hans von Michaelis. The initial conferences were held alternately at the universities of Stellenbosch and Cape Town. As the event expanded it was held at venues such as the Van Riebeeck Hotel (Gordon's Bay), Lord Charles Hotel (Somerset West), Protea President Hotel (Bantry Bay) and the Vineyard Hotel (Newlands) and also included researchers from what is now the Cape Peninsula University of Technology.

The conference has provided a platform for interaction between individuals from industry and academia to present their research on a wide range of topics. Furthermore, the conference has a strong postgraduate thrust providing research students with the opportunity to present their research to peers. The success of the conference is determined by the high quality of the papers delivered and also the support by delegates attending the conference.

The two-day conference opens with a plenary presentation on a general topic of interest. The parallel sessions are themed, amongst others, comminution, environmental, flotation, hydrometallurgy, metallurgical accounting, measurement and control and pyrometallurgy. For the 25th conference, session chairmen were asked to prepare a ten-minute presentation with a retrospective look at the developments and progress in the respective fields over the last quarter of a century. This will include a discussion on the requirements and demands for the next quarter of a century. The branch also implemented an initiative to promote collaboration with other tertiary institutions by presenting a bursary of R2 000 to a postgraduate student to attend the conference. Furthermore, a cash prize is awarded to the best poster and short presentation by a student. At the 2006 conference Barry Wills sponsored a full attendance package to an MEI conference, excluding accommodation and air fares. The prize was awarded to N. Musee and co-authors professors C. Aldrich and Lorenzen. The title of the presentation was 'A Neurofuzzy Approach to Gold Recovery Prediction during Leaching Processes'.

The conference is normally preceded by a workshop with a clearly defined theme. Authors are invited to present in their field of expertise. For the last two years, the workshop proceedings were video taped and a DVD produced. The aim of this initiative is to capture the wealth of knowledge for future reference by students and members of the SAIMM. A copy was donated to each tertiary institution in the Western Cape.

Promotion and other activities

The promotion of mining and metallurgy among tertiary students is achieved through a student evening. Students from the Cape Peninsula University of Technology, and universities of Cape Town and Stellenbosch are invited to participate. The aim is to promote interaction among the students from the different institutions as well as to promote the activities of the SAIMM. This year members of the SAIMM were invited to join the social event. Dr Gys Landman was invited to introduce the SAIMM mentoring programme. Furthermore, Ms Carina Reynders gave an overview of the activities of the SAIMM. Mr

Craig Sheridan gave a presentation titled 'Winemaking: An Engineer's Perspective'. He also facilitated a sauvignon blanc wine tasting sponsored by Distell.

Another avenue of promotion is providing prizes to achieving students. The SAIMM Prestige prize for best students in Mining and Metallurgy at the different institutions was presented by Pat Willis at the Mineral Processing Conference dinner to Daan van Staden (CPUT), Mr Pieter du Plessis (US), and Ms Andrea Schoeman (UCT)

The branch has a strong academic membership presence and therefore postgraduate research is a key component of promotion. Final-year students from the local tertiary institutions are invited by the research groups to attend the annual conference.

Another initiative to promote postgraduate research was the establishment of a SAIMM Postgraduate Conference fund and will be launched in 2007–2008. The aim of this fund is to provide the opportunity for postgraduate students registered at a Western Cape institution in the field of mining and metallurgy as well as related disciplines to attend and present a paper at an international conference. The successful applicant will be awarded R 15 000 towards the expenses of the conference. Two allocations will be made during the year, one in February and another in August. An amount of R120 000 was allocated towards this initiative.

4.1.6 *Zambian Branch*

S. Simukanga, Chairman
J. Mutambo, Co-Chairman
W. Musonda, Treasurer
N. Ndhlovu, Vice-Chairman
W.C. Mannda, Co-Vice-Chairman
M. Kampeni, Secretary

At the beginning of the year, the branch was inactive as its chairman and other members of the local executive did not have meetings. The chairman, Mr. John Mutambo had left the country to work in Asia (Malaysia). In realizing the inactivity of the local branch, the President of SAIMM appointed Professor Stephen Simukanga of the School of Mines of the University of Zambia as chairman of the branch to assist in the revival of the branch, in August 2006. The executive members of the branch have since been contacted and the activities are slowly coming on line. During the course of the year, the former chairman of the branch, Mr. John Mutambo came back to Zambia and is currently working with ICS Copper Systems (Z) Ltd. He has agreed to work as co-chairman of the branch meanwhile.

Registration of the *Zambian Branch*

It is a requirement by law that any organization or institution whether local or international, has to register with the Registrar of Societies. After some enquiries, the branch was informed that it is required to register under 'International Organisations'. This required that all the documents about the branch had to be the ones used by the SAIMM. In this regard the Constitution of the SAIMM was used as the main document to facilitate registration. The necessary paperwork has been

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submitted to the Registrar of Societies, including the new constitution for the Southern African Institute of Mining and Metallurgy. To finalize the registration, an amount of three million Zambian kwacha, equivalent to R6 000 has to be paid to the Registrar of Societies as this is the first registration, thereafter the annual renewals would be far less than this. The branch has raised one million kwacha and is in the process of raising the remaining amount so that the branch is fully registered. Full registration is expected in July 2007. After full registration, the Minister of Mines and Minerals Development, Hon. Dr. Kalombo Mwansa, will be requested to become the Honorary Vice President for the branch. He has already been spoken to and is agreeable to the suggestion.

Copper Event – November 2007

In order to make the branch 'active', Council allocated some activity for the branch this year, that of hosting a Copper Event in November 2007. The venue and dates for the conference are yet to be finalized. The SAIMM HQ is assisting in publicizing the event. The theme will mainly focus on developments in the Zambian copper mining industry, looking at new operations as well. This may also cover the developments in the DRC. Now that the branch members are alive to the activities again, we are looking forward to hosting the event. For better venues, it is suggested that the event takes place in Lusaka.

4.1.7 Zululand Branch

I. Walton, Chairman
E. Clare
E. Williams

The Zululand Branch of the SAIMM has once again maintained its association with the other professional institutes in the KZN area. Our members have been invited to several presentations during the year, but unfortunately most of them involve travelling considerable distances at night and, as a result, these presentations have not been well supported.

Our local presentations, on the other hand, have been well supported by members from Richards Bay Minerals, Exxaro Sands KZN, Foskor and the Bayside and Hillside Smelters. Suppliers to these industries such as Multotec KZN, Roche Mining and Spectrum Technical have also given us great support during the year.

Branch technical activities

The branch has had a relatively quiet technical programme this year. The Multotec KZN group has been extremely generous with sponsorship and presentation material and has hosted two presentations this year.

The first presentation in September 2006 was entitled 'Essentials in mineral processing sampling' and reviewed both the theory and practice mineral sands sampling.

The second presentation in June was entitled 'Mineral sands modelling for plant control' and resulted in some interesting debate among the audience.

The Zululand branch has also been very involved in the organizing of the Heavy Minerals Conference at Zulu Nyala Game Lodge in Zululand in September 2007. A large contingent of local and overseas members of the heavy minerals industry will be attending.

5. Engineering Science and Technology in South Africa

Portfolio Holder: R.P. Mohring

5.1 Engineering Council of South Africa (ECSA)

	<i>Mining</i>	<i>Metallurgy</i>
<i>Representative</i>	J.A. Cruise	R.F. Sandenbergh
<i>Alternates</i>	M.H. Rogers	

The Institute nominates members to the registration and professional advisory committees for mining and metallurgy.

During the past year, these committees continued their important work of screening the qualifications and practical experience of applicants for registration as Professional Engineers. The Institute also provides the administration and assessors for the ECSA Professional Review, a prerequisite for registration.

Assistance continues to be provided by nominees of the institute in the accreditation of courses offered by universities and technikons in the disciplines of mining and metallurgy.

Professional Advisory Committees

PAC Mining

J.A. Cruise, Chairman
M.H. Rogers, Vice-Chairman

F.M.G. Egerton	G.L. Smith
R.P. Mohring	T.R. Stacey
M.J. Mothomogolo	J.N. van der Merwe
J.C. Ngoma	D.J. van Niekerk
R.C.D. Phillis	

ECSA Council

The Minister of Public Works has appointed the Members of Council for the 2005 to 2009 term of office in terms of the Engineering Professions Act, 2000. The names of the new Council Members are available on ECSA's website.

Recognition of voluntary associations

The SAIMM is a recognized Voluntary Association in terms of ECSA's policy. An important benefit to members of the SAIMM is that registered persons are entitled to a significant reduction in their ECSA annual fees.

The identification of engineering work: compulsory registration

The Identification of Engineering Work steering committee has drafted proposed regulations for compulsory registration of persons conducting 'identified engineering work'.

These draft regulations have been submitted to the Council for the Built Environment and other interested and affected parties for their comment. The COM has initiated a project to gauge the impact of the draft regulations on the mining industry. This work is ongoing.

Standards and qualifications

ECSA has, over the last number of years, been addressing the question of the need to register Specified Categories of engineering practitioners, who are practising in areas of

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engineering technology, which do not readily fit into the four Professional Registration Groups.

This year a Specified Category of Lifting Machinery Inspectors was established.

Continuing professional development (CPD)

Renewal of registration (on a five-year cycle) through undertaking acceptable CPD became mandatory on 1 January 2006. Registered persons are required to start undertaking and recording CPD activities as from 1 January 2006.

The implication of the introduction of CPD is that Registered Persons are required to present evidence of continuing professional development at predetermined intervals in order to maintain their registration.

To date there has been a very poor response by registered persons in providing ECSA with details of their CPD activities.

The SAIMM is an approved provider of CPD activities and will be tasked with vetting all outside courses for CPD purposes in mining and metallurgy.

Details can be obtained on ECSA's website (www.ecsa.co.za).

PAC Metallurgy

R.F. Sandenbergh, Chairman

N.A. Barcza

R.D. Beck

L.A. Cramer

R.H. Eric

H.E. James

Metallurgy

The mission of ECSA is to ensure, through a cooperative 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 of ECSA contribute to this mission by considering matters specific to the discipline and also contributes to wider policy matters as required.

During 2006/2007 the PAC Metallurgical Engineering again considered applications for registration as Professional Engineers by means of paper evaluations and interviews. The requirement for continuing professional development of Professional Engineers is now a requirement for all registered persons and the PAC supports the strong involvement of the SAIMM in such a process for metallurgical engineers.

5.2 South African Academy of Engineering

R.F. Sandenbergh, Chairman

The objectives of the Academy of Engineering are to promote excellence in the science and application of engineering for the benefit of all members of the public in South Africa. The Academy comprises South Africa's most eminent engineers of all disciplines and related professionals with proven ability and achievement. During the year the representation of Mining and Metallurgical Engineers in the SAAE was increased to recognize their achievements and to facilitate interaction and contributions over a broader front of engineering. The Academy is presently negotiating with various stakeholders and the government for the official recognition of the SAAE to enable it to provide a better service and to participate in

international activities such as the International Council of Academies of Engineering and Technological Sciences.

The South African Academy of Engineering and the University of Pretoria took over the responsibility for coordinating the annual Hendrik van der Bijl Lecture at the University of Pretoria. This year's Hendrik van der Bijl Lecture, with the title, Gautrain, was presented on 18 May 2006 by Mr Jack van der Merwe, Project Leader and Chief Executive Public Private Partnerships, Gautrain.

6. State Liaison

Portfolio Holder: D.J. van Niekerk

6.1 Outcomes-based Education and Training (OBET)

Mining Qualifications Authority

The main achievements for the Mining Qualifications Authority (MQA) as Sector Education and Training Authority (SETA) for the SA Mining and Minerals Sector (SAM&MS) for the year under consideration, includes the following:

- ▶ Finalization of the streamed conceptual design of the Level 5 qualification for Mining Practice for the three main sub-sectors vis-à-vis underground hard rock, underground coal and surface mining and
- ▶ Further consideration by the Mine Health and Safety Council and the Board of the Mining Qualifications Authority (MQA) the DME's 'Discussion Paper: Training, Competency Certificates and Licensing in the SA Mining and Minerals Sector', which, amongst others, proposes registration to be the appropriate mechanism to replace the Mine Managers' and Engineering Competency Certificates currently issued by the Government.

The Engineering SGB/ECSA

The main achievements of the Engineering SGB for the year under consideration include the following:

- ▶ approval to register the 120 credit Stage 1 competency standard in Engineering Technology at Level 5 on the National Qualifications Framework (NQF)
- ▶ approval to register the 120 credit Stage 1 competency standard in Engineering Technology at level 6 on the NQF
- ▶ agreement by stakeholders to implement the Stage 2 competency standards for Engineering Technologists and Engineering Technicians. The Stage 2 competency standards for Engineers have yet to be approved by the respective Professional Advisory Committees and the Central Registration Committee before it can be implemented and
- ▶ obtained agreement from relevant stakeholders for the qualification for Certificated Mechanical and Electrical Engineers and Certificated Managers (Mining) captured by the proposed draft Stage 2 Qualification at level 7 ('broadly defined practice') on the NQF. The participating Mines Professional Associations, which include the SAIMM, have played a significant role in achieving this critical milestone. This generic qualification also provides the competency profile for practitioners in the Factories, Transport and Marine Sectors.

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Outstanding/unresolved issues

The following outstanding issues still require resolution:

- ▶ the issue relating to the implementation of the newly designed Stage 2 engineering qualifications—with specific reference to its integration/harmonization with current registration practice and qualify assurance in ECSA
- ▶ legislative interventions and compulsory licensing in the SAM&MS
- ▶ compulsory currency-of-competence in the SAM&MS;
- ▶ finalization of the Level 5 streamed Qualification in Mining Practice and
- ▶ finalization of the Level 4 streamed Qualification in Mining Practice.

Identification/reservation of engineering work

The ECSA Council, at its meeting held on 17 August 2006, approved the 'Proposed CBE IDoEW Regulations' and following accompanying supporting documentation prepared by the IDoEW-SC, which will in due course be accessible on the ECSA website (www.ecsa.co.za).

- (a) 'An Overview of the proposed Regulations of the Identification of Engineering Work, dated 13 October 2006
- (b) 'Introductory Document', dated 08 August 2006
- (c) 'IDoEW for Persons registered in a Category contemplated in Section 18(1) of the Engineering Profession Act 2000, Act 46 of 2006', dated 08 August 2006
- (d) 'Explanatory Memorandum', dated 08 August 2006
- (e) 'Codes-of-Practice issued in terms of the Engineering Profession Act 2000, Act 46 of 2006', dated 08 August 2006;
- (f) 'Baseline report', dated 14 August 2005, and
- (g) 'Framework for the IDoEW', dated 24 November 2005.

NOTE: To access the said IDoEW documents, you are advised to follow the following steps:

On the HomePage click on 'Identification of Engineering Work' (this will take you to the Index and the rest of the documentation)

or

Use the Menu on the left-hand side of the HomePage, click on 'ID of Eng Work'—you will find a drop-down menu with the following:

Index
Background and Process
Composition
Ref Docs

The ECSA Council also approved the following IDoEW-SC recommendations:

- ▶ 'Council's approval of or comment on documents (a) to (e) be communicated to the Steering Committee
- ▶ Following any further annotations, documents (a) to (e) be transmitted on ECSA's behalf to the Chief Executive Officer of the Council for the Built Environment (CBE)
- ▶ Documents (f) and (g) be noted only, and
- ▶ That the IDoEW Steering Committee be mandated to engage, on ECSA's behalf, with representatives of

various industrial sectors, inclusive of the Mining and Transport sectors, relevant organs of state and miscellaneous institutions to identify areas of omission, duplication or overlap in respect of the reservation of Engineering Work'.

The said 'Proposed IDoEW Regulations' have been forwarded for consideration and further processing to the Council for the Built Environment (CBE).

In terms of section 20.(1)(b) of the Built Environment Act, 2000 (Act No 43 of 2000) 'the Council must consult with any person, body or industry that may be affected by the IDoEW'.

In terms of section 20.(2) of the Built Environment Act, 'the Council must after consultation with the Competition Commission and in consultation with the Councils for the professions, identify the scope of work for every category of registered person'.

Phase II of ECSA's IDoEW Project will focus on the marketing and promotion of the 'Proposed IDoEW Regulations' and to consult persons bodies or industries that may be effected by the proposed IDoEW Regulations.

Potential implications: implementation of the proposed IDoEW Regulations

The employer grouping and the participating MPAs have jointly undertaken an 'acid test survey' to determine the potential implications of the imminent promulgation and implementation of the proposed IDoW Regulations in the SA Mining and Minerals Sector. The draft report has identified the potential implications from the said survey but a follow-up questionnaire was distributed throughout the industry to obtain quantification for some of the said potential implications. The final report is expected to constitute the basis for the long-awaited engagement between the Mine Health and Safety Council and ECSA.

7. International liaison

Portfolio Holder: R.P.H. Willis

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 institutes in other countries to promote international exchange of scientific and technical information.

7.1 APCOM

F.A. Camisani-Calzolari, Chairman

During the year under review there were no APCOM symposia held. The last symposium was held in Tucson, Arizona USA, from 30 March to 1 April 2005 and was the 32nd of the series.

The next Symposium is the 33rd International Symposium on Applications of Computers and Operations Research

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(APCOM 2007), which is being organized by the Department of Mining and Engineering of the University of Chile in Santiago and will take place on the second half of April 2007.

APCOM 2007 will be held at the Sheraton Hotel and Convention Centre and the Chairman of the Organising Committee is Professor Eduardo Magri, a well-known personality in the South African mining industry. It is the first time in its history that APCOM is held in South America.

APCOM 2007 will consider work submitted in the following fields of interest to the mining industry:

- Exploration
- Emerging technologies
- Modelling and estimation of deposits
- Mine planning, design and operation
- Communications in standardized networks
- Ore processing and plant operation
- Control, automation and robotics
- Investment planning and project evaluation
- Global projections for the industry
- Company information systems
- Knowledge management
- Safety systems
- Financial systems
- Education and trainingsystems
- Environmental matters.

The web page of the Symposium is www.apcom2007.cl and the contact person is Ms Olga Cherepanova, Tel. (56-2) 652 1519 or e-mail info@apcom2007.com.

7.2 INFACON

N.A. Barcza, National representative

The INFACON Congress was founded in South Africa in 1974 by The SAIMM, Mintek (formally NIM) and the Ferroalloys Producers Association (FAPA) when the first INFACON was held in Johannesburg. INFACON has been held three times in South Africa, the most recent being INFACON X in Cape Town in 2004. The primary objective of The International Committee on Ferro Alloys (ICFA) that was formed during the first INFACON is to promote the holding of the INFACON Ferroalloy Congress in appropriate locations. ICFA arranges the meeting of representatives from producing and consuming countries during each INFACON to discuss and decide on the country that will host the subsequent INFACON Congress. Prospective host countries are invited to make submissions to ICFA accordingly. The current members of ICFA are: ABRAFE (Brazil), CSM (Chinese Society for Metals—China), IFPEO (Europe including Scandinavia), IFAPA (India), JFA (Japan), TFA (North America), and FAPA (South Africa), and invited attendees include Russia the FSU and Kazakhstan.

INFACON has been held on 10 occasions in the following countries and locations:

- *Brazil* (1) in 1986 in Rio de Janeiro by AFRAFE
- *Canada* (1) in 2001 in Québec City by the TFA
- *China* (1) in 1998 in Beijing by the CSM
- *Japan* (1) in 1983 Tokyo by the JFA
- *Norway* (1) in 1995 in Trondheim by SINTEF
- *South Africa* (3) in 1974, 1992 and 2004 in Johannesburg, *Cape Town* (2) by FAPA, Mintek and the SAIMM

- *Switzerland* (1) in 1980 in Lausanne by IFPEO
- *USA* (1) New Orleans 1989 by the TFA.

INFACON has and continues to contribute to the exchange of research and development information covering the major and most of the minor ferroalloys. Universities and technical colleges, research and development organizations and the industry have mostly contributed to this wealth of knowledge.

INFACON XI was held in New Delhi, India in February 2007 and was a very successful event, both technically and socially. During the opening ceremony Dr Nic Barcza chairman of The International Committee on Ferro Alloys (ICFA) congratulated Mr R. K. Saraf, Chairman INFACON XI, the co-chairmen Mr D Askok, the Technical Committee chaired by Dr T.K. Roy and convened by Mr Romeo K. Das and Mr Subhrakant Panda, and Secretary of the Congress Mr T. S Sundaresan and the INFACON XI team on the exciting programme for INFACON XI. He thanked The Organising, Technical, Administrative and other committees and all of those who had contributed to the enormous task of arranging INFACON XI in New Delhi.

The excellent attendance of and participation by 551 delegates (including 27 spouses) from 36 countries at INFACON XI gave the rich dimension that ensured the success of the overall event from both a technical and a social perspective.

The Indian Ferro Alloy Producers Association's (IFAPA's) theme for INFACON XI of 'Innovations in Ferroalloy Industry' was chosen to reflect the increasing challenges faced by the industry globally. The excellent collection of 86 technical papers contained in the proceedings of and presented during the INFACON XI programme addresses all the relevant topics of interest to the ferroalloy industry now and well into the future.

The exhibition was supported by 13 exhibitors who contributed to the technical content of INFACON XI by providing information on state-of-the-art engineering and equipment supply services in their booths in the exhibition hall. South Africa was well represented in both the technical programme and the exhibition.

There was also good support for the very interesting post-congress tours within India, Golden Triangle (13), Nagpur (9), Orissa (38), and to Bhutan (22) as well as on the cultural tour to the Taj Mahal in Agra (22).

The Indian Ferroalloys Association IFAPA is to be congratulated for its role in the excellent planning and excellent organisation of INFACON XI.

The announcement of the host country for INFACON XII was made at the closing address of INFACON XI. Finland was awarded the honour of hosting INFACON XII in 2010 by the ICFA at its meeting held during INFACON XI in New Delhi. The following invitation was recently issued by the chairman of Organising Committee for INFACON XII, Jorma Daavittila. Participation from South Africa should be encouraged based on the major contribution the local industry has made to global developments and the close relationship with Finland over many years.

Invitation to attend INFACON XII

The Twelfth International Ferro Alloy Congress
June 6–9 2010, Helsinki, Finland

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Dear Delegate

The Twelfth International Ferro Alloy Congress (INFACON XII) will be held on June 6-9, 2010 in Helsinki, Finland.

The Congress is a major forum for exchange of knowledge and new experiences in ferroalloys production, applications and markets. The theme in Helsinki is 'Sustainable Future'.

The Organising Committee invites you to attend this Congress, and we look forward to welcoming you to Finland.

For further information, please visit the Congress web page www.infacon12.com.

7.3 SAMREC

J.R. Dixon, Chairman

The revised SAMREC Code and the SAMVAL Code were issued for industry comment late in 2006. Both codes attracted much comment from industry even though they had been subjected to a long and all inclusive consultative process. The level of comment reflected the healthy maturity of the South African minerals industry for mineral resource and reserve reporting. The SAMREC code was also submitted to our colleagues in CRIRSCO for comment and was returned with many compliments.

The comments on the SAMREC Code were quickly dealt with and the new Code was passed by Councils of the GSSA and the SAIMM in June 2007. The code will now be published and launched at an appropriate function.

The SSC has been working in conjunction with the JSE Limited to incorporate the new Code into the Section 12 Listing Rules and this has now been completed. The relationship with the JSE continues to be strong and distinguishes South Africa from many of our international counterparts.

The SAMVAL code has been more problematic and every effort is now being made to incorporate the many comments received into the code and to publish as soon as possible.

The SSC has continued its participation in the Committee for Mineral Reserve International Reporting Standards (CRIRSCO) and is represented by Ferdi Camisani and Roger Dixon. CRIRSCO has recently been accepted as a working group of the International Council of Mining and Metals (ICMM), which will assist with administrative duties and provide a modest budget.

The CRIRSCO Template, which is a guideline for countries developing their own reporting standards, has been published and is available on the CRIRSCO website.

One of the more important tasks for the SSC and CRIRSCO itself is the continued interaction with the International Accounting Standards Board, which is aiming to have an internationally accepted protocol for placing a value on mineral resources and reserves for inclusion on the balance sheet of mineral companies.

Ferdi Camisani has continued as chairperson of the UNECE working group working on the harmonization of reporting standards between solid minerals industry and the hydrocarbon industry, attending meetings in Geneva and Washington. Financial assistance for attendance at these meetings will now be forthcoming from the ICMM.

Members of the SSC recently participated in the organization of the Reserve Estimation and Reporting Africa 2007

conference held at the Sandton Convention Centre, which attracted international speakers and received positive reviews from delegates. The number of delegates again emphasized the importance attached to mineral reserve and resource reporting in South Africa.

The Investment Analysts award, adjudicated by the SSC, for excellence in reporting by mining companies, was this year won for the second time by Gold Fields. The standard of reporting amongst all mining companies has dramatically improved over the four years this award has been in existence. Thanks to Catherine Zita Galbraith for again organizing the adjudication.

My thanks to Matt Mullins and Rob Croll for their leadership of the working groups dealing with the SAMREC revision and the SAMVAL Code and to the SAIMM Secretariat for their support as always.

8. Management and administration

Portfolio Holder: R.P.H. Willis

The Secretariat consists of:

Ms Carina Reynders (Manager)

Ms Julie Dixon (Conference Co-ordinator)

Mrs Serena Jackson (Bookkeeper)

Mrs Shahida Moosa (Switchboard/Receptionist)

Mrs Zuliakha Malgas (DTP Operator)

Miss Nazli Mamdoo (Journal Secretary/Publications Co-ordinator)

Mrs Ginette Oliver (Membership and Subscriptions Administrator)

Mrs Anna Panana (Conference Secretary)

Ms Hannie Pretorius (Conference Co-ordinator)

Mrs Apathia Sello (Administration Clerk)

Mrs Lerato Tsiki* (Accountant)

Mrs Dawn van der Walt (DTP Supervisor)

Ms Caroline Williams* (Conference Co-ordinator)

Mrs Lara Winning* (Conference Co-ordinator)

* Resigned during the year

The SAIMM, Office Bearers and Council record their appreciation to the above for their service.

8.1 Finance

J.A. Cruise, Honorary Treasurer

Last year I reported that we had had six successful years financially and that I hoped that our 'run of fat years will extend to the biblical seven'. I am pleased to report that this is indeed so.

If we look at our Income Statement summary, we see that our surplus for the year was R4 165 927 (R3 738 041), of which R1 332 858 (R489 534) was operating surplus and R2 836 945 (R3 248 685) was income from investments.

The Detailed Income Statement shows that subscriptions for Company Affiliates increased to R437 981 (R377 930) and that for Individual Membership increased to R1 169 698 (R944 369). As this is an increase above the annual subscription rate increase, it indicates an increase in membership numbers.

Conferences, colloquia, etc. showed a slight decrease from last year's record surplus to R1 740 513 (R1 981 615). This can be ascribed to conferences being held at either side of the financial year end. This excellent income for two years running

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lies at the door of not only the two technical programme committees, who have not only held world-class conferences in both their content and numbers, but also the SAIMM Secretariat in their organization and attention to containing costs.

Income from investments showed an increase in dividend revenue of R272 087 (R242 677), an increase in interest received of R157 623 (R67 818), a decrease in the amount that the investment portfolio has increased to R2 095 489 (R2 689 611) and an increase in the value of assets sold to R311 746 (R248 579).

Expenditure for the year decreased to R2 015 334 (R2 814 380). This was made up in the main by a decrease in administration and secretarial costs to R1 116 178 (R1 710 100) due to the fair allocation of these costs to the conferences, an increase in *Journal* secretarial fees to R131 590 (R113 798), a decrease in *Journal* expenses to R1 367 786 (R1 444 031), with a commensurate increase in advertising revenue to R712 720 (R553 773), with the same number of *Journals* for this year as last year, and an increase in depreciation to R94 500 (R75 224).

Our listed investments increased by 37% to R11 529 514 (R8 426 352). Our cash and cash equivalents increased to R3 237 763 (R3 087 087). Our total assets increased during the year to R17 982 998 (R12 798 538), and total liabilities increased to R2 290 243 (R1 496 662).

Again, this year's financial success is due to many people whose unstinting work often goes unnoticed or is accepted at the Institute and by our members as the norm. To the members who serve voluntarily on the Institute's committees, a huge debt is owed, thank you. To the Secretariat who are the cogs in the wheel of our Institute, thank you. To Serena Jackson, our bookkeeper, who took over the accounting function a few months ago at short notice, well done. To our auditors R.H. Kitching who produced these Financial Statements in the limited time available between our year end and our AGM, thank you. To Dawn van der Walt and Zuliakho Malgas of our Desktop Publishing department who got the Annual Report to the printers on time, yet again, well done.

Finally, I would like to draw members' attention to the Statement of Changes in Reserves, which in old-fashioned parlance is Changes in Equity. The following are the Changes in reserves for the past seven years:

Year	Change R	Reserve R
2000		998 193
2001	803 8161	802 009
2002	1 607 9243	409 933
2003	575 730	3 982 633
2004	2 676 028	6 658 661
2005	1 094 849	7 753 510
2006	3 548 366	11 301 876
2007	4 390 879	15 692 755

The biblical seven fat years have been achieved. We now have a war chest with which we can do great things.

New Members

Fellows

G. Annandale, D.R. Betton, A.J. Burger, J.R. Derbyshire, J. Henckel, M.A. Hermanus, J. Kuypers, K. Moxham,

R. Palmer, H. Strauss, A. Taylor.

Members

C.A. Ackhurst, V. Agnello, S.G. Amoomo, S.R. Amos, A.K. Anyimadu, Z. Apuleni, P.S. Aylward, S. Banda, J.A. Basson, G.A. Boting, C.W. Brown, M.O.R.G. Buyens, W. Calitz, M. Campbell, S.B. Chantler, P.M. Chennells, G. Chifadza, D. Christopherson, B. Clarke, I.D. Crowe, E. Dadzie, L. de Villiers, C.J.N. Christian, A. Ditlhakeng, K.R. Donaldson, A.W. Dougall, A.D. du Plessis, T.Y. Dube, G.-I. Ekosse, M.S. Farrem, K.G. Fisher, A.R. Formanowicz, A. Forsyth, L.J.H. Fourie Pr Eng, C.R. Fredericks, D.J. Gillepsie, D.J. Gonsalves, S.P. Graham, M.E.J. Grummitt, G.B. Guldenpfening, C.J. Helfer, M.J. Hughes, R. Hundermark, J. Jacobs, F.W. Jawa, S.E.E. Johansson, K.S. Jones, J. Kabwe, I.S. Katanda, W. Kgope, N. Kingaby, C.B. Klopper, G.C. Kraft, F.T. Kruger, M.S. Kumwendas, W. Kuswani MBI, J.J. La Grange, A.S. Lalla, M.J. Little, S.R. Madziwa, P.D. Malunga, L. Manjengwa, V.G. Mapimele, B. Maramba, D.E. Marsden, V.V. Mashego, S. Matutu, N. McKenna, J.G. Meyer, G. Minnitt, M. Mohlabane, K.D. Moletsane, A.M. Moshokwa, Y.N. Mupupa, W. Mvula, K. Ndjibu, F.C. Ng'Ona, G. Nicholas, E.M.K. Nkulu, R. Opeka, J.L. Osborne, J.F. Petrick, L. Petrick, J. Phiri, R.E.L. Pobe, D.D. Pretorius, A.G. Quadling, K.H.H. Reading, C.R. Reeves, E. Rikhotso, C.E. Robertson, M. Robins, M.W. Roebert, A. Rompel, E.A. Roux, E. Ruzine, L.E. Sennanye, L. Shamu, G.S. Simate, H.P.S. Simpson, T. Sisy, C.F.P. Smythe, D.R. Swart, M. Swart, P.J. Theron, O.V. Thobela, S. Toure, I.T. Tshabalala, R.M. Tyler, M.C. Tyndall, L. van Aswegen, J.W. van der Merwe, D. van der Westhuizen, T.F. van Niekerk, M.J. van Schaik, B.M. van 't Riet, G.J. van Tonder, J.J. van Wijk, E. Vardar, J. Venter, R.J. Verster, D.R. Vogt, A.P. Vorster, M.J. Watt, P.J. Wells, L.K. Witika, D.R. Young, B. Zhao.

Associates

I.M. Abraham, D. Badenhorst, W.G. Barry, W.G. Bartholomew, R.J. Bennett, H. Bester, M.C. Boroko, J.B. Bosman, S.Z.D. Botsane, K.L. Bright, S. Buthelezi, T.T. Chigova, D.S. Coetzee, M.J. Davhana, J. de Jesus, H. de Klerk, T.D. Dhlamini, P.M. Dight, C.L. de Plessis, E. Elias, T.L. Gabe, B.C. Gerrell, E. Goagoseb, W.D. Gore, P.-J. Grabe, L. Hage, G.J. Hall, M.R. Hayton, P.N.J. Houman, C.E. Jansen van Rensburg (du Raan), D.I. Kalumbu, B.R. Kamstra, S.H. Kantwela, A. Katake, P.B. Kiggala, N. Kriel, R.L. Langa, S. Likhuleni, S.W. Louw, P. Lugisani, C. Machio, A. Madlingozi, C.A. Magalhaes, M.L. Makgaka, R. Malatsi, K.E. Maletzky, M.T. Maponopono, H.E. Mashego, J. Mathebula, O. Matlala, V.N. Mbangula, R.K.K. Mbaya, S.C. McGonigal, K.J. Menoe, S. Millward, R.J. Modiba, E.D. Mogopodi, M. Moje, P.W.K. Mokoena, T.R. Mokoena, G.J. Motsi, J.G. Moys, S. Mutavhatsindi, A. Muwila, H.A. Myburgh, T. Naidoo, M.L. Naude, V.L. Nkuna, N.G. Ntengou, L.T. Nyengerai, S. Pelletier, K. Petersen, P.J. Petit, T. Qhamakoane, R.L. Ratlou, W.F. Richter, R. Rikhotso, A. Robberts, R.S. Roy, J. Saunders, J.L. Schnuir, J.L. Schoeman, J. Schulze-Messing, A.J. Schutte, E.M. Setagane, M.S. Shang, A. Simbanegani, H.V. Simelane, V.N. Tawane, H. van der Walt, W. van der Westhuizen, P.W. van Deventer, F.E. van Jaarsveld, G.L. van Rooyen, S.J. van Wyk, K. Viljoen, C.C. Visser, C.F. Vos, A. Weber, T.H. Westermann, H. Wilhelm, N. Zipethe, S.V. Zulu.

Annual report

Students

M.D. Adams, K.K.T. Avia, M.A. Bantshi, D.G. Baxter, E.G.C. Bezuidenhout, A. Bhalla, I.J. Bisansaba, G. Bosch, B.B. Bosman, J. Botha, M.F. Buthelezi, M. Buthelezi, O.J. Buys, A. Chaendera, I. Chauke, L.T. Chuene, E. Coetzer, L.J. Coetzer, W.C. Coetzer, T.L. Crawford, G. Dabula, C. Dednam, L.C. Dikgale, N.I. Dikoko, R.J. du Toit, X.M. de Toit, J. Dube, L.C. Engelbrecht, J.C. Esterhuysen, P.W. Ferreira, R. Gilfillam, T. Gloster, J.K. Gouws, M.B. Hamese, M. Hand, S.S. Hlophe, E.U. Kaveru, J.K. Keagile, R.S. Kekana, M.H.S. Kgarira, M.N. Kgengwe, M.I. Kgope, J. Kgwane, H.L. Kilian, K.M. Kirk, G.D. Kleynhans, P. Kluge, Y. Kruger, J. Krzyzanowska, S.V. Langa, K.I. Lebelo, C.M. Leburu, M.S. Legodi, T.D. Lekoko, K. Lerumo, C.S. Little, E.C. Luyke, M.I. Mabala, A.K. Mabelane, M.L. Mabitsela, N.T. Mabuza, S.E. Maeyame, M.L. Mahapa, T.R. Makafane, M.W. Makamu, M.M. Makele, A.F. Makhese, M.I. Makola, P.K. Malapane, M.S. Malesela, P. Malele, M.P. Maloma, N.G. Mamafha, I.C. Mannafela, R. Manyenje, M.O. Marakalla, T.S. Marobane, F.F. Maseko, M.B. Maseko, M. Masemola, L. Mashele, T.P. Mashiane, M.G.C. Mashilo, N.F. Mashinini, S.J. Mashinini, N.D. Mashitsho, P.R. Mathabatha, L. Matheus, A.M. Matlhaku, T. Matoba, P.A. Mazibuko, S.B. Mbonani, M.W. Mbongo, F.K. Mdluli, K.M. Mekgwe, S.V. Mkhathshwa, P.L. Mkhonza, L.B. Mmesi, M.C. Mmoto, T.R. Modiba, L. Modise, K.M. Modisenyane, P.H. Mogakabe, S.P. Mohlake, M.-P. Mojapelo, L.A. Mokone, M.T. Moloto, J. Monama, M.S. Monyemangene, B.A. Moshodi, R.S. Mosimanyana, N.J. Mothibe, K. Mothulatshipi, M.H. Motloutsi, C. Moyana, T. Mpowe, K.N. Mthethwa, T. Mudau, R. Mudogwa, L.M. Mufamadi, I.A.M. Mugieto, M.M. Mulaudzi, T. Munchelele, H.K. Musiyarira, A.W. Mutelo, H. Mutondwana, D. Muusha, N.R. Mvelase, N.V. Mwamba, C. Mwapaura, O.C. Nakedi, T.V. da A. Nandesifeni, S.N. Ndiweni, J.P. Ndjago, T. Ndlovu, D.E. Nethavhanani, I.J. Neuhoff, A.L. Ngobeni, E. Ngobeni, B.P. Ngubeni, K. Nkatswe, J. Nkosi, P.T. Nortje, M. Nteo, S. Nxele-Mntambo, J.C. Oguh, P.A. Olubambi, M.L. Phahlamohlaka, M.L. Phasha, P.J. Phasha, M. Phejaolema, T.S. Phele, P. Pholose, J.D. Pretorius, M.P.S. Pretorius, J.P. Prinsloo, J. Puig Mengual, A.M. Radingwane, M.T.V. Rakosa, O. Ralushai, M. Raluswinga, M. Ramaphakela, S.N. Ramaremela, L.J. Ramashala, C.M. Ramorula, T. Ramovha, T. Randima, N.T. Ratshitaka, M.A. Ratshoshi, Q. Reynolds, V.M. Risimati, L. Rwodzi, T.C. Saasa, K. Sebako, A.I. Sebitiele, R.J.M. Sebitloane, I.K. Segatlhe, N.M. Segatlhe, A.L. Segoe, E.B. Sekgokong, M.R. Selkwane, N.H. Semane, E.L. Seome, M. Serojane, B.M. Etsepu, C. Setuke, N.B.T. Shabalala, I. Sibisi, T.B. Simelane, K. Sithelo, L.N.S. Sithole, M. Sivhidzho, C.W. Siyasiya, G.H. Snyman, A.I. Stoker, A.P. Tabane, J.T. Tebele, R.M. Teffo, N.P. Thanjekwayo, M. Thanwane, R. Thothela, M.W. Tladi, K.K. Tladiyamoroba, A. Tshabangu, M.K. Ubis, J.L. van den Berg, L. van Dyk, D.J. van Wyk, J.A. van Zyl, H.J. Vorster, R.L. Williams, J. Winnan, M. Xaba, K. Yathavan, K.S. Zulu, K. Zwane

Company Affiliates

Aquarius Platinum (Pty) Ltd, DMS Powders, IRCA (Pty) Ltd, MDM Technical (Pty) Ltd, RSV Misym Engineering Services (Pty), Skorpion Zinc

Resignations

Fellows

E. Adlard, J.L. Fourie, P.J. Hoff, G.S. Lawes, H. Laycock, F.J.V. van Wyk.

Retired Fellows

I.N. Hayward, O.G. Lilford, E.C. Stoltz, E.H. Thomas.

Members

N. Adams, A.R. de Beer, M.G. Downing, P.C. Freyberg, V.A. Kononov, D.J.R.M. Ras, W.H. Slaney, S. Turner, G.M. van Niekerk.

Retired Members

C.J. Cloete, D.I. Watson.

Associates

P. Doubell, L.G. Erasmus, D.A. Hayman, F.W. Human, S. Lidovho, A. Roodt (van Niekerk), A. Steinmüller.

Students

Q. Reynolds.

Company Affiliates

Alexander Forbes, Aquarius Platinum (Pty) Ltd, Boart Longyear Seco, Dantex Explosives, Diamond Fields South Africa (Pty) Ltd, IRCA (Pty) Ltd, MDM Ferroman (Pty) Ltd, P&H Minepro Services Africa, PPC Cement, SA National Roads Agency.

Members transferred to Higher Grade

Transfer from Member to Fellow

A.D. Pooley, A.R. Guest, J.J. Coetzee, G.I. Cunningham, W.D. Northrop, F.W. Taylor, N.A. Fortman, D.H. Kullmann, J. Henckel.

Transfer from Associate to Fellow

C.M. Armstrong, H.B. Nyirenda, J. Theron, P.K. van Manen, M.A. Hermanus.

Transfer from Associate to Member

E. Barnard, G.A. Botting, E. Dadzie, K.R. Donaldson, L.J.H. Fourie, S.P. Graham, S. Ilhan, A.N. Mainza, D.E. Marsden, W.P. Nel, G. Nicholson, C.E. Robertson, W.J. Theron, M.R. Tlala, L. van Aswegen, J.A. van Niekerk, J.J. van Wyk, A.E. Vidal da Silva, J.H. Zietsman, P.N.L. Lategan.

Transfer from Student to Member

J.A. Basson, J.G. Meyer, I.T. Tshabalala, T.F. van Niekerk, E. Vardar.

Automatic transfer to Associate

K.J. Afewu, R.J. Bennett, D.H. Bowker, C. Coertzen, U.A. Curle, H. de Klerk, B.C. Gerrell, J. de C. Grobler, J.C. Grobler, M.A. Kabemba, T.V. Kaston, A. Katake, D.J. Kruger, M.J. Lukhele, L.M. Mabokela, P. Madima, M. Mahlambi, N. Maseko, D.H. Mokgofa, W.R. Molapisi, M. Motau, M.H. Mothiba, T. Mudau, S. Mwansa, X. Ndlovu, S.A.S. Nhleko, R.J. Nicholson, G.G. Olivier, M.J. Opperman, E.D. Ras, E. Ras, M.J.G. Rose, W.Z. Saungweme, T.C. Sebutsoe, D.K. Selepe, L.K. Sengani, T.W. Sepetla, J.C. Steyn, J.-A.N. van der Linde, N.K. Wells, Q. Zaayman.

Annual report

Members who retired

Fellows

P.J. Cook, P.K. Hofmeyr, P.C. van Aswegen, J.A. Napier, H.A. Simonsen, W.P. Furusa, K.I. Oravec, F.C. Harvey, W.A. King, R. Hemp, W.A. Nairn, B.H. Strohmeier

Members

D.L. Hodgson, R.S. Traviss, C.V.B. Cunningham, W.A. Gericke, E.N.D. Westgate.

Associates

W. Mitchel.

Deceased

Honorary Life Fellow

R.P. King, H.G. Mosenthal, R.P. Plewman.

Fellows

R. Morris.

Life Fellows

Y.F. Armstrong-Smith, V.C. Barnes, G.S. Wilder.

Retired Fellows

G.I. Gossman, R.S. Pearson.

Members

B.I. Walker.

Associates

P.V. Seodigeng.

Retired Members

A.M. Harris.

Members who were reinstated

Reinstated as a Member

G. Akdogan, P.C. Freyberg, H.P. Grobler, G.T. Lewis, T. Pongweni, M. Pouroullis.

Reinstated as Associates

P.G.R. de Villiers, E. Fouche, T.P. Kabinde, G.C. Krafft Jr., D.H. Mokgofa, T.M. Nzimande, J.G. Oelofse, M.L. Ramashilabele, K. Sayginar, M.E. Sumner.

Reinstated as a Fellow

P.J. Hoff, J.A. Luckmann, C. Pouroullis. ♦



School of Chemical and Metallurgical Engineering—2007–2008

POSTGRADUATE: GDE, M. ENG, M Sc

MATERIAL SCIENCE AND ENGINEERING, PYROMETALLURGY & COAL PROCESSING COURSES, WELDING, MINERAL PROCESSING AND EXTRACTIVE METALLURGY, PROCESS ENGINEERING

2007

8–12 October	Welding Metallurgy of Steels
15–19 October	Experimental Process Synthesis
22–26 October	Coal Conversion
29 October–2 November	Transport Phenomena in Materials Processing
29 October–2 November	Kinetics & Transport Phenomena in Pyrometallurgy
October	Electrical, magnetic, optical & thermal properties of materials
5–9 November	Coal Combustion
5–9 November	Destructive & Non-destructive testing & Evaluation
12–16 November	Structure and properties of engineering materials
12–16 November	Electrometallurgy

2008

5–9 May	Process Flowsheet Synthesis
May/June	Physiochemical principles of refractory use
June	Coal preparation (Beneficiation)
July	Coal Combustion and gasification
18–22 August	Distillation Synthesis
September	Solid, Liquid and Gaseous State Pyrometallurgical Processes
November	Coal Management and Marketing