Annual report
FOR THE YEAR ENDED 30TH JUNE, 2000

Council for 1999/2000

President
M.H. Rogers

President Elect
Dr L.A. Cramer

Vice Presidents

Senior Junior
A.A.B. Douglas S.J. Ramokgopa

Immediate Past President
J.R. Dixon

Honorary Treasurer
J.A. Cruise

Members of Council

B.C. Alberts H.G. Mosenthal
W. Assibey-Bonsu* G.Y. Nisbet
Dr N.A. Barcza N.M. O’Brien
R.D. Beck R.G.B. Pickering
Prof. A.N. Brown Prof. R.P. Plewman
Dr L.A. Cornish S.J. Ramokgopa
Dr L.A. Cramer Prof. R.E. Robinson
J.A. Cruise M.H. Rogers
J.R. Dixon D.A.J. Ross-Watt
A.A.B. Douglas Prof. R.F. Sandenbergh
F.M.G. Egerton Dr P.D. Scott
Prof. R.M.S. Falcon Dr H. Scott-Russell
C.E. Fivaz Dr T.R. Stacey
K.J.R. Ford Dr O.K.H. Steffen
R. Graham D.J. van Niekerk
Dr R.V.R. Handfield-Jones** Dr W.H. van Niekerk*
J.P. Hoffman P.E. Venter
H.E. James J.C. Viljoen
P.J. Knottenbelt** J.N. Wallington
R.P. Mohring

Past Presidents Serving on Council

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

Key Objective 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 South 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. International Liaison
7. State Liaison
8. Management and Administration.

1. Interests of Individual Members
Portfolio Holder: Dr L.A. Cramer

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 practice 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 inter-changes;

➤ undertakes to prepare and publish career-guidance brochures, bursary handbooks, audio-visual and video programmes, optional school-curricula material, etc., and participates in the activities of the RADMASTE Centre to stimulate scholars and students to select careers in the minerals and metals sector of the South African economy,
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► 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 improve 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 recognise 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 South 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

Dr L.A. Cramer, Chairman
A.A.B. Douglas, Vice-Chairman
Dr N.A. Barcza
R.D. Beck
Prof. A.N. Brown
J.A. Cruise
J.R. Dixon
F.M.G. Egerton
C.E. Fivaz
H.E. James
R.P. Mohring
H.G. Mosenthal
G.Y. Nisbet
Prof. R.P. Plewman
D.A.J. Ross-Watt
Prof. R.F. Sandenbergh
Dr T.R. Stacey
Dr O.K.H. Steffen
D.J. van Niekerk

Membership

Members of the SAIMM comprise engineers, metallurgists, chemists, physicists, geologists, certificated managers, and technikon diplomas, 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 30 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.

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 post-graduate 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 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 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 is being educated or trained in a manner approved by the Council.

When he no longer qualifies as a Student member, he 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 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 with regard to change in designation, change in employer, payment address or change in postal address. Without this the communication link to members is broken. Also members must ensure that where subscriptions are paid by a company that 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 satisfies the need for continuing education;
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Table I

<table>
<thead>
<tr>
<th>Membership grade</th>
<th>Members July 99</th>
<th>New members</th>
<th>Transfers in</th>
<th>Transfers out</th>
<th>Reinstatements</th>
<th>Resignations</th>
<th>Deceased</th>
<th>Struck-off</th>
<th>Computer adjustment</th>
<th>Net gain (loss)</th>
<th>Members June 2000</th>
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<tr>
<td>Honorary Life Fellow</td>
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<td>4</td>
<td></td>
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<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<td>4</td>
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<tr>
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<td>30</td>
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<td></td>
<td>29</td>
<td>1</td>
<td>-1</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
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<td></td>
<td>7</td>
<td>5</td>
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<td>3</td>
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<td></td>
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<td>788</td>
<td>36</td>
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<td>53</td>
<td>3</td>
<td>24</td>
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<td>25</td>
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<td>730</td>
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<tr>
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<td>2</td>
<td>1</td>
<td>3</td>
<td></td>
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<td>72</td>
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<td>Associate</td>
<td>930</td>
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<td>2</td>
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<td></td>
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<td></td>
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<td>1</td>
<td>9</td>
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<tr>
<td>Student</td>
<td>244</td>
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<td>4</td>
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<td>54</td>
<td>7</td>
<td></td>
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<td>9</td>
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<td></td>
<td>7</td>
<td></td>
<td>+7</td>
<td></td>
<td>143</td>
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<tr>
<td>Total</td>
<td>2762</td>
<td>205</td>
<td>136</td>
<td>136</td>
<td>13</td>
<td>99</td>
<td>13</td>
<td>157</td>
<td>+5</td>
<td>-44</td>
<td>2718</td>
</tr>
</tbody>
</table>

- a bi-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 regarding 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 bi-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 regarding 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

F.M.G. Egerton, Chairman
P.J. Knottenbelt, Vice chairman
Dr R.M.S. Falcon* Prof. R.F. Sandenbergh
Prof. G. Gerrans* R. Tait*
S.J. Ramokgopa*
*Co-opted members

The Committee met regularly during the 1999–2000 council year. Efforts were concentrated on career guidance and publicising careers and opportunities in the metals and minerals industries. The ‘Career Guidance and Information Package’ was distributed widely and continues to be well accepted. The committee continues to be active in various expositions throughout the country.

Radmaste packages were distributed to many underprivileged schools throughout South Africa, via the chairmen of the regional branches.
During 1999 five topics were derived from the major human resources processes involved with skills acquisition, development, deployment and retention.

- Topic 1: Recruitment and Selection
- Topic 2: Further or Higher Education
- Topic 3: Socialization and Initial Training
- Topic 4: Deployment and Retention
- Topic 5: Continuing Education and Training

The above key topics were developed in the form of action steps.

The outgoing chairman of the committee wishes to thank the members of the committee and the secretariat without whose dedicated efforts the above-mentioned activities would not have been possible.

1.3 Promotion of the SAIMM

Members are aware that discussions are being held with other Professional Societies and Professional Associations in the Minerals Industry in South Africa with a view to forming an umbrella body to represent members’ interests in Industry issues.

Discussions with the Geological Society of South Africa have revealed sufficient areas of mutual interest and synergies for there to be a partial merger of the two Learned Societies. At the same time it has been recognised that there are member’s interests which are specific to each of the organizations. It is envisaged that the SAIMM and the GSSA will continue to manage these ‘specific interests’ on behalf of their members, while the areas of mutual interest will be managed jointly. Work on the partial merger continues under Council’s guidance.

In the course of the year the Institute concluded an agreement on closer co-operation with the South African Coal Processing Society. The main areas of co-operation being:
Observer status on each others councils
Participation by the SACPS on Extractive Metallurgy TPC
Sharing of mailing lists in order to increase market penetration
Publishing refereed papers authored by SACPS members in the Journal.

These arrangements will be of mutual benefit to the members of both organizations and to the organizations themselves.

The Institute has concluded an agreement on limited cooperation with the Institute of Mining and Metallurgy. In terms of the agreement, IMM members resident in South Africa and who are not members of the SAIMM will be included on our mailing list. The Institute secretariat will also assist in organising ad hoc events for the IMM. These events will not compete with the activities of the Institute.

Discussions on the formation of the umbrella body are being held with the South African National Institute of Rock Engineers, the Mine Ventilation Society and the members of the Mines Professional Associations.

During the year Letters of Introduction were sent to the Office of the State President and eight other Government Ministries and to some 1027 businesses operating in the Minerals Industry. The intention of the letters was to alert the recipients to the activities of the Institute and to canvass new members, both of Company Affiliates and individual members. The response has been disappointing and should be regarded as an ‘indication of the effort that will be required in the future in order to maintain membership levels and interest in the Institute.

1.4 Awards and Adjudication Committees

Awards and Adjudication Committee—Mining
M.H. Rogers, Chairman
A.A.B. Douglas Dr T.R. Stacey
F.M.G. Egerton D.J. van Niekerk
R.P. Mohring J.C. Viljoen
R.G.B. Pickering

Awards and Adjudication Committee—Extractive Metallurgy/Metals Technology
Dr L.A. Cramer, Chairman
J.W.P. Bennie* N.M. O’Brien
Dr L.A. Cornish Dr R.L. Paul*
J.K.R. Ford Prof. R.F. Sandenbergh
Prof. A. Garbers-Craig* Dr W.H. van Niekerk
R. Graham
*Co-opted members

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 Dr H.F. Oppenheimer
1981 Dr W. Bleloch
1982 Dr F.G. Hill
1983 Dr A.W. Whillier (posthumously)
1984 Prof. D.G. Krigge
1985 Dr R.E. Robinson

1986 Prof. M.D.G. Salamon
1987 Dr T.F. Muller
1988 Dr W.J. Wilm de Villiers
1989 Dr R.A. Plumbridge
1990 Dr W.G. Boustred
1991 Mr P. du P. Kruger
1992 Mr E. Pavitt
1993 Prof. D.A. Pretorius
1994 Dr H. Wagner
1995 Dr Oskar Steffen
1996 Mr B.E. Horsov
1997 Prof. D.W. Horsfall (posthumously)
1998 Mr B.P. Gilbertson
1999 Mr L. Boyd

This year the award is being made to Alex Mokken 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 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:

<table>
<thead>
<tr>
<th>Year to</th>
<th>Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td></td>
</tr>
<tr>
<td>1924</td>
<td>E.C. Polkinghorn*</td>
</tr>
<tr>
<td>1926</td>
<td>R.M. Martin</td>
</tr>
<tr>
<td>1927</td>
<td>W. Allen*</td>
</tr>
<tr>
<td>1930</td>
<td>E.T. Dunstan* (posthumously)</td>
</tr>
<tr>
<td>1931</td>
<td>P.L. Ward*</td>
</tr>
<tr>
<td>1932</td>
<td>F. Bowdler</td>
</tr>
<tr>
<td>1933</td>
<td>J.E. Laschinger*</td>
</tr>
</tbody>
</table>
| 1934   | F.D. Cartwright | E.R.C. O’Connor
| 1935   | C.H. Coxon | B.M. Roberts
| 1936   | J. Levin | A.A. von Maltitz
| 1937   | D.D. McWilliam* | T. Waterman
| 1938   | A.C.M. Cornish-Bowden* | J.W.V. Mortleman* |
| 1939   | H.E. Cross* | K. Roop* |
| 1940   | E.F. Laschinger* | A. Siff* |
| 1941   | E. Margo | O. Weiss* |
| 1942   | O.B. Swallow* |
| 1943   | O. Deane | A.H. Mokken
| 1944   | T.L. Gibbs | H.L. Monro*
| 1945   | R.C.J. Goode* | R.M.F. Seawright
| 1946   | F.G. Hill* | A.C. Pigott*
| 1947   | D.M. Jamieson* | J.S. van Zijl*
| 1948   | D.J. Rogers | L. Walter*
| 1949   | W. Bleloch* | J.J. Klein* |
| 1950   | L.A. Bushell* | C.D. Storrar
| 1951   | K.W. Findlay |
| 1952   | V.C. Barnes | C.A. McKechnie* |
| 1953   | E.T.S. Brown* | J.A. Nixon
| 1954   | R.S. Cooke* | E. Popplewell
| 1955   | J.K.E. Douglas | C.G. Sovry
| 1956   | A.L.A. Forder* | E.W. Thiel*
| 1957   | G. Armstrong-Smith | T.A. Newman
| 1958   | D.E.R. Ayres | R.S. Pearson

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L.D.C. Bok D.C.J. Squirrell* 1923 Dr A. Aiken S.H. Pearce
A.W.L. Brereton G.G. Stanley A.F. Crosse J.P. Williams
E.H.D. Carman R.F.J. Teichmann* J. Littleton
G.D. Gettliffe* I.S. van Eyssen* A.W.L. Bradley
W.G.H. Jackson* S.J. Venning Prof. J.A. Wilkenson
A.H.H. Davison* D. de V. Oxford* A. Whitby
D.J. Forder E. Pavitt 1931 Prof. J.A. Wilkenson
A.R.C. Fowler A.C. Petersen* 1932 J.R. Thurlow
H.F.W. Ketelhuy P.E. Rudolph S. Newton
J.D. McNamara P.W.J. van Rensburg* 1942 Dr Wm. Cullen A. McArthur Johnston
T.F. Muller* 1938 G. Melvill F.W. Watson
1941 Sir R.N. Kotze 1943 Prof. G.H. Stanley
1942 R.E. Burnton O.L. Papendorf E.H. Johnson
R.C. Espley-Jones V.O. Steed Prof. G.H. Stanley
N.M. Hayne* J.E. van Leeuwen* 1938 Dr. D. J. van N. Door T.K. Prentice
R.T. Naudé W.C. Walmsley* C.J. Gray R.S.G. Stokes
A.F. Dick R.P. Plewman Jas Gray Prof. S.J. Truscott
R.B. MacGillivray J.F. Reid J.V. Muller Prof. G.A. Watermeyer
D.J. Molony* P.B. Weehuizen Prof. John Orr J.A. Woodburn
J.D. McMorran 1946 Dr J. van N. Door T.K. Prentice
1944 J.L. Curtis* K.E. Steele* 1951 W.W. Mein
E.T. Pinkney A.S. Swartz C.J. Gray R.S.G. Stokes
L.J. Prince A.H. Taute Jas Gray Prof. S.J. Truscott
V.M. Reinecke* W.I. Spence J.V. Muller Prof. G.A. Watermeyer
1945 J.P. Hugo J.A. Tyser Prof. John Orr J.A. Woodburn
1947 D.F. Foster N.A. Stacey 1951 W.W. Mein
1948 G.P. Bennett D.F. Grieve C.J. Farr
J.F. Curtis D.A. Immanuel 1953 Dr. P.E. Hall Prof. B. St. J. van der Riet
O. Davel V.C. Ward 1954 Prof. C. Riccard Jeppe
1949 B.E. Hersov R.P. Plasket 1955 Dr. P.N. Latein
B.H.L. Leach N.C. Pope J.E. Pollard Prof. C. Riccard Jeppe
M.J. Martinson W.T. Ruhmer 1958 Dr. A.H. Flugge-de-Smidt
D.G. Maxwell T. Zadkin 1960 G. Hildick-Smith A.J. Walton
• Deceased since becoming members of club
Honorary Life Fellows
Pre– 1923 Dr A. Aiken S.H. Pearce
1923 Dr J. Moir A.F. Crosse J.P. Williams
1930 H.A. White J. Littleton
1931 Prof. J.A. Wilkenson
1932 J.R. Thurlow
1934 Dr Wm. Cullen A. McArthur Johnston
1938 G. Melvill F.W. Watson
1941 Prof. G.H. Stanley
1943 Sir R.N. Kotze 1946 Dr J. van N. Door T.K. Prentice
1946 Prof. G.H. Stanley
1951 W.W. Mein
1953 Dr. P.E. Hall Prof. B. St. J. van der Riet
1954 Prof. C. Riccard Jeppe
1955 Dr. P.N. Latein
1958 Dr. A.H. Flugge-de-Smidt
1960 G. Hildick-Smith A.J. Walton
Dr. A.J. Orenstein F. Wartenweiler
Dr H.S. van Eck
1961 Dr. C.S. McLean
1966 Dr. F.G. Hill Dr. F. Meyer
1970 Dr. H.E. Cross D.M. Jamieson
1974 Dr. R.J. Adamson C.J. Irving
1975 Dr. W. Bleech J.F. Reid
Dr. H. Britten
1979 Dr. P.J. Hugo P.W.J. van Rensburg
1980 Hon. S.P. Botha T.J. McIntyre
Prof. R.P. Plewman
Hon. P.G.J. Koornhof Dr. R.E. Robinson
Hon. P.G.J. Koornhof
A. Louw
1982 Dr. M.G. Atmore
1983 Dr. M.G. Atmore
1985 Dr. M.D.G. Salamon
1986 Dr. M.D.G. Salamon
1987 Dr. M.D.G. Salamon
1988 Dr. M.D.G. Salamon
1989 Dr. M.D.G. Salamon
1990 Dr. M.D.G. Salamon
1991 Dr. M.D.G. Salamon
1992 Dr. M.D.G. Salamon
1929 G. Hildick-Smith A.J. Walton
1930 H.A. White J. Littleton
1931 Prof. J.A. Wilkenson
1932 J.R. Thurlow
1934 Dr Wm. Cullen A. McArthur Johnston
1938 G. Melvill F.W. Watson
1941 Prof. G.H. Stanley
1943 Sir R.N. Kotze 1946 Dr J. van N. Door T.K. Prentice
1946 Prof. G.H. Stanley
1951 W.W. Mein
1953 Dr. P.E. Hall Prof. B. St. J. van der Riet
1954 Prof. C. Riccard Jeppe
1955 Dr. P.N. Latein
1958 Dr. A.H. Flugge-de-Smidt
1960 G. Hildick-Smith A.J. Walton
Dr. A.J. Orenstein F. Wartenweiler
Dr H.S. van Eck
1961 Dr. C.S. McLean
1966 Dr. F.G. Hill Dr. F. Meyer
1970 Dr. H.E. Cross D.M. Jamieson
1974 Dr. R.J. Adamson C.J. Irving
1975 Dr. W. Bleech J.F. Reid
Dr. H. Britten
1979 Dr. P.J. Hugo P.W.J. van Rensburg
1980 Hon. S.P. Botha T.J. McIntyre
Prof. R.P. Plewman
Hon. P.G.J. Koornhof Dr. R.E. Robinson
Hon. P.G.J. Koornhof
A. Louw
1982 Dr. M.G. Atmore
1983 Dr. M.G. Atmore
1985 Dr. M.D.G. Salamon
1986 Dr. M.D.G. Salamon
1987 Dr. M.D.G. Salamon
1988 Dr. M.D.G. Salamon
1989 Dr. M.D.G. Salamon
1990 Dr. M.D.G. Salamon
1991 Dr. M.D.G. Salamon
1992 Dr. M.D.G. Salamon

Gold and Silver Medals
Papers published in the Journal from March 1999 to February 2000 by members of the Institute were considered for medals.

Gold Medals
No awards were made.

Silver Medals
Silver medals were awarded to the following:
M.F. Wells for his paper published in the July/August issue of the Journal entitled ‘Construction of a concrete plug in South Deep’s main shaft to seal off a major water intersection’.

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 of time. Council has conferred Honorary Life Fellowship on the following persons:
Annual report

1993  No award
1994  B.C. Alberts
1995  R.D. Beck  H.E. James
      F.R. Janisch
1996  Prof. R.J. Dippenaar
      J.S. Freer
      H.G. Mosenthal
1997  J.A. Cruise
1998  D.A.J. Ross-Watt
1999  No award

In 2000 this award is to be conferred on Dr N.A. Barcza, J.R. Dixon and R.P. Mohring for their outstanding contribution to the Institute over a number of years.

Student Prizes
Prizes were awarded to the following students for the best student dissertations in part fulfilment of the B.Sc. (Eng.) degree:

Mining
W.C.S. Kotze, University of Pretoria
‘Haul road dust suppression’.

Extractive Metallurgy
No award was made.

Metals Technology
No award was made.

Other Prizes
Other prizes, made to students at the Universities of the Witwatersrand and Pretoria, were presented at faculty prize-giving ceremonies held at the respective Universities.

The prize winners were as follows.

University of the Witwatersrand
Prestige Prize
Mining  D. Holm
Metallurgy  D. Nardini

Book Prize
Mining  S. Newberry
Metallurgy  No Award

University of Pretoria
Prestige Prize
Mining  W. Kuys
Metallurgy  T. Dry

Book Prize
Mining  W. Kotze
Metallurgy  C.J. du Preez

Technikon Prizes
Prestige Prize
Metalliferous Mining  D. de Wet
Coal  J. Breytenbach

University of Cape Town
Prestige Prize
Chemical Engineering  A. van Niekerk
Materials Engineering  J. Buchanan

University of Stellenbosch
Prestige Prize
Chemical Engineering  A. van Niekerk

Cape Technikon
Prestige Prize
Chemical Engineering  R. Cameron-Dow

The prizes for the Universities of Cape Town and Stellenbosch, and the Cape Technikon will be awarded on 24 August 2000 at the Western Cape Branch Annual General Meeting.

Atlas Copco Travel Grant
No award was made in 2000.

Outokumpu Travel Grant
No award was made in 2000.

1.5 Banquet Committee
J.A. Cruise, Chairman

Dr L.A. Cramer  R.P. Mohring
J.R. Dixon  N.M. O’Brien
A.A.B. Douglas  M.H. Rogers

The banquet was again held at the Sandton Sun and Towers Hotel and was once again a sell-out.

This year the committee decided to have a guest speaker who could give both an in-depth look at the current political climate and also be humourous. Our choice of Mr Harald Pakendorf fitted the bill to the tee. He gave insight into the characters of our political leaders and the reasons he had high hopes for the political well-being of the country.

As usual the banquet guests had their fill and tripped the light fantastic past the bewitching hour.

2. Technical Meetings
Portfolio Holder: Dr L.A. Cramer

2.1 Technical Programme Committee—Mining
R.G.B. Pickering, Chairman

Dr W. Assibey-Bonsu*  P.S. Piper*
D. Cockcroft  J. Porter
D.H. Diering  G.L. Smith*
A.A.B. Douglas  Dr T.R. Stacey
F.M.G. Egerton  J. Truter
D.R. Fleming*  D.J. van Niekerk
Dr G.V.R. Landman  J.C. Viljoen*
P. Mwasinga*  J.N. Wallington*
N. Maslen  R.P.H. Willis

*Co-opted members

The technical Programme Committee—Mining arranged a number of events for the 1999/2000 SAIMM year. There were two international events, three colloquia and one school. The topics were selected to achieve the overall objective of the SAIMM of disseminating relevant and up-to-date technology to its members and to the mining industry in general. None of this could have been achieved without the hard work and commitment of the committee members and the SAIMM secretariat.

The following events were organized in the past year and special mention must be made of the convenors of these events. The colloquium New Mining Methods, convener
Annual report

R.P.H. Willis. The school Narrow Tabular Orebody Mining organized by F.M.G. Egerton. The colloquium National Environmental Management Act, organized by Dr T.R. Stacey. The colloquium Underground Lateral Transport, organized by N. Maslen. A wide-ranging selection of topics attended by some 1 275 delegates and supported by 54 both local and international sponsors. These events contributed to the dissemination of information to our members and to the considerable numbers of non-members who attended. They also provide a substantial contribution to the financial well-being of the Institute.

As well as the events mentioned above the committee provided representatives to assist with the organization of 5 International events due to be held over the next three years. Special mention must be made of the 12th International Conference on Coal Research and Mine Hoisting. These events promise to be truly exceptional events. None of these events would have been possible without the willing contribution of all members of the Mining Committee and their assistance is sincerely appreciated. The Secretariat are to be commended on their efficiency which ensures that all events are professionally organized and take place with the minimum of fuss.

2.2 Technical Programme Committee — Extractive Metallurgy and Metals Technology

Dr W.H. van Niekerk and N.M. O’Brien, Joint Chairmen

Table II

<table>
<thead>
<tr>
<th>Type of Event</th>
<th>Date</th>
<th>Title</th>
<th>Convenor</th>
<th>Venue</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colloquium</td>
<td>29 July 1999</td>
<td>New Mining Methods</td>
<td>R.P.H. Willis</td>
<td>Movenpick Indaba Hotel</td>
<td>132</td>
</tr>
<tr>
<td>International Symposium</td>
<td>8–12 August 1999</td>
<td>Fragblast</td>
<td>C.V.B. Cunningham</td>
<td>Sandton Sun Hotel</td>
<td>132</td>
</tr>
<tr>
<td>School</td>
<td>13–14 October 1999</td>
<td>Solvent Extraction &amp; Electrowinning</td>
<td>F.M.G. Egerton</td>
<td>Indaba Hotel</td>
<td>68</td>
</tr>
<tr>
<td>School</td>
<td>21–22 October 1999</td>
<td>Narrow Tabular Orebody</td>
<td>N.M. O’Brien/ R. Graham</td>
<td>Mintek</td>
<td>219</td>
</tr>
<tr>
<td>International Symposium</td>
<td>1–2 November 1999</td>
<td>Metallurgy Africa</td>
<td>J.H. Selby</td>
<td>Holiday Inn Durban</td>
<td>133</td>
</tr>
<tr>
<td>Colloquium</td>
<td>11 November 1999</td>
<td>National Environmental Management Act</td>
<td>Dr T.R. Stacey</td>
<td>Mintek</td>
<td>152</td>
</tr>
<tr>
<td>Colloquium</td>
<td>3 March 2000</td>
<td>Underground Lateral Transport</td>
<td>N.Maslen</td>
<td>Mintek</td>
<td>231</td>
</tr>
<tr>
<td>Colloquium</td>
<td>7 March 2000</td>
<td>Coal Preparation for Safe and Efficient Mining</td>
<td>D. Power</td>
<td>Witbank</td>
<td>126</td>
</tr>
<tr>
<td>Colloquium</td>
<td>25 May 2000</td>
<td>Modelling and Control of Mineral and Metal Proc.</td>
<td>Prof. A.M. Garbers-Craig</td>
<td>Mintek</td>
<td>72</td>
</tr>
<tr>
<td>International Symposium</td>
<td>13–18 May 2000</td>
<td>Tuncon</td>
<td>J. McKelvey</td>
<td>ICC Durban</td>
<td>357</td>
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<tr>
<td></td>
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<td>1339</td>
</tr>
</tbody>
</table>

None of these events would have been possible without the willing contribution of all members of the Mining Committee and their assistance is sincerely appreciated. The Secretariat are to be commended on their efficiency which ensures that all events are professionally organized and take place with the minimum of fuss.

The 1999/2000 year has been very successful but also a very ‘different’ year for the Metallurgy Technical Programme Committee. Because of the increasing workload on both the secretariat and the TPC members on planning and organizing events—particularly conferences. Council requested that the two metallurgy committees, Extractive Metallurgy and Metals Technology, be combined. This process began in March under the Chairmanship of Dr Willem van Niekerk with Noel O’Brien as Vice-Chairman. The synergy from this move was immediately apparent with better communication between the committee members, a more even distribution of workload and better organized events. We expect that this combined Metallurgy Committee will be formalized in the new SAIMM year.

An issue of concern is that events held during the year showed that attendances are falling. Whereas we endeavour to
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<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>SAIMM Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>6–8 September 2000</td>
<td>Mine Hoisting</td>
<td>R.G.B. Pickering</td>
</tr>
<tr>
<td>12–15 September 2000</td>
<td>Coal—the future</td>
<td>D.J. van Niekerk</td>
</tr>
<tr>
<td>17–19 September 2001</td>
<td>RaSIM 6</td>
<td>Dr T.R. Stacey</td>
</tr>
<tr>
<td>11–15 March 2002</td>
<td>XIVth International Coal Preparation Congress</td>
<td>R. Graham</td>
</tr>
<tr>
<td>5–10 October 2003</td>
<td>International Minerals Processing Conference</td>
<td>Prof. C.T. O’Connor</td>
</tr>
<tr>
<td>September 2003</td>
<td>International Rock Mechanics Symposium</td>
<td>Dr T.R. Stacey</td>
</tr>
<tr>
<td>2004</td>
<td>International Conference on Molten Slags, Fluxes salts</td>
<td>Prof. P.C. Pistorius</td>
</tr>
</tbody>
</table>

stage topical and meaningful events, it is up to the general membership to support these events and to provide feed-back. We are acutely aware of the cost of these events and do everything possible to keep costs down whilst providing quality functions and venues. We can only continue to do this if our members attend in sufficient numbers to spread the cost burden.

Despite the low attendances, acceptable profits were made thanks to sponsorships from various companies whose generous contributions are gratefully acknowledged.

The TPC Metallurgy has worked particularly hard this last year and we acknowledge the contributions made by:

- Cathy McNees, Chris Rule, Le Roux Strydom, Leslie Cornish, Andrie Garbers-Craig, Tom Owen, Peter Scott, Frank Bainbridge, Dick Graham, Roelf Sandenberg, Chris Horsley, Peter Hand, Kevan Ford, Roger Paul, Kobus Geldenhuis, Guvan Akdogan, Mike Cortie and Cyril Visagie. The mentorship of Dr Larry Cramer is also acknowledged.

Planning for the future is an ongoing process and some major international events will be held in South Africa under the auspices of the SAIMM in the next few years. You are referred to our long-term schedule of events for details and we urge you to start planning to attend these events. To highlight just a few, South Africa was recently selected as host for the prestigious 7th International Conference on Molten Slags, Fluxes and Salts to be held in 2002 in Cape Town. A School on Automation and international conferences in which the SAIMM participates.

3. Publications

<table>
<thead>
<tr>
<th>Topic</th>
<th>Author/Chairman</th>
<th>Editor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automation</td>
<td>R.M.S. Falcon</td>
<td>R.M.S. Falcon</td>
</tr>
<tr>
<td>International Event Involvement</td>
<td>F.M.G. Egerton</td>
<td>Dr P. Scott</td>
</tr>
<tr>
<td></td>
<td>J.S. Freer</td>
<td>A.A. Smithen</td>
</tr>
<tr>
<td></td>
<td>D. Limpitlaw</td>
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</tbody>
</table>

The Journal of The South African Institute of Mining and Metallurgy
3.1 Journal

The Journal suffered two setbacks in the year under review. Firstly, the October and the November/December issues had to be combined due to an overload in the administrative staff. Not only did this result in a loss in advertising revenue and adverse reactions from advertisers but also increased the backlog in papers waiting to be published.

Secondly, the posting of the contents page and abstracts on the SAIMM website fell into disarray when the site was handed over to a commercial organization, with the result that nothing has been recorded since August 1999. This has played havoc with attempts to have keywords recorded in abstract systems and search engines. However, alternative plans are under way for the website and hopefully more comprehensive inclusion of Journal contents will be possible shortly. It must be reaffirmed that in the global environment a presence on the Internet is essential. Thanks to the efforts of the admin staff, the publication target dates are close to being re-established. In an effort to streamline and improve the refereeing procedures—a referee advisory panel has been constituted to nominate and monitor the most appropriate persons. This step is part of an effort to cut pipeline delays and attract more submissions from local researchers particularly in mineral processing and extraction metallurgy. If this can be achieved there will be more than enough Transactions material which, if taken with the huge backlog of Journal papers will justify a monthly issue. It is believed that increased advertising revenue can more than make up for increased costs. I should like to thank the members of the publications committee for their support and all the staff at SAIMM for their hard work and willingness cooperation and kindness.

4. Regional Development

Portfolio Holder: Dr L.A. Cramer

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 Regional Development Committee

Although no formal meetings were held by the Committee feedback and updates were received from the Branches. Branch Chairmen were encouraged to attend at least one Council meeting per annum, to report on the progress within their Branches.

4.2 SAIMM Branches

4.2.1 Johannesburg Branch
A.S. MacFarlane, Acting Chairman
L.A.C. Cornish (Secretary) A.J. Field
G. Chamberlain D.R. Fleming
D. Cockcroft S. Rupprecht
D. Deiring G.L. Smith
V. Duke F.E. Smith

This report covers the period from July 1999, to June 2000.

During this period, Mr Mike Daniel held the Chair of the Johannesburg Branch, until the end of April, when he relocated to a position in Australia. At this point, he handed over the Chair of the Branch to Mr Alastair MacFarlane.

The Committee would like to thank Mr Daniel for the hard work that he put in to the Branch, during his time as Chairperson.

In an effort to spread the constituency represented by the Committee, several new members were invited to join the Committee, and their input has been most valuable. Recently, in addition to the members indicated above, who served during the year, Messrs A. Thin and P. Mwasinga have accepted to serve on the committee. The Branch pursued an active programme of technical visits and presentations, which were generally very well attended.

Amongst the visits arranged was an outstanding one to the Witkop Flour operation near Zeerust, which allowed members not only to enjoy a very informative technical visit, but also to savour the delights of 'Bosman country'.

Another very successful visit was arranged to a demonstration of explosives technology at AECl, and recently a visit was undertaken to Mponeng Mine, to the ice plant.

Technical presentations were most successful, covering a range of topics, as shown below.

The attendances at the presentations are indicative of continued support, for a wide range of topics, all of which were of very high quality, and excellent technical content. Included in the presentations was a session for the top students of the Wits Technikon and the Wits University Mining and Metallurgy Departments to present their project reports, which was of great benefit and interest to all concerned.

The Committee has arranged a full programme for the new year, and looks forward to continued support from the members of the Branch, and the Council.

As Chairperson, I would like to thank the Committee members for their hard work during the year, and to thank the Council and the Secretariat for their support and assistance.

Also, sincere thanks must be recorded for the presenters, sponsors and hosts of presentations and visits, which made the year a successful one.

4.2.2 Free State Branch

F.P. Guilherme, Chairman
J.J.H. Bester M. Glasspool
J.J. Jooste (Secretary) S.S. Smit
C.B. Sheppard M.J. Steyn
J.J.H. Bester M. Glasspool
D. Wright G.V. Thompson

The Free State Branch had an eventful year through 1999/2000. Unfortunately, the year's success was once again overshadowed by the decline of membership numbers due to the downsizing of the Free State gold operations and the associated transfers.

A number of events were scheduled during the 1999/2000 period for the SAIMM Free State Branch. The events included general meetings, various visits as well as committee meetings.

The calendar of events for 1999/2000 were as follows:

D. Wright G.V. Thompson
C.B. Sheppard M.J. Steyn
J.J.H. Bester M. Glasspool
D. Wright G.V. Thompson
The Journal of The South African Institute of Mining and Metallurgy

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Free State Branch Calendar of Events, 1998–1999

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee Meeting</td>
<td>5th August 1999</td>
</tr>
<tr>
<td>General Meeting—Presentation on Australian Metallurgical plant visit</td>
<td>9th September 1999</td>
</tr>
<tr>
<td>Committee Meeting</td>
<td>4th November 1999</td>
</tr>
<tr>
<td>Environmental Rehabilitation visit</td>
<td>2nd December 1999</td>
</tr>
<tr>
<td>Committee Meeting</td>
<td>3rd February 2000</td>
</tr>
<tr>
<td>Gold Plant security system visit</td>
<td>22 February 2000</td>
</tr>
<tr>
<td>Committee Meeting</td>
<td>4th May 2000</td>
</tr>
<tr>
<td>Annual General Meeting—Welkom Club</td>
<td>21st June 2000</td>
</tr>
</tbody>
</table>

General Meetings

The general branch meeting, held on the 9th of September 1999 at the Loraine Recreation Club in Allenridge, was hosted by Avgold.

An informative and entertaining presentation was delivered by Peter Colvin on aspects of his technical visit to Australia as a member of an Avgold technical team. This was an interesting overview of the operations and facilities visited.

Technical visits

A visit was arranged to the Environmental Rehabilitation programme sites within the AngloGold surface operations in the Goldfields on the 2nd December 1999. Visitors were afforded an insight into the methods adopted within the rehabilitation philosophy which has seen some significant progress being made.

A further visit was arranged to AngloGold’s Free State 2 gold plant. This visit focused on the retro-fitting of asset protection technology to an old plant operation.

A technical visit was arranged to Target mine on the 24th March 2000 to the mechanized development operations, as well as the innovative decline systems. Unfortunately, this visit had to be cancelled due to unforeseen circumstances.

I would like to express my appreciation to the committee members for their valuable contributions throughout the year. We were fortunate to have a number of distinguished speakers at our meetings.

The Pretoria Branch again had a successful year during which a number of meetings and other functions were held. The committee functioned well owing to the enthusiastic support and co-operation of its members.

The Annual General Meeting of the Branch was held on 28th July 1999 at the University of Pretoria. It was a pleasure to have the President Elect, Mr Mike Rogers with us. Mike gave us a very informative lecture on Coal—an industry in change.

The Branch, together with the Departments of Materials Science and Metallurgical Engineering and of Mining Engineering, again presented a series of Metallurgical Forums and Mini Symposiums. These events were structured to be of interest to our students as well as other members and with ample time for discussion. The attendance at these events was usually about 60 people. Cocktail parties were held after each meeting and also served as a get-together for the members and also allowed our younger members to make contact with senior engineers from industry. We were again fortunate to have a number of prominent speakers at these events.

Prof. Jan Miller of the Department of Metallurgical Engineering at the University of Utah, gave a seminar on flotation with talks titled Experimental techniques in flotation research and Selected industrial separations on the afternoon of the AGM.

On 12 August 1999 Dr Keith Weller of the CSIRO in Australia gave a talk on the milling research done in his group.

On 15 October the branch hosted the annual poster session in extractive metallurgy where the third-year students in Metallurgical Engineering presented their projects on Hydrometallurgy. The posters were adjudicated by representatives from industry.

We started off in 2000 on 3 February with a seminar by Prof. R.J. Fruehan of the Centre of Iron and Steelmaking at the Carnegie Mellon University, on Modification of inclusions in steel. This seminar was very well attended and his lecture was followed by a lively discussion prompted especially by representatives from industry.

On 18 February Prof. Fathi Habashi, well-known author of books on extractive metallurgy and professor in the Department of Mining and Metallurgy at Laval University in Quebec, gave a talk on The history of hydrometallurgy. In his talk he reviewed the development of the science and engineering of hydrometallurgy and also highlighted the problems that should be addressed in future.

On 2 March Dr Mulalo Doyoyo of MIT gave a talk on Fracture processes and energy partitioning during projectile travel through ceramic and silica glass systems. His talk emphasized the theoretical aspects of the development of ballistic resistant materials and some perspective of the practical aspects of the manufacturing of such materials were given by the representatives of the local industry.

On 12 April Mr Dick Bakker, Chief Inspector of Mines of the Department of Minerals and Energy, gave a talk on the challenges and opportunities that the new safety legislation poses to the minerals industry. The title of his talk was The challenge in mining. His talk was followed by a lively discussion with significant inputs from the students.

On 22 June Dr Craig Garlick of BHP in Australia gave a talk on Inclusion engineering—a key tool in achieving operations stability at BHP Whyalla. This talk was again well attended by representatives from industry and was followed by a lively discussion of this very topical subject in steelmaking.

The Committee is satisfied with the format and attendance of the events that were hosted during the year. We were fortunate to have a number of distinguished speakers at our meetings and are grateful to them for their time and effort. We would also like to again acknowledge the contributions of our sponsors.
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who made it possible for us to host these meetings and social events.

4.2.4 Western Cape Branch

Prof. P. Gaylard (Chairman)
J. Eksteen (Vice-chairman)
A. Nesbitt (Secretary/Treasurer)
Prof. C. Aldrich
Dr D. Bradshaw
Dr D. Deglon
Prof. R. Knutsen
Dr C. Lang
M. Winter (Branch Secretary)

The Western Cape Branch of the South African Institute of Mining and Metallurgy enjoyed yet another successful year, starting with the Mineral Processing '99 Conference, held on 5 and 6 August 1999 at the President Hotel, Bantry Bay. The conference was preceded by a workshop, held on 5 August, on ‘Materials Selection in Mineral Processing’. Unfortunately, attendance at this workshop was poor, despite the wide range of topics covered in a series of excellent presentations by a number of experts in the fields of physical metallurgy and corrosion science. Particular thanks are due to the companies who sponsored the workshop: Anglo American Research Laboratories, Columbus Stainless Steel, The Hot - Dip Galvanisers Association of Southern Africa and Mintek.

The conference, itself, was very well supported, as in previous years, with some 180 delegates attending. The plenary lectures were presented by Professor Alban Lynch, formerly Director of the Julius Kruttschnitt Mineral Research Centre at the University of Queensland in Brisbane, Australia, and by Professor John Herbst, of the University of Utah in the USA. Professor Lynch’s lecture was titled ‘Simulation in mineral processing—history, present status and possibilities’, while the title of Professor Herbst's lecture was ‘Mine to mill optimisation: new tools, new benefits’. Thirty-seven papers were presented over the two days, in addition to 14 poster snapshot presentations, as a preview to the poster session at the end of the first day of the Conference, at which 32 posters were displayed. Thirteen of the papers were presented by overseas visitors, with a further paper presented by representatives from the University of Zambia, while the conference was widely supported by most of the South African academic institutions and research and research organizations and also received a gratifying level of support from industry. The Branch extends its sincere thanks to all who contributed to both the Conference and the Workshop, whether as a delegate or as a speaker. In particular, thanks are due to the sponsors of the Conference: Pelichem (Pty) Ltd, Baker Hughes, Crusader Systems, Outokumpu Technologies, Senmin and Svedala. This sponsorship is used to subsidize post-graduate attendance at the Conference. As in previous years, the Branch owes a considerable debt of thanks to our secretary, Mrs Meg Winter, for her excellent organization of both events.

The annual student evening of the Branch, organized in collaboration with the local Branch of the South African Institute of Chemical Engineers, was held at the Peninsula Technikon on 13th April 2000. Unfortunately, the timing of the function clashed with exams at both Cape Town and Stellenbosch Universities, so the function was not as widely attended as had been expected. Nevertheless, those who did attend enjoyed a pleasant social evening.

The annual student tour took place from 31 March to 9 April 2000. This year’s tour was organized by Mr Emile Scheepers of Stellenbosch University. Thirty-six students and five members of staff travelled by bus to Phalaborwa, where they visited the operations of Foskor and Palabora Mining Company. This was followed by visits to the Feralloys plant at Machadodorp and to the Fairview Mine at Barberton. As in previous years, the tour was a great success. The Branch extends its sincere appreciation to the technical staff of the Western Cape Mineral Processing Facility (WCMPF), and particularly to Mr Emile Scheepers and his colleagues who participated in the tour, for their work in arranging the tour and in running the WCMPF. The financial support of the Minerals Education Trust Fund for the WCMPF and this students’ tour is gratefully acknowledged.

As reported last year, the Western Cape Branch is to host the XXII International Mineral Processing Conference (IMPC), on behalf of the SAIMM, from 5 to 10 October 2003. The local steering committee, consisting of Prof. Cyril O’Connor of the University of Cape Town, Prof. Leon Lorenzen of the University of Stellenbosch and Prof. Francis Petersen of the Cape Technikon, held a meeting at the Johannesburg Country Club on 15th March 2000, to launch the Conference Steering Committee. The meeting was attended by some 25 people from industry and from the Gauteng universities and research organizations. Response to the launch was enthusiastic and the various sub-committees, needed to organize a conference of this size, were established. The XXII IMPC is to be held in Rome from 23 to 28 July 2000 and the Branch will have a booth at the Conference to publicise the Cape Town conference. Initial financial support for the Conference has been encouraging and the Branch is particularly grateful for the financial backing provided by the Treasurer of the SAIMM.

In conclusion, I would like to express my sincere thanks to the out-going committee, for their support during the past year. On behalf of the Branch, I would like to thank the SAIMM Council and the President, Mr Mike Rogers, as well as the SAIMM secretariat, for their support during the past year.

4.2.5 Mpumalanga Branch

K.T. Bladwell, Chairman
R. Phillips, Vice Chairman
J. Sutherland, Secretary
B. Bell R. Jennings
J. Collins T. Matshana
P. Gercke J. Raath
A.M.P. Henderson D. Smith

The Branch had a good year with most of the committee’s attention having been focused on arranging the Gala Dinner for 9 March 2000. The dinner was a great success and was attended by 220 people. It was held in honour of Mike Rogers who was a Past Chairman of our Branch and the guest speaker was Clem Sunter. The only disappointing aspect was that 2 companies reneged on their undertaking which put the finances under strain.

A technical meeting was held on the 11 November and was attended by 25 people. The topics presented were 'The changing requirements and interpretations of the
Environmental Act’ by Mr F. Wagner and ‘Picking a cost effective dust management system’ by Mr A. Miller. Both the presentations were well received and a lively discussion followed.

Unfortunately the technical meeting in Evander had to be postponed due to a poor response. However, our strategy of targeting specific people within our industry to assist in canvassing support for technical events is having good results.

The committee has benefited a great deal from the inputs of our new committee members and I wish to take this opportunity to thank all the committee members for their support and effort during the past year.

4.2.6 Bushveld Branch

C.A.F. Sweet, Chairman

The first meeting after the Bushveld AGM was held at Union Section where the focus was on a number of R and D Projects. The electronic blasting generated such a high level of interest that a large number of follow-on visits were arranged with people coming from as far afield as Zimbabwe.

The last visit for the current year is to the BMW factory in Rosslyn to see how our mining products were converted into the final products of use.

4.2.7 Zululand Branch

G.J. Kok, Chairman

Branch Objectives

It is important that each year the Branch is reminded if its objectives and for this reason they are repeated here.

➤ To encourage and develop interest in all technical disciplines involved in the practice of mining and metallurgy in the Zululand area.
➤ To encourage the exchange of technical information between the various disciplines involved in mining and metallurgy.
➤ To encourage interest in the technical disciplines amongst scholars and students, with the aim of developing more potential scientists and engineers.

Membership

Membership remains low at 8 support from Bayside and Hillside employees has not improved significantly. I thank the core members from RBM for your support and I will continue to encourage members from other areas.

Meetings

Late ‘99 meetings consisted mostly of last minute arrangements such as Nalco Chemserve, with low numbers attending.

A proposed site visit to Nyal Minerals was not allowed due to their technology being proprietary.

For 2000 more combined meetings were held when speakers of interest were available and these has large total attendances, with the Iscor presentation pulling in more than 50 attendees.

This does seem to be a viable option considering the difficulties of getting speakers of sufficient interest.

However, we do face the risk of losing a separate identity if this is maintained. We are still doing well considering the increased workloads of today’s industry.

Social Events

The golf day was again a large success giving the Institute another presence in the social calendar.

Heavy Minerals Conference

The Heavy Minerals Conference was plagued by the loss of a block booking and this bit into the numbers attending. If not for this it would have matched the success of the 1998 meeting. I thank the HMC committee for their work.

Education

A new slide projector was brought for the John Ross Geography department.

Later this month we will again take part in the Zululand Life skills centre’s career exhibition. It is becoming difficult to get individuals to man stands and we will again depend on a few appointed volunteers from RBM.

5. Engineering Science and Technology in South Africa

Portfolio Holder: R.P. Mohring

5.1 Engineering Council of South Africa (ECSA)

The Institute nominates members on the Council of ECSA, and also 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.

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

Prof. A.N. Brown
J.A. Cruise
A.A.B. Douglas
R.P. Mohring
M.H. Rogers

D.A.J. Ross-Watt
Dr O.K.H. Steffen
Dr N.A. Barcza
P.J. Venter

PAC Metallurgy

Prof. R.F. Sandenbergh
Dr N.A. Barcza
Dr A.K. Haines
R.D. Beck
Dr W.H. van Niekerk
K.J.R. Ford

Dr L.A. Cramer
Dr W.H. van Niekerk

ECSA Activities

To date 162 companies have registered 323 commitment and
undertakings to train their Engineers-in-Training according to Policy Statement R1/1. The Policy Statement R1/1 was revised during the year to take into account the latest requirements of the engineering technologists, technicians and certified engineers.

Satisfactory progress was made during the year by the task team who are developing outcomes-based standards for education and training within the engineering profession. During 1999/2000 ECSA continued to carry out the following activities relating to the engineering profession in South Africa.

- Setting standards for registration
- Registering applicants who comply with the standards
- Accrediting qualifications
- Prescribing and enforcing a code of conduct
- Publishing a tariff of recommended fees for consulting work
- Recognizing engineering institutes
- Liaison with other engineering bodies
- Seeking international recognition for ECSA registered engineers

Significant progress was made with regard to the proposed change in administration of the Mining Industry Certificates of Competency, however little progress was made on the Mechanical and Electrical Certificates under the Factories Act.

South Africa is now a full signatory of the Washington Accord which allows for mutual recognition of academic qualifications between the parties to the Accord. Further negotiations towards reaching agreement on mutual recognition of engineering registration were held during the year. ECSA have established an International Committee to progress this and other issues related to international recognition as reported last year.

The new registration procedure which entails an interview with all persons applying for registration. The professional review will be introduced as part of the registration requirements from the beginning of 2001. One of the main thrusts of ECSA over the past years has been to obtain international recognition for South African Professional Engineers. This was finally achieved this year with the recognition of ECSA as a full member of the Washington Accord.

5.2 The Institute of Professional Engineering Technologists (IPET)

Representative Dr R.V.R. Handfield-Jones

IPET is the only professional society catering for the interests of Professional Engineering Technologists. All its efforts during the past year was aimed at enhancing the position and status of this group and providing opportunities to improve themselves as professionals and as individuals.

A highly successful regional Technikon research seminar was held at Witwatersrand Technikon in October 1999 where mostly M. Tech research papers were read.

The proposed new Engineering Profession Bill and the Bill on the Council for the Built Environment were studied and again commented on. The IPET president presented the objections of the Institute at the public hearing of the Portfolio Committee at the Houses of Parliament in Cape Town.

IPET annually presents a 75 mm gold medal to the Technikon student at B. Tech level with the highest academic achievement in all engineering disciplines country-wide. This year the award goes to Mr Cedric Comley, who completed the B. Tech in Mechanical Engineering at the Port Elizabeth Technikon with an average of 85.57%.

A seminar on registration as Professional Engineering Technologist is planned for early in 2001, as well as a follow up research seminar in collaboration with NRF. The Institute is actively seeking avenues of co-operation with other Engineering Institutes like SAIMM that could be of mutual benefit.

5.3 Engineers' Liaison Committee

Representative Prof. R.F. Sandenbergh

The Pretoria Engineers Liaison Committee is the rallying point for the Pretoria branches of the ten learned engineering societies.

The 37th Annual Hendrik van der Bijl Memorial Lecture was held at the University of Pretoria on 17 May 2000 and was organized by the Gauteng North Branch of the South African Society for Consulting Engineers. The lecture with the title Consulting Engineering 2000 was given by Dr Bingle Kruger, Chairman of BKS Pty Ltd. The lecture was most informative and the social gathering that followed was enjoyed by all.

5.4 South African National Council on Tunnelling (SANCOT)

Representative Dr T.R. Stacey
Alternate J.A. Cruise

SANCOT continues to be an active member of the International Tunnelling Association (ITA), and has a member on the ITA Executive Committee. It provides input to various ITA Working Groups, and operates its own committees on Shotcrete specifications, hydraulic roughness in tunnels, exploratory works, legal requirements and contractual practices.

Apart from current activities on the Lesotho Highlands Water Project, civil tunnelling in southern Africa is depressed at present. This has resulted in a decrease in interest in
SANCOT affairs and resignation of some members. Of particular concern is the decreased participation from the major owner organizations such as Transnet, the Department of Water Affairs and Forestry and the Department of Transport. This represents a challenge to SANCOT for the future.

The ITA Executive and Council Meetings, and annual meetings of the ITA Working Groups took place at the World Tunnel Congress, which was held in Durban in May 2000. This is the first time that the ITA World Tunnel Congress has been held in South Africa. The congress was organized by a committee consisting of SANCOT, the SAIMM, SANIRE and the LTS. The SAIMM Secretariat was responsible for the administration. The congress was attended by approximately 350 delegates, most of whom were from abroad, and was very well received. There were many compliments regarding the organization of the event.

5.5 The Environmental Planning Professions Interdisciplinary Committee (EPPIC)

Representative Dr T.R. Stacey
Alternate J.S. Freer

EPPIC was established approximately 25 years ago with the aim of promoting the use of Integrated Environmental Management amongst the planning professions. EPPICs mission was to achieve a situation where all activities are planned and managed to bring about the sustained maximum net benefit to man and his environment. Interest in EPPIC has waned over the past few years, an example being the SAICE, which was substantially responsible for its formation, indicating that they wished to withdraw from membership. Another major factor was the recent introduction of the National Environmental Management Act (NEMA), in terms of which integrated environmental management is a requirement for all projects. During the year, the EPPIC Committee reviewed the situation and it was considered that, with the introduction of NEMA, EPPICs main aims had been achieved. It was therefore with a sense of pride in its achievements over a quarter of a century that the Committee took the decision to close EPPIC at the end of 1999.

6. State Liaison

Portfolio Holder: S.J. Ramokgopa

The main emphasis of the year was to improve the profile of the Institute, especially in relation to Government departments. Letters introducing the Institute and listing key objectives were sent to all departments.

6.1 Mining Qualifications Authority (MQA)

Representatives D.J. van Niekerk J.C. Viljoen

The MQA’s application to the SA Qualifications Authority (SAQA) to be registered as a Standards Generation Body (SGB) as well as to be accredited as an Education and Training Quality Assurer (ETQA) has been provisionally approved for a period of 3 years considered by SAQA. The major issue to be resolved is whether or not the MQA will be allowed to register both as an SGB and ETQA for the Industry. The Mine Health and Safety Act, 1996 (Act No. 29/1996) specifically assigns both these two functions to the MQA.

The MQA has been established as a Sector Education and Training Authority (SETA) for the Industry in terms of the Skills Development Act, 1998 (Act No. 87/1998). Three separate tripartite task teams have been established to develop appropriate implementation plans for the MQA to give effect to the following aspects of a SETA for the Industry which are not covered by the MQA Implementation Plan n1. A Skills Development Plan, Leaderships in the Industry (sector) and the Skills Development Levy (0,5% of cost of human resources) which has come into effect on 1 April 2000.

2000 is the year of delivery for the MQA in respect of standards generation and qualifications design. To this end the Policy Implementation Guideline on the generation of Standards and the design of Qualifications have been finalized. 23 Tripartite Standards Generation and Quality Design Groups (SGGs) have been established since January 1999. Facilitators and the members of these SGGs have been trained in the art of standard writing. A multi-partite Mining and Minerals Standards Generated Body (SGB) has been established to steer, coordinate and monitor the standards generation process through the following Standards and Qualifications Coordinating Groups (SQCGs):

➤ Engineering
➤ Occupational Health and Safety
➤ Ingqokelela (‘Basket of miscellany’).

What is of specific interest for members of the SAIMM are the technical and engineering competencies which will be required in terms of the core business processes of the Industry. The Institute should ensure effective participation in those initiatives dealing with the levels 5 to 8 standards and qualifications.

A Qualifications Design Task Team was established during April 2000 to develop definitions, common vocabulary, appropriate models and criteria to be used during qualifications design. This report deals with very sensitive issues such as competent person, registration, licensing and the notion of a practising person.

7. International Liaison

Portfolio Holder: M.H. Rogers

Key Performance Areas

To achieve its objectives, the SAIMM

➤ participates in and represents South Africa on bodies such as the Council of Mining and Metallurgical Institutions (CMMI), the Iron and Steel Society Inc (ISS), 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, 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 Council of Mining and Metallurgical Institutions (CMMI)

National Representatives M.H. Rogers
Alternates Dr O.K.H. Steffen Prof. C.T. Shaw Prof. D. Buchanan

The Institute has been instrumental, and successful in
resurrecting the compilation of a South African Code for Mineral Resources and Reserves. It is envisaged that this code will be officially published and recognized by the end of 1999. The drawing up of the South African code has been done in conjunction with the other members of CMMI to arrive at an internationally acceptable code. This initiative has illustrated the need for the Institute to become recognized internationally and play its part in the global game.

7.2 APCOM

National Representative Dr F.A. Camisani-Calzolari

The symposium APCOM '99 is the 28th of the series and was held in Golden (Denver), Colorado, during 20–22 October 1999. The attendees were 171 from all over the world. South Africa was represented by 5 participants. There were a total of 103 papers of which 3 were from South Africa. All the South African papers were well received. The keynote address was delivered by Prof. D.G. Krige and was entitled ‘Conditional bias and uncertainty of estimation in geostatistics’. That was also the topic for the panel discussion.

The symposium covered the following topics, in order of presentation:

- Mineral resource and mineral reserve classification
- Rock mechanics—Computer modelling of stress and deformation in rocks
- Cost Estimation, large project management and control systems
- Geostatistical resource estimation
  a) Conditional simulation for uncertainty and risk analysis
  b) New techniques for old problems
  c) Simple, indicator and lognormal kriging—problematic data sets and geostatistics alternatives.
- Evaluation and mining system optimization through fuzzy logic and artificial intelligence
- Blasting optimization
- Mine planning and design optimization
  a) Open pit mining
  b) Underground mining.
- Mine loading and hauling production optimization through dispatch systems
- Computer application in industrial mineral
- Strategic planning and management decision analysis
- Mine production scheduling
- Environment and safety applications
- Geographic information system
- Computer simulations for mining applications
- Metallurgical process control
- Environmental and production simulations for underground coal mining.

The International Council meeting took place on 20 October 1999. Future APCOMs have been scheduled as follows:

- 29th symposium APCOM 2001 in Beijing, China, 25–27 April 2001
- 30th symposium APCOM 2002 in Phoenix, USA, 11–13 March 2002

- 32nd symposium APCOM 2005 at the University of Arizona, March 2005.

The next regional APCOM will be in Helsinki, Finland, during September 2001. The regional APCOM, which was scheduled for 7–9 December 1999 had to be cancelled for lack of interest.

7.3 INFACON

National Representative Dr N.A. Barcza

Plans for Infacon Nine in Quebec City, Canada from 3 to 6 June 2001, are well advanced. The Congress is being organized by the Ferroalloys Association (of North America). Information on the event can be found on their web site: http://www.infacon.com

The Congress is sponsored by a number of international organizations in the ferroalloy business. A symposium on Managanese Health Issues is being held during Infacon Nine, since the potential toxicity of managanese has become an important issue. Five papers from South Africa are included in the Infacon Nine programme of about sixty papers. Topics in the technical programme cover simulation, control and modeling, all the ferroalloys, environmental, health and safety issues, and equipment.

The SAIMM is represented by Dr N.A. Barcza, who is the chairman of the International Committee on Ferroalloys (ICFA). South Africa is hoping to host the following Infacon Congress in 2004 under the auspices of the SAIMM and Mintek, as was the case in 1992 (Infacon 6).

8. Management and Administration

Portfolio Holder: S.J. Ramokgopa

The Secretariat consists of:

- Mrs Sam Moodley (Manager)
- Mrs Pam Bester (Publications Co-ordinator)
- Miss Nazli Mamdoo (Junior Clerk)
- Miss Zuliakha Mohamed (Junior Clerk)*
- Mrs Anna Panana (Junior Secretary)
- Mrs Dawn van der Walt (DTP Operator)
- Mrs Sam Moodley (Manager)
- Mrs Apathia Sello (Junior Clerk)
- Miss Karen Norman (Conference Co-ordinator)
- Miss Marshane Perez (Conference Co-ordinator)*
- Mr André Schoeman (Contract Accountant)

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

8.1 Finance

J.A. Cruise, Honorary Treasurer

Subscriptions received showed an increase on the previous year, being Company Affiliates R193 997 (R175 751) and individual membership R687 359 (R452 111).

The substantial increase in the latter was due to the increase in the subscription rate to R400 p.a. (R250 p.a.).

Income from colloquia and schools decreased from the previous year to R353 337 (R428 579).

A surplus on the sale of investments of R166 732 (R292 638) was recorded for the year. Interest and dividends received were lower than the previous year at R13 344 (R32 997).
Annual report

The result of the above showed an increase in total income received of R1 374 944 (R1 243 183).

The total expenditure for the year decreased to R1 497 292 (R1 511 421). This is mainly due to a reduction in journal expenses to R558 755 (R605 023) and an increase in advertising to R175 916 (151 718) giving a net journal expense over income of R360 995 (R448 525). Provision for doubtful debts decreased to R18 966 (R35 000) and subscriptions written off amounted to R70 583 (R50 926). An exceptional expense item was incurred during the year being that of the cost of the release of our lease and the subsequent move to our new rent-free offices in the Chamber of Mines Building—an expense of R144 514 this year which should provide a cost saving benefit of some R180 000 p.a. for the foreseeable future.

Our investments in the equity market decreased in value by some 15% over the year. During the year we have changed our investment advisors from Quyn Martin to RAD AFC. Our cash position at the bank improved to positive R638 509 (negative R178 806). This was due to a special effort being put into the timely collection of debts. As such, the improved cash flow towards the end of the year, has ensured that we are no longer dependent on the sale of investments for the day to day running of the Institute.

In last year’s financial report, I stated that to make ends meet, we would have to double our subscriptions over two years. This would have meant a subscription rate of R500 p.a. if we had not been able to limit the increase in subscriptions to 10% savings achieved during the year and the improved cash flow, for this year. I am pleased to report that, due to the cost move to our new rent-free offices in the Chamber of Mines Building—an expense of R144 514 this year which should provide a cost saving benefit of some R180 000 p.a. for the foreseeable future.

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Finally, our thanks go to our secretariat for containing the costs and to our accountant Mr. André Schoeman for his efforts in streamlining our accounting system.

Addendum

New Members

Fellow


Member


Associate


Student


Company Affiliates

AngloGold Training and Development Services
Bell, Dewar & Hall Incorporated
Compagnie Generale de Geophysique
Delkor Technik (Pty) Ltd
Diamond Fields South Africa (Pty) Ltd
Digby Wells and Associates
Dorr-Oliver South Africa Ltd
Goodyear SA (Pty) Ltd
Humboldt Wedag SA
Lakefield Research Africa (Pty) Limited
MCC Contracts (Pty) Ltd
Metorex Limited
MSA Projects (Pty) Ltd
Namakwa Sands
Pandrol
Richards Bay Minerals
Sulzer SA Ltd

Resignations

Fellow

Annual report

Retired Fellow

Member

Retired Member

Associate

Retired Associates
L.M. Cameron, B.A. McKay.

Students

Company Affiliates
BCL Limited
Black Mountain Mineral Development Co
Consolidated Murchison Limited
Denel (Pty) Ltd
Gold Fields of South Africa Ltd
Ingersoll Rand Company SA (Pty) Ltd
Lindum Reefs Gold Mining Co. Ltd
Scitec (Pty) Ltd
Vergenoeg Mining Co.

Members Transferred to Higher Grade

Transfer from Member to Fellow

Transfer from Associate to Fellow

Transfer from Associate to Member

Automatic Transfer to Associate

Deceased
Honorary Life Fellow
J.F. Reid.

Retired Fellow
A.R.C. Fowler, J. Hall, W.S. Rapson, A. Tennent, J.L. van Eyssen.

Member

Retired Member
A.M. Guthrie, R.A. Mackellar.

Retired Fellow

Retired Members

Retired Associate
D.A. Arnold.

Members who were Reinstated
Reinstated as Fellow
D.W. Bosch, F.W. Kluckow, F.K. Letowski.

Reinstated as Member

Reinstated as Associate
P.M. Cook, E.H.W. Theron.

Reinstated as Student
C.F. Haasbroek, T.B. Mokeke.