

Annual Report
of the
South African Chemical Institute
(Incorporating the SA Institute of Assayers and Analysts)
13th August 2010 to 12th August 2011



THE SOUTH AFRICAN
CHEMICAL INSTITUTE

COUNCIL

Office Bearers

President	:	Prof I Green
Vice President	:	Dr M Booth
Immediate Past President	:	Prof N Coville
Executive Secretary	:	Prof B Mamba
Executive Treasurer	:	Prof E Breet
Co-opted Member	:	Prof J Michael

Reporting Officers

Publications Officer	:	Prof G Jackson
Publicity	:	Prof N Coville
Webmaster	:	Mrs L Smith
IUPAC	:	Dr M Booth
SACNASP	:	Prof E Breet

Chairpersons of Co-ordination Committees

Eastern Cape	:	Prof P Loyson
Gauteng	:	Prof J Darkwa
Kwazulu-Natal	:	Dr R Robinson
Western Cape	:	Prof I Green

Chairpersons of Divisions

Analytical Chemistry (Analytica)	:	Prof N Torto
Chemical Education	:	Prof M Rollnick
Chromatography (ChromSA)	:	Mrs P Forbes
Electrochemistry	:	Dr P Baker
Environmental Chemistry	:	Prof E Cukrowska
Mass Spectrometry (SAAMS)	:	Dr S de Kock
Industrial Chemistry	:	Dr M Booth
Inorganic Chemistry	:	Prof S Lotz
Molecular Modelling	:	Prof G Kruger
Organic Chemistry	:	Prof I Green
Physical Chemistry	:	Dr D Billing
Green Chemistry	:	Dr V Nyamori
ThermSA	:	Dr J Wagener

OFFICE BEARERS



Prof I Green – President



Dr M Booth – Vice-President



Prof J Michael - Co-opted Member



Prof N Coville – Immediate Past-President



Prof B Mamba – Executive Secretary



Prof E Breet – Executive Treasurer

MEETINGS

Council meetings were held on:

13th August 2010 (AGM)

Executive Committee meetings were held on:

13th August 2010(AGM), 11th November 2010, 10th February 2011 and 12th May 2011

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PRESIDENT'S REPORT

The year, as always, has sped by at a tremendous rate and I must say, it has been both challenging and very rewarding. I am convinced that collectively the hard work, attention to detail, enthusiastic approaches and determination to effectively conclude tasks by my fellow EXCO members, is the reason for SACI moving forward this past year. It is neither fair nor pragmatic to report on a ring-fenced 12 month period since so many processes are on-going and flow from one period to the next. However I will highlight a few items and give some perspective on them.

Finances

We have for the past years been very astute in the budgetary needs and expenditure and between Laila and Prof Breet we have to a large extent remained within a narrow spending bandwidth. In effecting this we have had to make a few cuts but never to the detriment of our operational side. Thus we have purchased a laptop for Laila and sent her on a course about Website design and management after Klaus Achleitner retired from UCT and this has made a huge impact on the user friendliness and effective interaction with Members. Laila has designed a new website and manages this on a regular basis. She has also taken on the role of Conference management at a much reduced rate for our Members. The advantages are that auditing costs are saved, immediate transfers and payments are done, registration for reduced rates of Members are immediately audited and finalised and financials are continuously updated. Any profits due to SACI are transferred and the remainder is then placed in a monitored account assigned to the entity which receives its separate interest and is available to the entity committee immediately for bursary use or whatever else is decided.

Programme

Analitika 2010 was held at Stellenbosch from 6-9th December, 2010 and Dr Marietjie Stander and her very enthusiastic committee are to be congratulated for a truly magnificent event which attracted many leading analytical chemists from all over the world. Some 25% of the delegates were from across our borders. A sizable portion of the profits from this event are to be used for student bursaries for those undertaking MSc degrees in Analytical Chemistry. The year 2011 has been identified as the International Year of Chemistry (IYC) and to mark this Prof Darkwa and his organising committee heralded in the year by hosting the 40th Convention of SACI from 23-28th January at WITS and this proved to be a truly remarkable international event with the Presidents of SACI, IUPAC, ACS and FASC sharing the stages at various functions a unique occasion which will take a long time to repeat. This intense interaction has additionally lead to facilitating future ventures of mutual benefit between the Societies. The next Frank Warren (Organic event) will at long last be held at the Free State University scheduled from 15-18th April 2012.

SACI is also very encouraged to note that regular Young Chemist events organised by the students in the Sections are still popular and regular as this is a learning curve for students to migrate into full Membership.

We are currently attempting to convince The University of Fort Hare to host the 41st Convention of SACI in 2013 and the Eastern Cape Section has been assisting in this regard. This move, if successful, will provide an opportunity for SACI to be seen in areas which are more difficult to access.

In 2012 SACI will be 100 years old and to celebrate this achievement we have asked all Sections/Divisions to organise a special event commemorating this and a certain sum of money has been set aside by Council for this to ensure it is a huge success. I will be writing a monograph essentially describing the history and developments within SACI over the past 25 years and have requested all who wish, to please send me information I could consider for incorporation.

Awards

SACI has a number of awards it makes each year to give recognition to those who have achieved certain levels of competency and innovation in their specific lines of endeavour. Adjudication is done by nominated previous recipients and is impartial. The premier award, the Gold Medal of SACI always attracts excellent nominations. However, this requires some concerted input by the person nominating and we encourage this practice. What is a concern to Council is that there are a few categories that receive no nominations at all viz., The Hendrick van Eck, The SASOL Innovator and The Industrial Chemistry Medals. Perhaps it is time to revisit these and combine them into a single entity.

Membership

As a consequence of an intensive drive by the Organising Committee of the 2011 SACI convention our membership has grown most satisfactorily this year. Prof Mamba has done some sterling work in formulating strategies of how we should tackle this essential aspect in the near future and it does seem that in order to increase the number of Company and Corporate Members, the correct person at the institute has to be identified and followed up by a personal visit.

General

Our auditors brought to our attention the fact that since our annual turn-over has increased over the years it has placed SACI at the level where we have to be considered for tax and thus suggested that we register as a Non Profit Organisation (NPO). In the past under the then prevailing legislation SACI did not have to pay tax. However, subsequent tax legislation passed now dictates that we have to. Thus a great deal of time has been spent by Laila, myself and Neil to fill out the forms in the requested context and submit these to the tax authorities only to get them back requesting us to provide the information in a slightly different format. This has been frustrating and since we effectively are a NPO we are driving this aspect very assiduously to conclude the registration otherwise we have to pay tax on profits made at conferences which we consider to be an invasion of our constitution.

I am delighted to report that the Chemistry Department at UCT instituted a series of general lectures between 23 June and 5 July for adults and grade 12 students covering subjects viz., what research is being done at UCT, how conditions such as malaria are being researched, some exciting experiments, the interaction between people and chemistry, cupcakes and cookies and was finalised by a interschool quiz. This is a wonderful demonstration of their seriousness not only to celebrate the IYC but to also bring chemistry to the public at large.

The Analytical unit at Stellenbosch have organised a series of basic and slightly advanced courses for students and staff on analytical techniques with a heavily directed practical component which should attract especially people from industry to upgrade their skills.

I also thank the Honorary Editor of the Journal, Prof Graham Jackson for maintaining its rating and for the recent Salary Survey. In this regard I need to encourage Members to support the Journal by at least one article per year. Prof Jackson has also made an appeal to all Members to submit articles for a special commemorative issue in 2012.

Concluding remarks

It was a pleasure to work with such a committed group of colleagues and I have always considered us to be a family operating with our Matriarch Laila who I must say has made my position that much easier. She runs a tight ship, a neat ship and manages

a well organized crew. Neil Coville as the past President has been tremendous in the good advice he gives, and who took on the task of ensuring continuation of the very informative SACI Newsletter. This is a wonderful medium and I am forever amazed at the responses it elicits from Members as it put me in contact with so many more people I would otherwise have missed. Ernst Breet for his friendliness and competent manner he has kept SACI's financial operations within budget as well as to compile the new budget each year. To Mike Booth for his valued inputs from the Chemical Industrial side as well as sagacious assistance at EXCO and to Mbeki Mamba for the wisdom and I think ability to involve himself in the way forward for membership matters that has given EXCO much to deliberate and apply. I also thank Prof Jo Michael for standing in for a short while on EXCO to assist us through a difficult period.

Finally, it is indeed a proud moment for me to thank Prof James Darkwa for his valuable and constructive role he has played on EXCO. I earlier nominated him to serve on Council Honorary Secretary which he did for 2 years and then became the Vice Chair but at the outset indicated a commitment he had made to Chair the SACI 2011 National Convention. We thus lost his services for this period and I am delighted to announce that we persuaded him to return to EXCO. This process has directly lead to Prof Darkwa becoming the first Black President of SACI and I cannot think of a finer and more appropriate person to take over the reins from me than James.

I wish him and the new EXCO all the success they deserve and that the current new ideas discussed at the EXCO and Council will be realised for the benefit, growth and development of SACI into a home for all practicing chemists not only in South Africa but in Southern Africa.

IRGreen
President 2010-2011

AWARDS 2010

2011 awards will be announced at the AGM

THE GOLD MEDAL

The award, a gold-plated medal bearing the Institute's name and crest on the obverse and name of the medal and the recipient and date on the reverse, is made to a person whose scientific contribution in the field of chemistry or chemical technology is adjudged to be of outstanding merit.

No Award Made

THE MERCK MEDAL

The medal is awarded to the senior author of the paper, or papers, published in the South African Journal of Chemistry in a specific field of chemistry, adjudged to have made the most significant contributions to the discipline. The award for 2010, covering papers published in the period 2006 to 2009, was in the field of Inorganic Chemistry.

Professor Neil Coville

School of Chemistry

University of the Witwatersrand

South African Journal of Chemistry, 2009, 62, 67–76

THE SASOL POST-GRADUATE MEDAL

The medals shall be awarded to students engaged in research towards an MSc or PhD degree at a University, or an MTech or DTech degree at a Technikon, or University or Institute of Technology. The number of medals awarded shall not exceed five per annum, and the awards are limited to one per institution. Adjudicators for the awards are fellow students.

Ms Daniela Bezuidenhout

University of Pretoria

Mr Edward Nxumalo

University of the Witwatersrand

CHEMICAL EDUCATION

The award is made to a person who has made an outstanding contribution to chemical education as judged by the person's published work in the previous 5 years. Published work may be in any form and may be related to any level or educational context.

Dr Erica Steenberg
RADMASTE Centre
University of the Witwatersrand

THE JAMES MOIR MEDALS

Medals shall be awarded to the best BSc Honours student in chemistry at each University, and the best BTech student in chemistry at each Technikon, or University or Institute of Technology. To be eligible for the award the student must have achieved a minimum final pass mark of 75%. One medal shall be available for award annually for each University, Technikon and University or Institute of Technology in the Republic of South Africa.

Mr Clive Eley	Rhodes University
Ms Anzel Falch	University of the North-West
Ms Ilne Grobler	University of Stellenbosch
Ms Kathy Hadje Georgiou	University of the Witwatersrand
Ms Nwabisa Jijana	University of the Western Cape
Ms Pegah Khalili	University of KwaZulu-Natal (Pietermaritzburg)
Mr Renier Koen	University of the Free State
Ms Lynette Komarsamy	University of KwaZulu-Natal (Durban Westville)
Ms Hilde Maritz	University of South Africa
Mr Wade Petersen	University of Cape Town
Ms Agnes Pholosi	Vaal University of Technology
Mrs Carina Alicia Renison	University of Johannesburg
Ms Baganetsi Karabo Sebogisi	Cape Peninsula University of Technology
Ms Pinkie Sobantu	Durban University of Technology
Mr Stephen Thompson	University of Pretoria

THE SASOL CHEMISTRY INNOVATOR OF THE YEAR MEDAL

The award shall be made to a person whose scientific contributions in the field of chemistry or chemical technology during the year preceding the award are adjudged to be outstandingly innovative.

No Award Made

THE RAIKES MEDAL

The award shall be made to a person, under the age of 40 on 31 March in the year of the award, whose original chemical research shows outstanding promise, as judged by the person's publications in reputable journals. It is further stipulated that the research shall have been performed in South Africa.

Dr Manuel Fernandes
University of the Witwatersrand

THE HENDRIK VAN ECK MEDAL

The award shall be made to a member of the Institute who has made exceptional contributions in the business or industrial sectors and/or to the community as a whole in South Africa.

No Award Made

THE INDUSTRIAL CHEMISTRY MEDAL

The award shall be made to a person who has conducted novel research, or enhanced existing chemical research, in a particular field in an industrial laboratory, which is adjudged to be of outstanding merit, taking into account benefits to his/her company and the chemical community at large.

No Award Made

THE ANALYTICA PRIZE

The award is made to the author(s) of the best paper published in Analytical Reporter during the previous year.

No Award Made

MEMBERSHIP REPORT

Another year has come to an end and we take stock of the current membership within the institute. The current membership figures are attached with this report. When comparing the state of affairs in April 2010 with the membership record as it stands in July 2011, one notes a sharp decline in the number total paid up members - from 602 to 461, while the membership in the non-paying category has slightly increased. When interrogating the sub-categories in each case one does not pick up any significant positive change.

This is a cause for concern for an organisation as large as SACI which is celebrating its centenary next year. The question that begs an answer is whether members of SACI get any value in becoming members of the organization. One would like to believe there is a lot of value in becoming a member of a professional organisation such as SACI and the benefits often overshadow the membership fees, which are nominal. However, is SACI marketing itself adequately to its potential membership? The SACI newsletter has improved over the years and companies and institutions have used it for advertising (recruitment) but still SACI is not amassing membership despite such efforts. Be that as it may, it is gratifying to realise that some members of SACI have had uninterrupted membership for a forty year period!

The increase in student membership can basically be attributed to the SACI convention held early this year where discounts for student delegates who were members of SACI, we pre-negotiated, hence the spike in students' membership. Is this sustainable? Can SACI be conveniently "abused" only when students register for conferences? Shouldn't that be translated to visible student participation in SACI organised events and meetings? These are questions which the SACI executive seeks to answer including the proposition of a fully-fledged national conference that is specifically dedicated to student participation. Such a conference would obviously not be held in the same year as the SACI convention. This is one very good avenue that needs further exploration in the future.

The corporate membership is still not as impressive as what one would have expected given the numerous business transactions involving Departments of Chemistry at Universities across the country. To what extent have the Departments encouraged their suppliers to take up membership at SACI? Nevertheless, it was gratifying to have a company joining SACI after sponsoring the SACI convention and it is hoped that other companies would follow suite.

There is a proposal to position SACI as an organisation that should give designated affiliation categories to anybody who qualifies and works within the chemistry and

related fields, including the chemical industry. This would potentially allow members of SACI to use certain abbreviations after their names, much in the same manner as the British Royal Society of Chemistry. While this is still under discussion and in line with government's intended policy to register professionals within the specific disciplines, one believes SACI should use this opportunity as a means to boost its membership and offer something even more meaningful to its members.

Finally, as I stand down from the portfolio of General Secretary, I would like to appreciate the Executive membership for the experience of serving this organization and to further express my appreciation to Laila who continues to serve SACI with such a high degree of excellence.

Prof Bhekie B Mamba
General Secretary SACI

SACI Membership - 25 July 2011

CURRENT MEMBERSHIP FIGURES - Paid UP

Breakdown of Full Membership

	Jan-10		Apr-10		Nov-10		Feb-11		Apr-11		Jul-11	
Members	301	36	337	-42	295	33	328	42	370	-164	206	
Retired Members	19	0	19	0	19	-1	18	1	19	-1	18	
Associate Members	48	2	50	-9	41	-1	40	6	46	-22	24	
Married Associates	3	0	3	0	3	-1	2	-1	1	0	1	
Students(Paying)	148	37	185	17	202	27	229	63	292	-85	207	
Patron Members	2	0	2	-1	1	0	1	2	3	-1	2	
Company members	6	0	6	-2	4	0	4	0	4	-1	3	
Non-Paying												
Honorary Members	19	0	19	1	20	0	20	0	20	0	20	
Life Members(50YR Members)	78	0	78	4	82	0	82	0	82	0	82	
Students(non Paying)	50	50	0	27	27	0	27	1	28	5	33	
Teachers	8	0	8	3	11	3	14	-1	13	5	18	

PROGRAMME COMMITTEE

The 12 month period will be remembered by having two large events within a month of each other, a practice SACI has attempted to obviate due to “milking the same cow syndrome”. However, in this case it worked out rather well. Council was informed and the President, Prof Green in fact had to present the case for Analitika 2010 held at Stellenbosch between 6-9th December. This was as against the 40th National Convention of SACI held at WITS from 24-28th January 2011. One of the main arguments placed before Council was the fact that few ChromSA and SAAMS members attend National Conventions and the distance between to two venues will remove the possibility of the same local financial institutions and other sources of sponsorships being tapped.

Analitika 2010 was a major success with profits being set aside for bursary purposes to students wishing to pursue MSc degrees at Stellenbosch in Analytical Science. About 320 delegates attended of which around 40 were from across our borders. Council was very proud that the 40th National Convention was the first event in the year to mark the International Year of Chemistry and that South Africa was the leader in the initiative. Enough has been reported about this event which incorporated the FASC to make it a truly African event. A most reasonable profit was made which Council will ensure is put to the best use for SACI Members.

In order to maintain this level of success and financial viability, all Members are urged to send in details of all events on the National Calendar to our secretary, Mrs Laila Smith and draw up budgets for submission to EXCO when applying for starter funds from the Central Fund. Council and EXCO are there to provide guidance and assistance to make sure all SACI events are publicised and financially viable. Members are also reminded that we provide an electronic secretarial service at a vastly reduced rate for the organisation of all SACI events and this has been illustrated by the President in the various News Letters.

Members are also reminded that when organising occasions for the handing over of awards approved by Council at the AGM, that Council makes a financial contribution towards the costs based on a submitted budget.

Prof I R Green
President of SACI

SA JOURNAL OF CHEMISTRY

Scientific editors: J. D. Bradley (chemical education), R. J. Haines (inorganic chemistry), R. A. Hasty (analytical chemistry), N. Torto (analytical chemistry), H. G. Kruger (organic chemistry), W. van Otterlo (organic chemistry), L. Fraser (organic chemistry), B. S. Martincigh (physical chemistry) and G. Venter (computational chemistry). Coordinating editor: G. E. Jackson.

Administrative

The board of scientific editors has been expanded to cope with the increase number of manuscript submissions. Two of the editors, Bob Hasty and Ray Haines have decided to step down as editor. Their valuable contribution over many years is gratefully acknowledged. Nelson Torto has been appointed as the new analytical editor. We are currently looking for a new inorganic editor.

Statistics for 2010-2011

The steady increase in the number of manuscripts submitted since 2003 has been maintained, with 123 manuscripts received in 2010, and 91 submitted so far in 2011. This reflects only those manuscripts that were sent for review and excludes those manuscripts that were deemed so poor as to warrant early rejection. The average publication time for 2010 is down slightly compared with 2009, while the fastest time from submission to publication is in line with those of previous years (see Table 1). The rejection rate is still high, reflecting the poor quality of some of the manuscripts received, and the diligence with which the scientific editors and referees undertake their duties.

The international nature of the journal is one of its positive features, and for those years for which accurate statistics are available, South African manuscripts represented only ~13% of those submitted. India, China and Iran are the three countries for which the journal appears to be most attractive (see Table 2). The quality of the South African papers however is high and this is reflected by the proportion of papers published relative to the total (see Table 3); for a number of years now South African papers published has been below 50%. It is hoped that, while the journal will continue to attract manuscripts from other countries, the number of South African submissions will increase once local authors regain confidence in the journal since it went electronic in 2000. In order to boost submissions from South African authors, this year, being the International 'Year of Chemistry', a call was sent out to all SACI members inviting them to publish in the journal under the banner:

Submitted by invitation to celebrate 2011 - the "International Year of Chemistry"

Already this has seen a significant increase in submissions.

The sharp increase in the number of manuscripts submitted since 2006 has seen its greatest effect in the area of organic chemistry (see Table 4). The spread among the remaining disciplines remains virtually unchanged, with chemical education continuing to attract very few submissions, reflecting the relatively small number of active researchers in that field. The number of papers published in each discipline is in proportion with the total numbers of manuscripts received (see Table 5).

For the first time, this year we had a case of gross fraud. A student, without the knowledge of his co-authors, submitted a paper that had already been published, citing himself as the primary author. Fortunately the attempted fraud was uncovered.

Concluding Remarks

The journal is continuing to experience growth. 2010 was the largest issue of the journal since it went electronic. A matter for concern, however, expressed in previous annual reports, is the increasing number of poor quality manuscripts being received. These can be a source of embarrassment to potential referees, and an early rejection procedure have been implemented. The criteria for submission of papers on new synthetic methodology has also been considerably tightened. There is always room for improvement in the turnaround time between submission and publication. The difficulty of extracting reports from the more recalcitrant referees and in ensuring that authors return their revised manuscripts with the minimum of delay is putting an increased burden on our scientific editors.. To aid in this process, and to even the work-load, the journal now has 3 Scientific Editors for organic chemistry and a new editor has also been appointed to cover computational chemistry. Luigi Nassebeni has been helping with the early rejection process in physical chemistry. The fact that the whole publication process is dependent on the goodwill of voluntary referees, who have to balance many conflicting demands on their time, is appreciated, but they need to be made aware of their crucial rôle in reducing turnaround times.

Table 1. Numbers of manuscripts received per year, numbers of journal pages, numbers of manuscripts published, rejected or withdrawn, and pending, rejection rates and times to publication.

Year	No. of manuscripts received	No. of journal pages	No. of papers published	No. of manuscripts rejected or withdrawn	No. of manuscripts pending	Rejection rate/%	Average time to publication /months	Fastest time to publication /months
2003	38	62	16	22	0	57.9	9.2	2.7
2004	55	56	17	38	0	69.1	9.9	2.4
2005	63	143	21	42	0	66.7	11.3	3.1
2006	103	140	19	84	0	81.6	8.6	1.8
2007	120	128	19	81	20	67.5	6.1	2.5
2008	88	161	24	52	12	59.1	6.3	2.6
2009	101	204	34	63	0	66.3	6.1	2.3
2010	123	233	39	167	27	68.3	5.9	1.2
2011*	91	56	9					0.8

*Up to 30 June 2011.

Table 2. Breakdown of submitted articles with respect to country of origin.

Country	2010	2011 ^a
SA	16 (13%)	21 (23%)
India	30	15
China	21	13
Iran	19	22
Nigeria	9	6
Pakistan	6	4
Turkey	6	2
Mexico	4	2
Egypt	2	1
Marocco	1	1
Algeria	1	1
Thailand	1	1
	1	
Poland	1	1
USA	1	
Sudan		
Tanzania		
Other	2	
Total	123	91

^aUp to 30 June 2011.

Table 3. Breakdown of published articles with respect to country of origin.

Country	2004	2005	2006	2007	2010
SA	6 (50%)	13 (52%)	16 (57%)	7 (30%)	13 (33%)
Austria	1				
Botswana		2			
Zimbabwe					1
Turkey				1	2
China	2	5	2	3	3
Algeria	1			1	
Mauritius	1				
UK	1				
India		1	3	6	9
Kenya		1		1	1
Korea		1			
Nigeria		1	2		1
USA		1			2
Iran			3	4	5
Cote d'Ivoire			1		
Other			1		2
Total	12	25	28	23	39

Table 4. Breakdown of published articles with respect to scientific discipline.

Year	Analytical	Education	Inorganic	Organic	Physical	Total
2003	3	1	1	5	2	12
2004	6	1	2	2	1	12
2005	9	1	2	5	8	25
2006	6	0	3	14	5	28
2007	5	0	2	11	5	23
2010	3	1	10	20	5	39

G E Jackson
30 June 2011

SACI NEWSLETTER

The SACI newsletter continues to go out on a regular monthly basis; typically in the first week of a month. The monthly items include:

- 1) A President's letter. I would like to express my thanks to Prof Green for his regular and timely articles.
- 2) A list of forthcoming events
- 3) I typically write a 5-10 line editorial

The rest of the articles are published on an 'availability' procedure. Articles include: advertising of workshops, seminars; reports on events; articles on chemists etc. Pictures are used when available

The future:

- 1) Need more articles from industry
- 2) Need to consider using the newsletter for advertising and hence to generate revenue.
- 3) I would like to see more articles from outside Gauteng.
- 4) Do we want re vamp the format?

Finally I would like to express my thanks to Ms Laila Smith who takes the information I give her and converts it into the actual formatted newsletter the members receive.

Prof Neil Coville
26th July 2011

IUPAC Annual Report

Name of Committee	
Committee members (please indicate office, year of election/nomination, gender, race and age)	Dr Mike Booth (Male, White) Industries' Association (Chairman) - Chemical & Allied
	Professor Alan Hutton (Male, White) (Vice-Chairman) - University of Cape Town
	Dr Erica Steenberg (Female, White) - RADMASTE Centre
	Professor Pieter Steyn (Male, White) - University of Stellenbosch
	Professor Koos van Staden (Male, White) - University of Pretoria
	Dr Alufelwi Tshavhungwe (Male, Black) Technology - Dept. of Science and
	Dr Leah Vilakazi (Female, Black) - Mintek
	Professor Neil Coville (Male, White) Witwatersrand - University of the
	Professor Ewa Cukrowska (Female, White) Witwatersrand - University of the
	Miss Busiswa Molefe (Female, Black) - ICSU Secretariat

Headings	Activities completed – January to December 2010 x	Activities planned – January to December 2011
<p>1. Participation by South Africans in Union activities (Indicate name of South Africa, union and type and level of participation)</p>	<p>The structure of IUPAC comprises eight divisions and three standing committees</p> <p>Physical and Biophysical Chemistry Division (I) Inorganic Chemistry Division (II) Organic and Biomolecular Chemistry Division (III) Polymer Division (IV) Analytical Chemistry Division (V) Chemistry and the Environment Division (VI) Chemistry and Human Health Division (VII) Chemical Nomenclature and Structure Representation Division (VIII)</p> <p>Chemical Research Applied to World Needs (CHEMRAWN) Committee on Chemistry Education (CCE) Committee on Chemistry and Industry (COCI)</p> <p>South Africa has representation on five of the divisions and two of the standing committees. In addition we have representation on the Committee on Printed and Electronic Publications</p> <p>Professor Jonathan Blackburn - Division III (Sub-Committee on Biotechnology) Professor Kelly Chibale - Division III (Sub-Committee on Biomolecular Chemistry) Professor Liliana Mammino - Division III (Sub-Committee on Green Chemistry) Professor Ron Sanderson - Division IV (Sub-Committees on Polymer Education and Modelling of Polymerisation Kinetics and Processes) Dr Nelson Torto- National Member - Division V Professor Ewa Cukrowska - Titular Member - Division VI Professor Alan Hutton – Titular Member - Division VIII Dr Erica Steenberg - National Member - CCE Professor Jimmy Bull - Committee on Printed and Electronic Publications</p>	<p>•</p>

Headings	Activities completed – January to December 2010 x	Activities planned – January to December 2011
3.1. Size of local community	<ul style="list-style-type: none"> 40 Fellows and Members 	<ul style="list-style-type: none">
3.2 South Africans serving on Unions or its subsidiary bodies	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
3.3 Attendance of International Congresses/Workshops <ul style="list-style-type: none"> Number of conferences attended Number of South African delegates Number of papers presented by South Africans (indicate any special invitations, e.g. keynote/ plenary talks) 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Divisional and Standing Committee Meetings at the General Assembly in San Juan, Puerto Rico 30 July – 7 August 2011 - Professor Hutton, Professor Cukrowska and Dr Torto.
3.4 Capacity Building with regard to Membership of National Committee and involvement of young scientists in International Meetings	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
3.5 Involvement of young scientists in Union activities.	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> SACI Conference, 16-21 January 2011 ICFPAM Conference, 22-27 May 2011
3.6 Organisation of Union related Conferences in South Africa	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
3.7 Contribution by members to key documents (e.g. policy docs.) and publications (please indicate why they are regarded as key)	<ul style="list-style-type: none"> Professor Hutton contributed a Chapter entitled “Nomenclature of Organometallic Compounds” to the revised edition of “Principles of Chemical Nomenclature”, edited by G.J. Leigh and due for publication by IUPAC and RSC Publishing in 2011. 	<ul style="list-style-type: none">
3.8 Report back on recommendations made during the in depth review (indicate what were the recommendations and what progress has been made to attend to them.)	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
4. Value to the Community and Benefit to South Africa	<ul style="list-style-type: none"> Visibility and active participation in the international community. Providing a channel for dissemination of latest recommendations from IUPAC. 	<ul style="list-style-type: none">
5. Public Society Interfaces and Outreach Programmes – self initiated or facilitated by ICSU	<ul style="list-style-type: none"> UNESCO – IUPAC Global Programme in Microchemistry 	<ul style="list-style-type: none">

Headings	Activities completed – January to December 2010 x	Activities planned – January to December 2011
6. Research Highlights/ New Initiatives in South Africa (indicate what benefits will these bring for SA)		•
7. Science Education (Any activities involving teachers, students, school curriculum development, graduate student development)	•	• IYC Global Experiment
8. Highlights and/or major	<ul style="list-style-type: none"> • Professor Hutton attended the Annual Division VIII Committee Meeting in Lund, Sweden, from 11-13 August 2010, as well as meetings of the “Inorganic PINs” and “Revision of Principles of Chemical Nomenclature” Working Groups, held at the same time and venue. 	<ul style="list-style-type: none"> • IYC Activities – • Edition of Quest Magazine for Schools and Universities on Chemistry • Edition of South African Journal of Science devoted to Chemistry • Publicising chemistry at Science Festivals and Science Centres
9. Financial assistance received by South Africans direct from ICSU bodies during 2010		•

SACNASP

Prof. ELJ Breet

SACNASP is a professional body which registers natural scientists under the Natural Science Professions Act (2003) of Parliament in one of three categories (Professional, Candidate or Certificated Natural Scientist) depending on qualifications and vocational experience.

- SACI Representation

I continued in the past year to represent SACI, one of several Voluntary Associations (VA), on the Council of SACNASP and to serve as Chairperson of the Professional Advisory Committee (PAC) of Chemistry to evaluate applications of chemists for registration within the field of Chemical Science.

- Fields of Practice

Schedule I of the Act makes provision for registration within about thirty different fields of practice. Recently, a proposal was made to add, by virtue of revision of the Act, “Water Resource Science” as a new field of practice within which hydrologists, water care scientists and scientists involved in water management may be accommodated. Prof. Dennis Hughes of Wits (as Chairperson) offered the services

of the SA National Committee for International Hydrological Scientists (as VA) to assist with the formation of the PAC.

- CPD System

The Committee tasked with the implementation of a Continuous Professional Development (CPD) point system recommended that two fields of practice (Geological and Animal Science) should serve as a test in the interim before the concept is adopted across the board.

- First Court Case

The Act requires every practising natural scientist rendering a service to the public to be registered. Recently non-registered firefighters in Cape Town who were reported to the police by the Registrar in turn opened a case of offence against SACNASP. The outcome of this first court case will be decisive for the success of SACNASP and the relevance of the Act.

- Registration Statistics

The registration statistics as on 30 April 2011 shows that of a total of 4 134 registered Professional Natural Scientists (highest category of registration), only 273 (6%) are chemists. Chemical Science is in the sixth position, with Geological Science (31%), Earth Science (11%), Environmental Science (9%), Agricultural Science (8%) and Animal Science (7%) in the first five positions.

- Honorarium

Council recently commissioned Deloitte to provide remuneration information of organisations similar to SACNASP by virtue of which honoraria paid to Council members for their time and services may be benchmarked.

- Obituary

Council was recently informed of the death of one of its members, Ms Nokukhanya Yvonne Maluleke.

- New Logo

A new logo for SACNASP will soon complement its updated website.

CO-ORDINATION COMMITTEES AND DIVISION REPORTS

EASTERN CAPE

**SACI / ASPEN PHARMACARE regional student Post-grad Chemistry seminar
22 October 2010**

The annual regional post-graduate chemistry seminar, sponsored by SACI and Aspen Pharmacare, took place on Friday 22 October at the Nelson Mandela Metropolitan University in Port Elizabeth. Post-graduate students and staff from the chemistry departments of the four universities in the Eastern Province gathered together to listen to the latest chemistry research being carried out at the various universities.

The participating universities were: Rhodes, Fort Hare, Walter Sisulu and the Nelson Mandela Metropolitan University (NMMU). It was encouraging to see so many people coming from far out to be part of this auspicious event : there was a large contingent from Walter Sisulu University in Umtata (6 hours by car) and from Fort Hare (4 hours by car) , as well as from Rhodes. All together there were 110 people present.

As usual we had two sections: a junior section incorporating BSc Hons / B Tech and 1st year M, and a senior section covering the higher studies : 2nd year M and PhD. Professor Tommy Gerber, Head of the Department of Chemistry at NMMU briefly welcomed the delegates after which Prof Peter Loyson, chairman of SACI (EP), gave a brief introduction to SACI, its activities and the benefits of belonging to SACI and he presented the James Moir medal to Mr Clive Eley from Rhodes.

There were 3 speakers in the Junior section, one from Rhodes, Fort Hare and NMMU. After tea and biscuits the senior section started with 4 speakers: one from each of the Universities present. A panel of judges, consisting of one staff member from each university and a representative from Aspen Pharmacare, allocated marks for each student presentation and the top two speakers in each category were rewarded with cash prizes, sponsored by SACI (EP).

The 1st prize in the Junior category went to Matthew Coombes from Rhodes with the title : Synthesis, characterization, and computational analysis of a Cu(II) Metal Organic Framework, whilst the 2nd prize went to Claire Rossouw from NMMU with the title : The accelerated life cycle testing and modeling of Lithium-ion cells used in electric vehicle applications.

The 1st prize in the senior category went to Ryan Walmsley from Rhodes with the title: A catalytic exploration of vanadium; the 2nd prize went to Tavengwa Bunhu from Fort Hare with the title: Preparation of polymer-grafted lignocellulose / clay composites for the removal of heavy metals from aqueous solution.

The standard of each presentation was exceptionally high and the large number of post grad students present augurs well for the future of chemistry in the Eastern Cape.

After the academic programme was concluded, students and staff enjoyed refreshments sponsored by Aspen Pharmacare.

International Year of Chemistry activities

A number of activities are planned for the region during 2011. For the 76 schools in Port Elizabeth there will be a Quiz, a blog has been created where you find interesting stories about chemistry, chemistry Spectacular Show will be presented and a series of public lectures will be presented; one in particular dealing with the World of Polymers will be taken to a number of schools.

At the NMMU there will be a Chemistry Quiz for 1st year students, a poster competition for senior students covering a number of topics, and a series of public lectures to which they are invited.

Other Universities in the region also have organized events.

Prof Peter Loyson
Chairman SACI (Eastern Province)
8 April 2011

GAUTENG

The better part of 2010 was used to in the preparation for the 40th SACI convention that was held at WITS in January 2011. As such not many activities were planned by the coordination committee that had dwindled to only two members, the Chair and the Secretary.

Highlighted below are the activities of the Gauteng Co-ordination Committee for the above period.

Young Chemists Symposium:

On October 19th, 2010 the Department of Chemical Technology at University of Johannesburg hosted the Young Chemists symposium at its Doornfontein Campus

(DFC). We had student representations from University of Johannesburg (DFC), North-West University, Potchefstroom campus; WITS, University of Pretoria, Vaal University of Technology and University of Johannesburg (APK). Prizes for the best presentations were generously provided by The Royal Society of Chemistry (RSC) (Northern Section). The next Young Chemists symposium would be hosted by Vaal University of Technology in October 2011.

Interactions with RSC (Northern Section):

The Chairman of Gauteng Co-ordination Committee continued to attend meetings of the Northern Section of the RSC in South Africa; representing SACI Gauteng.

AGM and Award ceremony:

On July 28th, 2011 the SACI Gauteng AMG was held at the Humphrey Raikes building School of Chemistry at WITS and to elect a new Co-ordination Committee. The officers elected are: Dr Alfred Muller (University of Johannesburg), Chair; Dr. Richard Moutloali (Mintek) Vice-Chair; Dr. Omotayo Aritoba (University of Johannesburg), Secretary; Dr Andreas Lemmerer (WITS), Treasurer.

Several outstanding awards were handed to recipients, culminating in an award lecturer by Prof. Reinout Meijboom, the 2009 Raikes medal awardee from the University of Johannesburg. He gave a lecture entitled “*Dendrimers from synthesis to catalysis*”.

KWAZULU-NATAL

The first event held during the period July 2010 to June 2011 was a talk given by the DST on 4 August 2010. It was focused on the tax incentive programme for industries to promote research in chemistry within the province, and it formed part of the section's new strategy to try to incorporate more industry-relevant events in the programme.

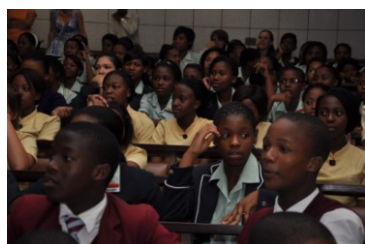
The annual Honours/BTech seminar day was held at the Durban University of Technology Hotel School on Tuesday, 26 October 2010. The symposium was attended by some 70 delegates with six oral presentations.

This was followed by a two-day workshop on applications of the QuEChERS extraction technique and associated GC analysis, presented by Dr Jack Cochran, Director of New Business and Technology at Restek Corporation, USA. The workshop was held on Thursday, 28 October 2010 at UKZN Pietermaritzburg Campus, and on Friday, 29 October at the Westville Campus. The technique was

designed primarily for pesticide analysis in high water content, low fat food products, but it is a very useful general extraction technique in other areas, including natural product research.

The International Year of Chemistry opened in KZN with a joint SACI/SAAFoST evening lecture at Makaranga Lodge, Kloof, on Wednesday, 26 January 2011. The first speaker was Dr Mike Booth, Director of Information Resources, Chemical and Allied Industries Association, who explained why 2011 has been chosen as the IYC, what it is hoped will be achieved, and what global initiatives are planned for the year. The second speaker was Dr Nigel Sunley, a food industry consultant, who gave an overview of how chemistry is revolutionizing the food industry. The venue was sponsored by Tongaat Hulett Sugar, and the catering by SACI KZN Section.

To celebrate the International Year of Chemistry the Section held a Chemistry Magic Show at the UKZN Pietermaritzburg Campus on Monday, 28 March 2011 for learners in grades 9 to 12. Approximately 170 students attended from 8 schools, and were given a gift pack containing a periodic table, pen, ruler and highlighters.



A presentation was also held on the “European Regulatory affairs for food packaging including REACH” by Mr Chris Whitehead who is a retired Director of a major ink manufacturing company in the UK.

WESTERN CAPE

The amalgamation of the two Sections viz., SACI Western Cape Section and The Royal Society of Chemistry into one functioning committee was a good and well received structural change. It has allowed us to join forces for functions, lectures, events and committee meetings.

Although the majority of the SACI committee members are in Stellenbosch and the RSC members are in Cape Town, meetings are alternated on the two campuses for equity. We are indeed most grateful to Dr Sophie Rees-Jones for acting as secretary for both societies since we share our membership lists for the purposes of communication.

A successful science expo was organised and presented by the RSC with Eileen

Murray and Susan Bourne acting as judges and on all accounts the real eye-opener was the difference between the standards of the junior vs senior students in the Boland since no prizes were awarded in the latter section.

On the 13th July, a ChromSA seminar was held at the US Biochemistry Department and Martin Hornshaw spoke on "Recent Advances in the field of Mass Spectroscopy with special reference to Proteomics.

The annual FW Warren Lecture was given by Prof Holger Friedrich in October to an audience comprising students from all campuses.

The Young Chemists, represented by all three campuses viz., UWC, UCT and US organised a full day Symposium on the 25th November on the UCT campus with Chris Barnett being the main driver. The event started with an introductory lecture by the SACI President, Prof Green and was followed by a presentation by Prof Priscilla Baker from the UWC. Thereafter the programme was over to the students who presented their work in 20 min slots and was equally proportioned between the three Universities to end at 1730. Feedback suggested a most enterprising day and an occasion that is to be repeated at the UWC in the 2nd half of 2011 by Ms Natasha West a PhD student.

The SACI/RSC annual dinner was organised by the Stellenbosch SACI group and the wine estate Neethlinghof which proved to be an excellent venue. It was gratifying to note the older SACI members were well represented.

Many committee members were fully engaged in the organisation of the Analitika 2010 meeting held from 5-9th December of 2010 which was attended by no fewer than 300 delegates. Dr Marietjie Stander was chair and operated from the US campus which hosted this most successful event. One of the more rewarding features of the Conference was the large number of overseas delegates (~20%) who attended and gave such positive feedback. This effectively brought all the Analytical Chemists together at one time and under one roof. An afternoon was set aside for the three subject groups, Analytica, SAAMS and ChromSA to comprehensively discuss the boundaries of interaction and the way forward. The President has enunciated on this in the newsletter for all to read. The committee decided to put an amount of R10000-00 aside to support MSc bursaries for students undertaking their degrees in Analytical Science.

A most enjoyable 30th AGM was held by the RSC at UCT on 3rd May this year and Dr Martin Dovey spoke on the flavour industry.

We have not had any visiting overseas chemists of late and thus the programme has been rather quiet over the past 6 months.

I R Green
Section Chairperson 2010-2011

ANALYTICA

The following items were carried out by the Division based on the planned activities submitted in 2010.

- 1) **Building capacity in Analytical Chemistry through students.** A grant of R90k was secured through the NRF's Knowledge Field Development Grant. This grant was used to support the participation of 30 postgraduate students to the Analitika conference in Stellenbosch. The condition for the award of sponsorship was that the students were supposed to attend a workshop on Chromatography and Mass Spectrometry and also present a paper at the conference. The workshop presented the students with an opportunity to listen to experts from Lund University in Sweden.

- 2) **Enhanced triple helix interaction to promote analytical Chemistry:** Because it had been pointed out during the Analytical Workshop held in November 2009 that there was a need to address the expertise gap in the discipline; several meetings were held with government representatives (DST and NRF), academia and industry. The meetings were focussed on trying to justify and also demonstrate the need for allocation of research chairs in the areas that help the development of analytical Chemistry. A proposal was submitted to DST highlighting the need for Chairs in the areas of Nano-based Analytical Chemistry, Analytical Polymer Science, New Analytical Methods and Technologies as well as Bio-analytical Chemistry

- 3) **Development of a database for Analytical Chemistry in South Africa.** The plan is to develop a database that will be hosted on the SACI website and will list all Universities including their available instrumentation, analytical expertise and curricula. The list will also include organisations and companies that are engaged in analytical activities and thus facilitate the identification of

gaps in Analytical Chemistry capacity. Letters have been sent to HODs and the responses have been trickling in slowly, hence not very much progress has been made.

4) Harmonisation of Analytical Chemistry Curricula

A workshop was held between SACI's Analytical Division and the Analytical Chemists Network of Africa (SEANAC) on July 12-13th, 2011. The main outcome of the meeting was a draft Curricula for level 100-400 which will be discussed at a joint workshop planned for 12-13th August 2011 at Birchwood Hotel. It is hoped that participation by Analytical Chemists from other African countries should enrich the discussions.

CHEMICAL EDUCATION

Main Activities

- SACI convention
- FET Chemistry curriculum
- NSTF meeting
- International Year of Chemistry
- African Journal of Chemical Education

There is little to report from the chemical education division. The main activity in the last year has been securing good participation for the SACI convention. The IYC committee has been working well under Mike Booth.

There has been a request from members of the education committee for a conference on first year teaching. This will be discussed further.

SACI convention

The Chemical Education division hosted the plenary speaker, Dr Mary Nakhleh from Purdue University in Indiana and two keynote speakers', Prof Bette Davidowitz from UCT and Prof Marietjie Potgieter from University of Pretoria, both previous winners of the chemical education medal. Dr Mary Nakhleh went on to the SAARMSTE conference which starts on the Tuesday of the same week in Mafikeng. In addition to the two keynote speakers, there were a further 5 presentations which were all well attended. RADMASTE also organized a workshop for teachers which allowed participants to work through the IYC experiments.

FET Chemistry Curriculum

After the input of the chemical education division to the government's Curriculum and assessment Policy statement (CAPS) document, the final document came out recently. The documents for science can be downloaded from:

<http://www.education.gov.za/Curriculum/CurriculumAssessmentPolicyStatements/tabid/419/Default.aspx>

Although some issues in the chemistry curriculum were addressed such as the initial exclusion of the mole and the inclusion of acids and bases, problems remain with the tone of the document. It represents a move back to the old "matric" and many important innovations such as a look at the chemical industry have been drastically curtailed.

NSTF meeting

I was unable to attend the last meeting on the 6th May and we were unable to get a replacement. The minutes of the meeting are available at

<http://www.nstf.org.za/ShowProperty?nodePath=/NSTF%20Repository/NSTF/files/PlenaryMeetings/2011/Minutes39Plenary.pdf>

Highlights included

- Integrated resource plan (IRP) of the department of energy 2010–2030 by Thabang Audat, Director: electricity supply, department of energy
- Nuclear safety within the South African nuclear regulatory framework by Dr Ramatsemela Masango, NECSA

International Year of Chemistry

This committee has been active and regular meetings have been held. Mike Booth will report on this.

African Journal of Chemical Education

Two issues of this journal have now been published, the second only this month. See <http://www.faschem.org>

Marissa Rollnick

CHROMSA

A) COMMITTEE:

Four committee meetings were held during the above period. The committee members are:

Dr Patricia Forbes (Chairperson)

Mrs Hannalien Meyer (Immediate Past Chairperson)

Dr Magda Rösemann (Minutes Secretary, Vice-Chairperson)

Mrs Wiana Louw (Treasurer)

Prof Luke Chimuka (Student Liaison)

Mrs Yvette Naudé (Honorary Secretary and Membership)

Additional members: Mrs Anita Botha, Mrs Betty-Jayne de Vos, Dr Peter Gorst-Allman, Mrs Belinda Hickman, Dr Maria Fernandes-Whaley, Mr Grant Kilian.

Dr Marietjie Stander is the ChromSA representative for the Western Cape and Dr Martin Dovey is the ChromSA representative for KwaZulu Natal.

B) ANNUAL GENERAL MEETING:

The AGM was held on 19 November 2010 at the CSIR Knowledge Commons.

C) AWARDS:

Dr Werner Welthagen was presented with the ChromSA Chromatographer of the Year award for 2010 in the category “Publications of new developments in chromatography” at the Analitika conference in Stellenbosch early in December.

D) FINANCES:

The funds held by ChromSA are more than R280 000.

E) EVENTS ORGANISED:

- The following lectures were held in Gauteng and were well attended:

Speaker	Title	Date	Sponsor
Patricia Forbes	Alternative monitoring methods for trace organic air pollutants	27 May 2010	Chemetrix
Postgraduate students	2010 Chromatography Postgraduate Student Workshop (held at Wits)	18 August 2010	Life & Analytical Sciences & ChromSA
Werner Welthagen; Rina van der Westhuizen; Hein Potgieter; Carol du Sautoy & Piet de Coning	Visit to the Sasol Laboratories followed by technical lectures	25 February 2011	Sasol Technologies & ChromSA
Martin Dovey	Chromatography as a tool in the flavour industry	7 April 2011	Chemetrix

- A short course entitled “Modern sampling and sample preparation techniques in environmental analysis” was held at Wits from 2-3 December 2010. Prof Branislav Vrana and Dr Peter Tolgyessy were the presenters and this event was presented jointly by ChromSA and the Environmental Analytical Chemistry Research Group of the University of the Witwatersrand. Anatech provided partial sponsorship and there were 30 attendees. The feedback from participants was positive.
- The Western Cape section was primarily involved with the organization of the Analytika 2010 conference from 5-9 December 2010. The conference was held at the University of Stellenbosch and was very successful. ChromSA sponsored one of the invited speakers to the conference as well as four postgraduate students.

F) FUTURE EVENTS:

A number of additional lectures are planned for the 2011 calendar, and preparations have begun for the 2012 ChromSAAMS symposium.

G) CONCLUDING COMMENTS:

It was only possible to hold so many successful events in the year with the dedicated hard work of the ChromSA national committee members and regional representatives, who voluntarily give of their valuable time and energy. I would therefore like to sincerely thank all committee members for their contributions. The ongoing valuable support of ChromSA's sponsors is also highly appreciated and all ChromSA members who contribute to the vibrancy of the division are thanked for their participation in our events. It is very encouraging to note the increased interest and involvement of postgraduate students in the activities of ChromSA.

Dr Patricia Forbes

Chairperson, ChromSA

Date: 28 July 2011

ENVIROMENTAL CHEMISTRY

No Report

PHYSICAL CHEMISTRY

No Report

ELECTROCHEMISTRY

**10th International symposium on Kinetics in Analytical Chemistry
2-4 December 2009, Cape Town, South Africa**

Conference special issue:

Proofs of all 18 submissions for the special issue of Analytical Letters dedicated to papers read at the above meeting have been reviewed and edited (June 2011). The manuscripts are currently being prepared for print in by the editorial team as Volume 44, issue 11.

Events and Activities:

The 4th workshop of the Electrochemistry division of SACI (ElectrochemSA Workshop IV) entitled "International workshop on electrochemical microscopy & spectroscopy" was recently held at Nelson Mandela Metropolitan University (NMMU), Port Elizabeth, South Africa from 21 – 22 February 2011. Delegates from AngloPlatinum, Bruker, CSIR, Gamry, Metrohm, Mintek, and Willard Batteries (Powertech) as well as students from NMMU, University of the Western Cape (UWC), University of Cape Town (UCT) and University of Rhodes (UR) engaged in interactive discussion and training in specialised applications of electrochemistry. The organising committee for the workshop was made up of Dr Shawn Gouws (chair of organizing committee), Prof Peter Loyson, Dr Ernst Ferg (treasurer), Prof PGL Baker (secretary) and the SensorLab team. The rationale was to bring students and developing researchers together with representatives from the companies supplying our electrochemical equipment within a workshop environment as a platform for facilitating demonstrations, lectures and presentations highlighting existing expertise in the usage of the advanced techniques as well as their applications.

Forthcoming events:

Another training workshop is planned for May- June 2012 (UWC, Bellville) to coincide with the visit by Prof O Sadik (NSF/NRF research co-operation partner of PGL Baker) where the focuss of the training will be transfer of technology from academic status to innovative tools. The workshop is provisionally entitled "From Science to Technology; S2T)

Action:

Proposal for approval to be submitted



Prof Priscilla G L Baker
Chair, Electrochemistry division 2006-
25 July 2011

INORGANIC CHEMISTRY

Activities in Inorganic Chemistry at various regional divisions have caught the eye in the regular monthly SACI Newsletters. Many events however went unaware because of a lack of information, maybe the scale of an event and organizers not informing the SACI office at Wits about visitors, seminars, etc. It is envisaged that each SACI branch in the country should have a publicity member (also for Inorganic Chemistry) to distribute information and report on activities.

Many meetings, regional and National were held in Chemistry or across disciplines in Science in celebrating the International Year of Chemistry (IYC). Some more are to follow.

The 15th SACI National Inorganic Conference was held in January (16-23) at the University of the Witwatersrand and judged by the response represented another big success. For the first time, Inorganic 2011 was organized as part of the 40th National SACI Convention and 3rd FASC meeting. Inorganic 2011 was well attended with about 150 delegates, excellent speakers and program with wide participation by younger researchers and students. Running parallel to the main Convention, Inorganic 2011 could benefit in a number of ways such as the number of plenary speakers at the Conference, the larger social events, the organization at a single venue, advantages of combining efforts to organize, look after visitors and the possibility of mixing of delegates with students and colleagues in other disciplines in Chemistry. The 16th SACI Inorganic Conference will be organized by the UKZN branch of SACI in 2013

Simon Lotz (July 2011)

MOLECULAR MODELLING

Minutes SACI modeling division AGM

8 December 2010 15h30

CHPC meeting, Westin Grand Hotel, Cape Town

Welcome:

Prof. Kruger welcomed everybody present at the meeting. He gave a short background about the annual meeting of the division. He invited everybody present in the meeting, that do not receive any e-mail in regard to CHPC and/or SACI molecular division to send him an e-mail. The subject of the e-mail should be: "Please add my name to computational interest group list." His e-mail address is: kruger@ukzn.ac.za

The following issue were discussed:

Gaussian is up and running on the CHPC. AMBER, DYNOMO (not very user friendly) and Materials Studio of Accelrys are also available on the CHPC. The people interested in using Materials Studios could ask for the Visualliser (GUI) (free of charge) from the company. Registration to become a CHPC user is open for individuals / students. E everybody that wants to use the available software on the CHPC should register as soon as possible. There is a possibility that Discover of Accelrys will be obtained by CHPC. In this regard everybody interested in using Discover of Accelrys should send an e-mail (to kruger@ukzn.ac.za) , mentioning this in subject line.

The meeting is reminded of the SACI2011-meeting in January 2011. There will be a computational session at the meeting. There will be an Accelrys Workshop at the meeting, but the details are not available yet. Visit the SACI2011 website (www.saci2011.org.za) for more information.

Prof. Kruger mentioned that a Workshop for beginners in Computational Chemistry (based on the Introductory Course in Molecular Modelling as presented by NWU) is being planned just before or after CHPC-meeting next year. The CHPC-meeting is planned to take place in Gauteng. The idea of the workshop is to involve more post-graduate students. Dr. Chen mentioned possible travel grants for students, especially previously disadvantaged students. Presentations of computational chemistry during the CHPC conference are envisaged.

A few problems that occurred when using CHPC facilities and which have been brought to the attention of CHPC. The queuing system must be changed to be fairer in allocation of CPU time. The systems of CHPC must be simplified. The CHPC announced that that will be advertising a position for a computational chemist application person. This should assist the computational chemistry users a lot.

If help with computational chemistry aspects is needed the best place to start is the CCL list. It was suggested that everybody register on the list and use it as first point when trying to solve a problem. It was also suggested that CHPC start a WIKI – forum at CHPC.

The meeting finished at 15h45.

ORGANIC CHEMISTRY

After the last successful event, The 11th Frank Warren Conference held from 17-21 January 2010 in Pietermaritzburg under the chairmanship of Prof Ross Robinson, the next event was scheduled for the Eastern Cape and Rhodes University would have been the hosts. Since the next National Convention (41st) also happens to be scheduled in the Eastern Cape in the same timeframe, Prof Mike Davies-Colman contacted me to discuss very valid concerns he had about a small section having to organise two events within 6 months of each other and the financial impact it would have on soliciting sponsorships.

After discussion, EXCO then asked me to contact The University of the Free State, who had last organised a Frank Warren Conference some time ago to ask them to consider hosting the next event. Prof Jan van der Westhuizen immediately agreed to this request and proceeded to form a committee to organise the 12th Frank Warren Conference and I am delighted to confirm that this events is scheduled to be presented from 15-18 April 2012 at the UFS. Details are on the SACI website and will be updated from time to time.

I R Green

Divisional Chairperson

SAAMS

The recently held **Analitika 2010** symposium was very successful and we would like to thank the symposium committee in the Western Cape for organizing and hosting this in Stellenbosch during December 2011. The Analitika 2010 committee will separately report to SACI on this symposium. The next symposium, **ChromSAAMS 2012** is a joint effort between the divisions SAAMS and ChromSA. A symposium committee has already been established and organization has started. It is likely that the symposium will held during October 2012 in a rural or game park setting just outside Gauteng. International renowned scientists have already been identified as plenary speakers to invite. Pre and/ or post symposium schools and workshops are being investigated. There will be advertisement into Africa and we hope to have significant attendance from other African countries also.

A new **SAAMS committee** was recently established. The **universities** of Pretoria, North West, Witwatersrand and Johannesburg are represented by committee members. There are also several committee members from industry as well as scientists from **instrument supplier** companies. The latter are important as they introduce us to new instrumentation, techniques and applications as these become

commercially available. The fields of inorganic mass spectrometry and proteomics are now catered for as specialized fields within SAAMS. Dedicated events are being organized for these interest groups and we expect our membership to grow within these fields.

The **SAAMS website** was revamped and more information was added. Following this about a thousand **business cards** were provided to universities and instrument companies for distribution. This in an effort to increase membership and to ensure that new users of mass spectrometry are made aware of the activities of SAAMS and the symposia and events we offer.

To close a busy 2010 there was a **SAAMS end of the year function**. This was sponsored by instrument companies. This was reserved for members and accompanying persons only it was held at a restaurant at the University of Pretoria. The late afternoon event started with two talks on the **chemistry of wine**. This was followed by the tasting of wines, some specifically selected to illustrate and substantiate the chemistry which was presented. The left-over wines were enjoyed during the buffet supper offered afterwards. The complexity of wine aromas and tastes and the fact that differences between wines have a strong chemistry basis was much enjoyed by all!

Mike Britton, a previous chairperson of SAAMS and a scientist at NECSA has now taken over from me as the **SAAMS chairperson**.

Dr Schalk de Kock
SAAMS Chairman

RSC

South Africa (North) Section

ANNUAL REPORT 2010

1. Annual General Meeting

The 31st AGM was held at Wits Chemistry Department conference room on 4th March 2010. The attendance was similar to previous years in that seven members and one guest attended the meeting.

2. Section Committee

The committee met on five occasions during the year at Wits University. We moved from the 5th floor boardroom in the Humphrey Raikes building to the 8th floor meeting room in the Gatehouse building. I would like to thank Dave Billing for his excellent hospitality and provision of refreshments at the meetings.

I would also like to express my thanks to our Secretary, Suzanne Finney, for producing excellent and timeous minutes of our meetings and also liaising with the RSC in the UK. Thanks to Mike Laws for keeping a tight rein on the finances yet again. I wish to record my grateful thanks to them and to the other committee members, Rob White, Peter Quorn and Noah Halwindi for their input and contribution to the section's activities over the past 9 months.

3. Functions and activities

The official launch of the Emasondosondo Chemistry Bus project finally took place on 1st October, many months after the bus actually started operating. The function was attended by the Deputy Minister of Science and Technology, Derek Hanekom, and Professor Mike Green, past Chairman of the local section and a member of the RSC council. There was a demonstration of chemistry experiments in action by a team from Wits, under the capable leadership of Dave Billing, and by the Emasondosondo facilitators. The function was well attended and excellent publicity was obtained especially in the Star and Engineering News.

We also donated R80000 which will be used to purchase equipment to stock the new RSC Laboratory at the Sci Bono Centre. This was a welcome addition to our ongoing support for the centre. Our relationship with Sci Bono remains excellent thanks to Michael Peter, Thandi O'Hagan and especially David Kramer. Their enthusiasm never seems to wane and we are fortunate in having such a dynamic partner.

The section once again sponsored prizes and provided judges at the Eskom National Science Expo and sponsored prizes at the SACI Young Chemists event which this year was hosted by the University of Johannesburg.

The annual dinner was held in October 2010 and was attended by 30 members and guests. The guest speaker, Professor Helder Marques from Wits, enlightened us on the topic of malaria and why new drugs may not be the answer to eradicating the scourge of this disease.

Other activities with which the section and its members were involved in during 2010 were:

- Provision of 130 “Access to Chemistry” books to schools via Sci Bono
- Donation of RSC books to four university Chemistry Departments (University of the Free State, Vaal University of Technology, University of the Witwatersrand, and University of Kwa Zulu Natal)
- Sponsoring of poster prizes at CATSA
- Attendance at meetings of the International Year of Chemistry coordination committee. Thanks to Mike Laws for being the section representative on this committee.

We have also continued our close liaison with SACI during 2010 and Neil Coville and James Darkwa have been regular attendees at our committee meetings. Suzanne Finney has continued to represent the RSC at the SACI Council meetings.

The increased activity in KZN did not happen in 2010 but this is still on our agenda for 2011.

4. Finances

The annual grant received from the RSC (UK) increased slightly to R175819 for 2010. We were finally able to get a majority of the membership to agree (via an e-mail ballot) to change our financial year end to 30th September. [A big thanks to Suzanne for all the e-mails she sent out in order to make this happen.] The audited figures thus only represent a nine-month period and thus the expenditure for this period is much lower than the previous 12 months. However, the balance of our grant for 2010 has been/will be spent during the last three months of 2010 as detailed in the appendix to the audited financial accounts.

The change to the financial year end made it possible for the Annual General Meeting to be held in November this year and in future years. We will now be able to submit our approved audited accounts and proposed budget for the following year to the RSC in London and hopefully receive our annual grant in January/February each year instead of April/May as in previous years.

The section is still in a financially healthy position. My thanks, once again, to our Treasurer, Mike Laws for his work in this regard and to Phillip Schmidt our Honorary Auditor. It was particularly pleasing that Phillip was able to attend the launch of the Chemistry Bus at Sci Bono and also our annual dinner this year.

5. Membership

The membership has decreased slightly and now stands at 101. Of these, the majority (69 members) are in Gauteng with the second biggest number (19 members) being in Kwa Zulu Natal. We also have a few members in each of the other provinces covered by the section (Limpopo, Mpumalanga and Northwest).

6. General

2011, the International Year of Chemistry, is almost upon us. The first major event of the year will be SACI2011 which will be held at Wits University with over 400 chemists from all over the world and South Africa meeting to celebrate and promote Chemistry. The local section of the RSC has donated money to sponsor the attendance of students and also to fund the poster prizes. The RSC (UK) will be mounting an exhibition and their publications division is also interested in displaying books and journals.

In 2011 we intend to actively promote a series of Whizz Bang lectures which will be run by Dave Billing and a team from Wits aimed at students and teachers through the Sci Bono Science Centre. We will also continue to support the Emasondosondo bus, educational material for schools and hopefully some additional chemistry exhibits at Sci Bono itself.

We are also hoping to sponsor a return visit by Tim Harrison whose previous visit in January of this year, proved highly successful. As always, the committee welcomes suggestions on other activities which will help us to fulfill our role of promoting Chemistry in our area of activity.

Interim Report 2011

1. Functions and activities

The highlight of the year to date was undoubtedly the SAC2011 conference which was attended by the President of the RSC, Professor David Phillips and the RSC Manager of International Projects, Alejandra Palermo. They were able to get a first hand account of the section's activities. They also had the opportunity to see the Emasondosondo Chemistry Bus. This resulted in another photo and article in RSC News.

The prizes for the poster competitions at the conference were sponsored by the local section RSC and committee members Suzanne Finney, Dave Billing, Noah Halwindi and Ian Bratt acted as judges ably assisted by David St. Black and Rudi van Eldik.

The giant periodic table which the section sponsored at Sci Bono is finally complete.

The section Chairman, Ian Bratt, was the keynote speaker at the launch of the International Year of Chemistry held at Sci Bono on 19th April.

The section sponsored twenty water test kits for schools to use for the IYC experiments. The section was ably represented on the local IYC coordinating committee by Mike Laws.

RSC books for donation to the Universities of Limpopo and Venda have recently been ordered along with a further 120 copies of Access to Chemistry which will be distributed through Sci Bono. Several attempts to contact the University of Zululand to offer them RSC books as a donation were unsuccessful.

The section organized a lecture on 31st March to promote the International Year of Chemistry as part of the Sci Bono “Speak to a Scientist” series. Professor Ewa Cukrowska gave an excellent lecture on Marie Curie (2011 is the 100th anniversary of her being awarded the Nobel Prize).

The proposed series of Whizz Bang lectures has been slow to get off the ground but this project has been taken over by Paul Franklin from Wits who is liaising directly with Sci Bono.

RSC handouts (pens, ‘bugs’ and wristbands) were obtained for Sci Bono to use during National Science week.

Activities planned for the rest of the year include the Annual dinner (date and venue to be advised), the Eskom Science Expo, the SACI Young Scientists symposium, a dinner for the visiting RSC dignitaries attending the RSC/SACI course on Catalysis (17th Nov) and the AGM (scheduled for November).

The section sponsored twenty water test kits for schools to use for the IYC experiments. The section was ably represented on the local IYC coordinating committee by Mike Laws.

2. Finances

The section's financial year now runs from 1st Oct to 30th Sep. This is to facilitate completion of the audited and approved annual accounts for submission to the RSC in London before the end of the calendar year. This resulted in receiving the annual grant (which increased to R185835 for 2011) much earlier in the new year than was previously the case.



Ian M Bratt (Dr.)

Chairman 2010

Green Chemistry

The Green Chemistry Division of SACI became a reality on the last day of the 40th SACI Convention incorporating the 3rd Federation of African Societies of Chemistry (FASC), at the University of the Witwatersrand, held from 16-21 January 2011. At that time a mailing list was also established and will be used to inform everyone on latest developments or future announcements in Green Chemistry, please inform anyone who wants to be included and forward Name, email, and institution to the Green division secretary. A monthly circular to all is aimed for from now on.

In a recent article Poliakoff and others have come up with 13 Principles of Green Chemistry specifically designed for the needs of Africa with the useful acronym GREENER AFRICA. How many of these principles do we keep in mind when we plan our chemistry or processes? This could be read in conjunction with the already established 12 General Principles developed by Anastas that can be found on our website.

<http://www.greenchemistry.co.za/greenchemistry/default.html>

13 Principles for Greener Africa

G - Generate Wealth not Waste

R – Regard for All Life & Human Health

E – Energy from the Sun

E – Ensure Degradability & No Hazards

N – New Ideas & Different Thinking

E – Engineer for Simplicity & Practicality

R – Recycle Whenever Possible

A – Appropriate Materials for Function

F – Fewer Auxiliary Substances and Solvents

R – Reactions Using Catalysts

I – Ingenious Renewable Feedstocks

C – Cleaner Air & Water

A – Avoid the Mistakes of Others

Adapted from: "The Thirteen Principles of Green Chemistry and Engineering for a Greener Africa", Asfaw et al., *Green Chem.*, **2011**, *13*, 1059.

The SACI Green Chemistry committee members aim to organize a Green Chemistry workshop for later in the year.

SACI GREEN CHEMISTRY DIVISION CONTACT E-MAIL

greenchem@ukzn.ac.za

More contact info can be found on our website shown above.

CONTACT DETAILS OF CURRENT COMMITTEE MEMBERS ON SACI GREEN CHEMISTRY DIVISION:

Chair: Dr Vincent O. Nyamori (UKZN)

E-mail: nyamori@ukzn.ac.za

Tell: 031-260 8256

Secretary: Dr Werner E. van Zyl (UKZN)

E-mail: Vanzylw@ukzn.ac.za

Tell: 031-260 3188

Treasurer: Dr Muhammad D. Bala (UKZN)

E-mail: bala@ukzn.ac.za

Tell: 031-260 2616

Member: Victoria Anderson (AngloAmerican)

E-mail: vanderson@angloamerican.co.za

Tell: 011-377 4790

Member: Dr Alufelwi M. Tshavhungwe (DST)

E-mail: alufelwi.tshavhungwe@dst.gov.za

Tell: 021-843 6433

Member: Dr Sabelo Mhlanga (Wits)

E-mail: sabelo.mhlanga@wits.ac.za

Tell: 011-717 6705

ThermSA

Background

It has long been the dream of several individuals working in the field of thermal analysis to revive the old SATAS (Southern African Thermal Analysis Society). This dream started to become reality when several researchers in the field of thermal analysis gathered in September 2010 under a tree at the Preller House restaurant at Necsa. A decision was made to work towards establishing a new society devoted to the field of thermal analysis. It soon became clear that this is a major undertaking and that some assistance would be required. With the help of Prof Neil Coville SACI was approached and **ThermSA** was duly founded as a Section of SACI. The founding members elected an interim committee to further advance the establishment of the society. Thermal analysis equipment vendors were also contacted to obtain their support for ThermSA.

Interim committee

The interim committee is as follows:

- Gerda de Jager (Sasol)
- Avril Ley (Sasol)
- Danie Moolman (Necsa)
- Andrew Pienaar (Necsa)
- Liezel van der Merwe (UP)
- Kobus Wagener (Necsa) (Chairperson)

Membership

Membership is open to any individual with an interest in thermal analysis. SACI members can join ThermSA as a section of SACI. It is, however, recognised that the field of thermal analysis is wider than just chemistry, and individuals can also join ThermSA without necessarily having to join SACI.

Planned activities

The first order of business is to recruit members. This will be done through SACI newsletters and through the personal contacts of committee members, as well as through the assistance of equipment vendors.

A general meeting will be convened where a constitution for ThermSA will be ratified and a committee elected.

ThermSA plans to advance the cause of thermal analysis through one day seminars, courses and conferences (possibly affiliated to SACI conferences). International contact through affiliation with international thermal analysis organisations (such as ICTAC) will also be sought.

Dr JB Wagener

Interim Chairperson: Therms

FINANCIAL REPORT

Prof. ELJ Breet, Executive Treasurer

The assets and income/expenditure of the South African Chemical Institute (SACI) for the past financial year (1 May 2010 to 30 April 2011) are reflected in this report and concisely summarise figures found in the annual financial statements issued by the auditors.

- Assets as at 30 April 2011

The assets of SACI are held in three different fund-holding entities. The table below gives an abbreviated breakdown of these assets, and explanatory notes are added to make the report as informative as possible. It is the first time ever that an overview of the assets of the Institute is presented in this way.

Fund-Holding Entity	Type of Asset	Amount (R)	Notes
Divisions/Sections	Local Account	423 125	1
	Central Account	499 963	2
	Subtotal	923 088	3
Central Fund	Unit Trust Portfolio	560 966	4
	Cash on Hand/Call	286 761	5
	Seed Money	21 889	6
	Subtotal	869 616	7
Secretariat	Property	14 286	8
	Trade/Inventories	56 377	9
	Cash on Hand	120 139	10
	Subtotal	190 802	11
SACI	Total	1 983 506	12

1. Divisions and Local Sections are allowed constitutionally to keep funds in an account of their own and to manage these by an appointed Treasurer. Entities holding funds in this way are ChromSA (R323 828), SAAMS (R34 493) and Western Cape (R64 804).
2. The Secretariat assists Divisions and Local Sections to hold funds in an account of their own within the Institute's internet banking portfolio, and to manage such funds strictly according to instructions given by the Division/Section concerned. The service seems to be popular, and entities holding monies in this way include Inorganic Chemistry (R53 320), Computational Chemistry (R5 720), Chemical Education (R975), Organic Chemistry (R164 960), Eastern Cape (R9 110), Analytica (R192 065), Kwazulu-Natal (R31 228) and Electrochemistry (R42 585).

3. Funds held by Divisions and Local Sections, either in local or central accounts, amount to 46.5% of the total assets of the Institute.
4. This figure represents the fair value of the unit trust investment portfolio based on the market price on the date of the balance sheet. It constitutes the core of the Central Fund and generates money to be used as seed money or to finance projects decided on by Council.
5. This amount represents the cash on call (R206 220) generated by the portfolio within the Central Fund and the cash at hand (R80 541) earned through profit on events funded by the Central Fund as on the last day (30 April) of the current financial year.
6. This amount comprises unsecured, indefinite period loans to Divisions or Local Sections (R16 889 to Gauteng, R5 000 to ThermSA in the financial year under consideration) on which no interest is charged and which serve as advances to these entities to get themselves or events organised by them off the ground.
7. This figure reflects that 43.8% of the assets of SACI resides within the Central Fund.
8. Property refers to office and IT equipment, the carrying value of which is estimated by taking into account additions and depreciation.
9. Inventory consists of finished goods (laser pens, T-shirts, mouse pads, ties) held by the Institute (R37 277), and trade receivables (R19 100) through selling such merchandise.
10. This amount refers to money in the cheque account of the Secretariat at year-end.
11. This figure reflects that 9.6% of the total assets is kept within the Secretariat.
12. The total amount is balanced against the equity and current and non-current liabilities as displayed in the balance sheet issued by the auditors.

- Income/Expenditure Statement for the year ended 30 April 2011

The principal income and expenditure items are listed in an abbreviated financial statement below, and explanatory notes are added for more detail on key issues.

Income			Expenditure		
Item	Amount (R)	Note	Item	Amount (R)	Note
Membership Fees	326 485	1	Employee Costs	264 885	5
Investment Return	112 255	2	Rental	24 500	6
Operational Income	249 297	3	Operational Expense	149 012	7
TOTAL	688 037	4	TOTAL	438 397	8

1. The figure represents 98% of the membership fees anticipated on the basis of issued invoices (R333 130), indicating that the Secretary's repeating efforts to collect these fees have paid off. The income from this source represents about half (47.5%) of the Institute's total income, indicating that the Secretariat still relies strongly for its operation on this source of income.
2. The returns accrued were generated by the investment portfolio within the Central Fund and by the bouquet of bank accounts held within the internet banking portfolio of SACI.
3. The operational income stems from all kinds of money-generating activities other than interests received, such as events, journal access, advertising and sales of merchandise.
4. The total income is almost R300 000 less than in the previous year, since profits gained on recent events were only paid in after 30 April and will reflect in the statements of the next financial year.
5. This figure reflects the total cost of remuneration of the full-time Secretary pursuant to the recommended staff member salary structure of the University of the Witwatersrand.
6. SACI is charged with this amount for the space within the Department of Chemistry made available to the Secretariat for its day-to-day operations.
7. The operational expenditure largely results from running the Secretariat and includes travel (R20 508), phone/fax (R9 111), meals/refreshments (R6 211), computer/software (R12 122), journal (R32 422), printing/postage/stationery (R6 841), charges/fees/subscriptions/donations (R17 771), awards (R10 114) and general expenses (R9 519). The remaining expenditure was incurred by the Divisions and Sections.
8. SACI concluded the financial year with an overall surplus of R688 037 - R438 397 = R249 640. The Secretariat succeeded in reducing its deficit to R24 000, almost R100 000 less than the figure budgeted for.

PRESIDENTS OF THE INSTITUTE

1916-1917	J S Jamieson	1955-1956	FW Hayes
1917-1918	R B Denison	1956-1957	F Hawke
1918-1919	J A Wilkinson	1957-1958	A L Abbot
1919-1920	J McCrae	1958-1959	H A E McKenzie
1920-1921	J Lewis	1959-1960	G W Perold
1921-1922	G H Stanley	1960-1961	F L Warren
1922-1923	J Gray	1961-1962	W S Rapson
1923-1924	H H Green	1962-1963	F L Clark
1924-1925	J Moir	1963-1964	E F C H Rohwer
1925-1926	H H Dodds	1964-1965	L J le Roux
1926-1927	J A Wilkinson	1965-1966	R E Robinson
1927-1928	B de C Marchand	1966-1967	V Pretorius
1928-1929	C C Frye	1967-1968	M Lamchen
1929-1930	M Rindl	1968-1969	M Mrost
1930-1931	F W Fox	1969-1970	P C Carman
1931-1932	A Harding Kloot	1970-1971	P R C Cooke
1932-1933	H R Raikes	1971-1972	J F Preston
1933-1934	B van der Riet	1972-1973	F E Malherbe
1934-1935	J B Robertson	1973-1974	C F Garbers
1935-1936	St C O Sinclair	1974-1975	N Stutterheim
1936-1937	J A McLachlan	1975-1976	S Goodman
1937-1938	T D Hall	1976-1978	V C O Schuler
1938-1939	F J de Villiers	1978-1979	D E A Rivett
1939-1940	H J van Eck	1979-1980	A Goosen
1940-1941	F G Braithwaite	1980-1981	R R Arndt
1941-1942	J P van Zyl	1981-1982	R O Perry
1942-1943	W F Barker	1982-1984	C J H Schutte
1943-1944	P Kamerman	1984-1986	P Bloom
1944-1945	J E Worsdale	1986-1988	J R Bull
1945-1946	T J Wilken Jorden	1988-1990	J D Bradley
1946-1947	E Taberner	1990-1992	A M Heyns
1947-1948	H L de Waal	1992-1994	M D Booth
1948-1949	W H Dyson	1994-1996	T M Letcher
1949-1950	H J Koch	1996-1998	E L J Breet
1950-1951	P v d R Copeman	1998-2000	C J Rademeyer
1951-1952	L F Addis Smith	2000-2001	B Rae
1952-1953	A J Petrick	2001-2003	G E Jackson
1953-1954	L D C Bok	2003-2005	E Meintjies
1954-1955	S S Israelstam	2005-2007	T A Ford
		2007-2009	NJ Coville
		2009-2011	IR Green

RECIPIENTS OF THE GOLD MEDAL OF THE INSTITUTE

1970	L H Ahrens	1989	No Award
1971	P C Carman	1990	J G H du Preez
1972	S G Shuttleworth	1991	No Award
1973	W S Rapson	1992	A Goosen
1974	P E Rousseau	1993	R J Haines
1975	V Pretorius	1994	A M Heyns
1976	C van der Merwe Brink	1995	S E Drewes
1977	D G Roux	1996	D Ferreira
1978	G J Stander	1997	N J Coville
1979	R E Robinson	1998	W McGill
1980	C F Garbers	1999	T M Letcher
1981	P R Enslin	2000	M E Brown
1982	GW Perold	2001	J P Michael
1983	J C A Boeyens	2002	H G Raubenheimer
1984	J R Bull	2003	L Nassimbeni
1985	A M Stephen	2004	B Burger
1986	M Peisach	2005	No Award
1987	PS Steyn	2006	T A Ford
1988	C W Holzapfel	2007	P Kaye
		2008	No Award
		2009	M R Caira
		2010	No Award

RECIPIENTS OF THE RAIKES MEDAL

1961	PC Haaroff	1986	M O Albers
1962	AJ de Koning	1987	No Award
1963	No Award	1988	No Award
1964	No Award	1989	H M Marques
1965	No Award	1990	C A Strydom
1966	Se Drewes	1991	M D Adams
1967	W Robb	1992	J H Potgieter
1968	CHJ Shutte	1993	G H Verdoorn
1969	RA Basson	1994	N V Jarvis
1970	No Award	1995	M Raynor
1971	No Award	1996	No Award
1972	D P Botes	1997	No Award
1973	RJ Haines	1998	No Award
1974	PS Steyn	1999	K J Naidoo
1975	No Award	2000	M H S Gradwell
1976	R D Hancock	2001	M J Mphahlele
1977	G V Fazakerley	2002	RI Stefan
1978	R van Eldik	2003	No Award
1979	K De Haas	2004	W A L van Otterlo
1980	G J Mc Dougall	2005	No Award
1981	T V Ashworth	2006	No Award
1982	R L Paul	2007	J R Zeevaart
1983	No Award	2008	OQ Munro
1984	No Award	2009	R Meijboom
1985	No Award	2010	M Fernandes

RECIPIENTS OF THE AECI MEDAL

1961	P R Enslin, L A Anderson and W T de Kock	1979	G M L Cragg
1962	F J Joubert and T Haylett	1980	J C A Boeyens
1963	O A Swanepoel	1981	E Singleton
1964	V Pretorius and P C van Berge	1982	C Pohlandt
1965	M Peisach and C O Poole	1983	J M Koekemoer and G J Lourens
1966	C v d M Brink, W Nel, G H J Rall, J C Weitz and K G R Pachler	1984	No Award
1967	M B Hanley, S C Churms and E C Leisegang	1985	R M A von Wandruszka
1968	G W Perold and H K L Hunt	1986	E Singleton
1969	J Turkstra, G B Behrens and W J de Wet	1987	A E Watson
1970	W J Engelbrecht and M J de Vries	1988	C W Holzapfel
1971	J G H du Preez	1989	T A Ford
1972	J A van den Berg	1990	E Singleton
1973	J C A Boeyens	1991	P P Coetzee
1974	T W Steele	1992	J R Bull
1975	A Goosen	1993	A Amman
1976	P C Carman	1994	N J Coville
1977	E F C Rohwer and J J Cruywagen	1995	J F van Staden
1978	F E W Strelow	1996	P P T Kaye
		1997	T A Ford
		1998	J M Anderson

RECIPIENTS OF THE MERCK MEDAL

2000	J F van Staden	2005	B Staskun
2001	G H P Roos	2006	H M Marques
2002	N J Coville	2007	J J Pienaar
2003	J C A Boeyens	2008	PP Coetzee
2004	I Cukrowski	2009	CW van der Westhuizen
		2010	NJ Coville

RECIPIENTS OF THE HENDRIK VAN ECK MEDAL

1983	A E Rupert	1996	R R Arndt
1984	N Stutterheim	1997	No Award
1985	No Award	1998	No Award
1986	No Award	1999	No Award
1987	No Award	2000	No Award
1988	No Award	2001	No Award
1989	No Award	2002	P S Steyn
1990	No Award	2003	No Award
1991	C F Garbers	2004	No Award
1992	No Award	2005	No Award
1993	F E Malherbe	2006	No Award
1994	No Award	2007	No Award
1995	No Award	2008	No Award
		2009	No Award
		2010	No Award

RECIPIENTS OF THE INDUSTRIAL CHEMISTRY MEDAL

1961	GE Mapstone	2001	T Grimmbacher
1962	No Award	2002	No Award
1963	No Award	2003	No Award
1994	A Geertsema	2004	K McIntosh
1995	F Fisher	2005	No Award
1996	No Award	2006	No Award
1997	No Award	2007	No Award
1998	No Award	2008	No Award
1999	No Award	2009	No Award
2000	N Ravenscro	2010	No Award

RECIPIENTS OF THE MISCHA MROST (ANALYTICA) PRIZE

1977	J M Pratt	1992	D Gravett and L Salter
1978	I R Leith	1993	No Award
1979	H J Hattingh	1994	No Award
1980	P Theron	1995	M J Laing
1981	J Zlotnick	1996	G J Stander
1982	G L Moore	1997	J H Potgieter
1983	M F Dutton	1998	No Award
1984	No Award	1999	P Apps
1985	R Osborne	2000	N J Coville
1986	G L Moore	2001	E W Neuse
1987	M A B Pougnet and M A E Wandt	2002	No Award
1988	S Parris	2003	S S Potgieter
1989	T M Letcher	2004	No Award
1990	M A B Pougnet	2005	P W Lotz
1991	C Pohlandt-Watson and E A Jones	2006	No Award
		2007	No Award
		2008	No Award
		2009	No Award
		2010	No Award

RECIPIENTS OF SASOL POST-GRADUATE MEDAL

- 1994 JJ Nair, OQ Munro, PG Mountford, MHS Gradwell
1995 BG Taverner, JL Scott, SL Roberts, P Mason
1997 J A Ferreira, J du Toit, V Sewram, D Bessarabov, A Horne
1998 M A Hearshaw, W A L van Otterlo, J J C Erasmus, H A Mahomed, J J C Grove
1999 H van Rensburg, M A Fernandes, G Cripps
2000 S Otto, A Rousseau
2001 K Kaschula, W van Rensburg, K Blann
2002 H de Bod, M Onani, C B Perry, D Webber
2003 L Mpholle, K Barnes, C Gray
2004 A Landman, E E Mmutlane, T le Roex, M Shezi
2005 C Pelly, N Govender
2006 A Lemmerer, J N Zimba, M Lawton
2007 G Morgans
2008 SD Mhlanga, K de Villiers, S Hadebe, M Shaw
2009 S Pelly, C B Barnett, G A Boyle, T I Nkambule
2010 D Bezuidenhout, E Nxumalo

RECIPIENTS OF THE JAMES MOIR MEDAL

- 1999 J P K Reynhardt, A J de Villiers, R Best, K Thornell, S V Goodall, K Blann,
U Naidoo, N I Harmse, D P de Carcenac, R Cock, J C Nel
2000 N Grootboom, E Lamprecht, Amaluleke, D Rautenbach, G L Nattrass,
A M Castille, W Gerber
2001 J van Rensburg, T Le Roex, X K Peter, J Taljaard, K Lobb, G Venter,
A van Aswegen
2002 L Greyvenstein, D Patten, Y Baijnath, T Raasch, K Stern, M du Toit,
S Botha, O Horwood
2003 V Buchanan, E T Borkum, E Erasmus, P Reddy, P Franklyn
2004 W Barnard, R Gessner, A Gordon, Z Hall, G Lloyd, L Rota

- 2005 D I Bezuidenhout, C Booyjzsen, J Coetzee, R Janse van Vuuren, Y Koen,
C A Laing, E Marais, S Mohamed, M S Mokhadinyana, N Moodley,
J Paraskevopoulos, T S Pentz
- 2006 T Paquet, I Rootman, N Rose, P D R Kptze, S Travis, N Miti, D Duma, V A
Patterson, M van Rhyn
- 2007 L Loots, M Adendorf, S Botha, MW Smith, P Skillington, N E Hendricks, T
Hughes, B Waldron, M N Kay, D J Brankin
- 2008 SA Herbert, KE Mason-Jones, N Silwana, C Reynolds, JI du Toit, A
Manival, A Cullen, TR Madihlaba, B Truscott.
- 2009 E Hanekom, W Xu, S M Jing, C F Zipp, Y Nortje, K J Gillham, B Dzepina,
P Nyamukamba, A C Conibear, A Ilchev, P I Tshoke, K Potgieter
B Simpson
- 2010 C Eley, A Falch, I Grobler, K Hadje Georgiou, N Jijana, P Khalili, R Koen,
L Komarsamy, H Maritz, W Petersen, A Pholosi, CA Renison, BK Sebogisi,
P Sobantu, S Thompson

RECIPIENTS OF THE CHEMICAL EDUCATION MEDAL

- 1993 MJ Laing
1994 J Elsworth
1995 M Selvaratnam
1996 No Award
1997 GC Gerrans
1998 No Award
1999 SJ Nel
2000 P Huddle
2001 No Award
2002 MS Rollnick
2003 No Award
2004 B Davidowitz
2005 No Award
2006 G O M Onwu
2007 M White
2008 M Potgieter
2009 GV Green
2010 E Steenberg

RECIPIENTS OF THE SASOL
INNOVATOR OF THE YEAR AWARD

2002	No Award
2003	No Award
2004	M J Green
2005	I Smith
2006	No Award
2007	No Award
2008	No Award
2009	No Award
2010	No Award