



## MINUTES OF THE 159<sup>TH</sup> MEETING OF THE COUNCIL OF THE SAIP

**DATE:** Tuesday, 24 June 2003  
**TIME:** 10h30 – 17h00  
**VENUE:** Stellenbosch Institute for Advanced Study, Stellenbosch

### 1. OPENING

The President of the SAIP, Dr. Whitelock, chaired the meeting, welcomed all present to Stellenbosch, and thanked Prof. Geyer for hosting the meeting.

### 2. ATTENDANCE

**Present:** Dr. S.H. Connell, Dr. N. Chetty, Prof. J.A.A. Engelbrecht (Treasurer), Prof. HB Geyer, Prof. D.J. Grayson, Prof. W.D. Heiss, Miss. J. Padayachee (Secretary), Dr PA Whitelock (President and Chair), Prof. EC Zingu (Vice-President)

**Apologies:** Prof. H Moraal and Prof. JB Malherbe

Council noted the resignation of Prof. R. Bharuthram effective 27 May 2003.

### 3. ITEMS FOR DISCUSSION UNDER "GENERAL"

There were no items added for discussion.

### 4. MINUTES OF THE PREVIOUS MEETING

Council **considered and approved** the minutes of meeting R158 held on 21/22 February 2003 at the Stellenbosch Institute for Advanced Study, Stellenbosch.

### 5. MATTERS ARISING FROM THE MINUTES

The following items from the minutes that have not been captured under normal agenda points were discussed:

#### 5.1 Shaping the Future of Physics in South Africa

Prof. Zingu gave a short progress report. Following the regional meetings of 2002, the National Stakeholders Meeting was held on 16 May 2003 at the NRF and members were elected to the Management and Policy Committee (MPC). The members are:

- 0 Technikon Representative (as long as Prof. Zingu is on the Committee)
- 1 nominee from the Biophysics and Medical Physics community: Prof MG Lotter (UFS)
- 4 University nominees: Dr N Chetty (UNP), Prof F Hahne (US), Dr T Marais (UWC), Dr Z Vilakazi (UCT)
- 1 University research student/ young physicist: Mr M.J. Phasa (UNIN)
- 2 Industrialists: Dr. J. Sigalas (Element 6), Dr. P. Tselane (PBMR)
- Representative: Department of Science and Technology: Dr. R. Adam
- Representative: Department of Education: Dr. M. Qhobela
- Representative: SAIP Council: Prof. E.C. Zingu
- Representative: NRF: Dr P Nevhutalu
- Representative: Science Councils (COHORT): To be appointed.

The Technical Committee must still be appointed.

The MPC had their first meeting on 12 June 2003 where Prof. Zingu was elected to Chair the Committee. The members of the International Panel (IP) were discussed. The IP will consist of 4 foreign members and 2 local members. Thus far, 29 foreign candidates have been nominated and none for the South Africans. The French Embassy has made funding available for a French candidate. Further nominations (especially French and South African candidates) should be submitted to the SAIP Secretary. South Africans should be nominated in one of two categories: industrial and academic.

The aim is to get the final report out to stakeholders by March 2004. Dr. Chetty suggested that international funding should be acknowledged on the cover of the report.

#### 5.2 SAIP Banner

This matter will be removed from the agenda in light of the profit of the Durban conference.

### 5.3 South African Association of Physicists in Medicine and Biology

It was decided that SAAPMB be invited to join the SAIP as an affiliate. A memorandum of understanding will be drafted.

### 5.4 Internet Access to Journals

This item will be dropped from the agenda unless raised by the Heads of Departments. A progress report should be obtained from Prof. Malherbe.

## 6 FINANCIAL MATTERS

### 6.1. Financial Statements – 1 April 2002 to 31 March 2004

The Treasurer, Prof. Engelbrecht presented the financial statements for the period from 1 April 2002 to 31 March 2003.

Specialist Group chairs should be encouraged to arrange student prizes. This issue will be raised at the meeting with Specialist Group chairs.

Advisors/supervisors should be encouraged to pay the membership fees for their students. This issue will be raised at the Heads of Departments meeting.

### 6.2. Provisional Budget – 1 April 2003 to 31 March 2004

The Treasurer, Prof. Engelbrecht presented a provisional budget for 2003/2004 financial year. Council proposed a 10% increase in membership fees to prevent large, infrequent increases.

### 6.3. Fund-Raising

A portfolio on the new council will be created to address this important issue.

## 7 CONFERENCES

### 7.1. Durban (UND) 2001

Council noted that the report on the UND conference had been received and that the profit from the conference had been deposited into the SAIP account. It was noted that only a small proportion of delegates, at the 2001 conference were SAIP members. The report was accepted with thanks.

### 7.2. Potchefstroom (PU for CHE)

Council noted that the report on the Potchefstroom conference had been received. The largest proportion of the profits came from the Spring School. The report was accepted with thanks.

### 7.3. Stellenbosch (US) 2003 (Winter School – 24 June 2003, Conference – 25 – 27 June 2003)

Prof. Geyer reported that there are currently about 420 registrations, the largest by far.

### 7.4. Bloemfontein (UFS) 2004

The conference will be held from 29 June to 2 July 2004. An official invitation has been included in the registration pack of the 2003 conference.

### 7.5. Pretoria (UP) 2005

Council has still not received official written confirmation that the University of Pretoria is prepared to host the 2005 conference. In light of Prof. Malherbe's absence at this conference, Dr. Whitelock will discuss the matter with Prof. M. Braun from Pretoria.

### 7.6. 2006 and 2007

There are no venues arranged for the 2006 and 2007 conferences. The suggestion is to decide on a city/region and then liaise with the relevant heads of departments. Possible hosts: 2006 - Rhodes, 2007 - Wits.

## 8 COMMITTEES OF COUNCIL

### 8.1 Awards Committee

The 2003 Silver Jubilee Medal will be awarded during the banquet on Thursday, 26 June 2003.

### 8.2 Education Committee

#### ***International Conference on Physics Education, 5-8 July 2003, Durban***

Prof. Grayson reported that she had submitted an application to IUPAP requesting support for an International Physics Education Conference to be held under the joint auspices of the SAIP and ICPE from 5-8 July 2004 in Durban. The theme of the conference will be *What physics should we teach?* The application to IUPAP was done in consultation with the chair of the ICPE, Gunnar Tibell in Sweden, and Edmund Zingu (Chair of the SA IUPAP Liaison Committee). Case Rijdsdijk has agreed to take on the bulk of the organising. Prof. Grayson sent out a preliminary notice to PHYSLRNR, the international physics education email discussion group, and, judging from the responses, there is considerable interest in the conference and the topic. Accommodation and venues have been provisionally booked

## **FET Curriculum Statement for the Physical Sciences**

Prof. Grayson is trying to contact Nkopodi Nkopodi to find out the latest information. She reported that she had commented on four drafts of the Physical Sciences curriculum statement in the past year, as well as attending a meeting with two other scientists and three people representing the Department of Education in April, at the invitation of the Department of Education.

### **8.3 Transformation Committee**

It was decided that a portfolio on the new committee monitor transformation in the SAIP. Changes to the constitution following from recommendations of the Transformation Committee will be discussed under General.

### **8.4 Portfolios of Council**

#### **8.4.1. Communication (HBG)**

Prof. Geyer reported that both the newsletter and web-site were functioning well. He also reported that members of the Press were invited to the opening lecture of Carl Wieman at the conference. Prof. Wieman would also be interviewed on the radio station, CapeTalk.

#### **8.4.2. Conferences**

##### **Conference Format**

At the 2002 AGM, it was decided to change the format of the conference to 3 full days with the banquet on the Friday evening. This will be highlighted during the 2003 AGM. There was also the suggestion that the Specialist Group chairs should have more input into the programme. There should also be some review of abstracts submitted for orals. The lengths of the talks should also be looked at. The Bloemfontein organisers will also be reminded.

##### **Non-attendance of Conference by Senior Physicists**

Dr. Whitelock's expressed concern at senior physicists not attending the annual conference.

The following suggestions were made:

- Find out from those members who have not attended a conference, why they have not.
- Find out from those members that do attend the conference, what they get out of it.

It was also suggested that *Aims of the Conference* should be formulated and included with the Guidelines for Conference organisers. These aims should be promoted to members.

##### **Application for Funds for Visitors from Africa**

The Stellenbosch organisers did not apply to the correct department at the NRF and was therefore unable to get funding for visitors from Africa to attend the conference. Dr. Whitelock will contact the NRF to determine what the procedure is. This will be highlighted in the Guidelines to Conference Organisers.

#### **8.4.3. Marketing (SHC)**

The three activities mentioned below form a coherent effort to develop the profile of Science in the Schools as an exciting and accessible career path and therefore attract more young people into Science. Dr. Whitelock thanked Dr. Connell and Mr. K. Govender for their efforts in promoting these projects.

##### **The Physics Emasondosondo Project**

The SAIP is a partner in a programme of physics outreach, aimed at disadvantaged high school learners. The programme is based around a mobile physics laboratory, accompanied by scientists, teachers and students equipped to run a varied physics program and provide teacher support. The physics program contains visually exciting physics demonstrations, hands-on exploratorium activities and also team based project experiments, all targeted at high school learners. It is especially important for learners to be exposed to young postgraduate students, who they can talk to and identify with very easily. This is the second year of the project. The first year (2002) visited about 3% of the Gauteng and Western Cape Schools. This year, the programme is extended and the construction and stocking of a dedicated vehicle is complete. The project media is also better developed. The project has also spread to additional regions. The 2003 visits will begin shortly after the Annual SAIP conference. Please see the SAIP www page under "Projects" for further details.

##### **Promoting STYLE (Science and Technology for Young LEarners)**

This is an initiative lead by Kevin Govender of NECSA to establish learner-run Science Clubs in Schools. Activities and networks of contacts between the clubs and participating tertiary institutions and science-based industries are to be managed via a set of WWW-pages on the SAIP WWW-site. Some clubs have already been started. A joint venture has been established with the help of NECSA and the non-profit organisation ODT (Oukassie Development Trust) to take the idea to schools in their region in the North West Province. The Science Emasondosondo programme will aim to establish the STYLE clubs in the schools it visits as well, starting in mid July. The WWW-page has been launched, from the SAIP site under "projects". The letter inviting tertiary institutions and science-based industries to participate by facilitating visit, talks and other activities is ready to go out.

**Schools participation in SAIP Conferences**

As a pilot programme which will be further developed in the future, Kevin Govender and the organizers of SAIP 2003 are arranging a special event targeted at senior learners and educators in the surrounding area – including some from as far away as Sutherland in the Northern Cape. The participants will have an opportunity to meet practising physicists and get a flavour of the research being preformed within South Africa. They will also see some practical demonstrations and get an opportunity to do hands-on experiments. I believe there is a lot to be said for this approach, particularly after being told by a smart young engineering student that he had thought of doing physics at university, but his science teacher had told him it was boring. There should be no doubt about it - we have to get through to those educators if we want more physics students.

The SAIP based projects mentioned above have been registered with the Education Department via participation in the MST Projects' Fair held on the 17<sup>th</sup> March by the Gauteng Institute for Educational Development.

**Physics Video**

Funding is needed.

**SciFest on the Road**

No money is available from the SAIP. The IoP will be approached for funding in light of their offer to fund a similar project after the offer of the medal was withdrawn.

**Re-Design of Logo**

Dr. Connell reported that he had obtained an estimate of R12 000 to have the logo re-designed by a professional and a further R10 000 to get the logo on letterheads, web-pages, etc. It was decided that a competition with a R3 000 prize will be held to re-design. The competition will be announced to members with the request that they spread the word as far as they can. This will reduce any further costs. Dr. Whitelock offered to draw up some judging criteria for the competition. The logo should be representative of South Africa. The competition will be mentioned at the AGM.

The symbolism of the current logo will be researched and a short description will be included in the newsletter.

**9 SPECIALIST GROUPS**

The problem with the Applied Physics Interest Group was discussed. It was decided that an outcome of *Shaping the Future in South Africa* should be that physicists in industry should be surveyed and to then use this as a platform for launching an interaction between physicists in industry and academia.

Prof. Zingu reported that he had drafted letter to the Specialist Group chairs requesting feedback from their members on *Shaping the Future in South Africa*.

**10 SAIP AFFILIATIONS AND REPRESENTATIONS****Microscopy Society of Southern Africa**

Prof. Engelbrecht reported that MSSA was in a financially healthy state after the International Microscopy conference in Durban in 2002. The 2003 Annual MSSA conference will be held at UCT and will be organised by Prof. C. Lang from the Department of Materials Engineering.

**African Academy of Sciences**

The SAIP is interested in being affiliated with the African Academy of Sciences. The Secretary will find out about what role the SAIP can play in the African Academy of Sciences.

**11 INTERNATIONAL LIAISON****11.1. IUPAP**

Prof. Zingu reported that South Africa was successful in the bid to host the 2005 IUPAP General Assembly which will be held in October 2005 in Cape Town.

Nominations for members to the South Africa IUPAP Liaison Committee for the 2004 - 2006 term should be submitted to the Secretary before 31 July 2003. A discussion via email will follow.

The Lasers, Optics and Spectroscopy Specialist Group will be asked to nominate a member to represent the Optics Community on the Liaison Committee.

**11.2. International Catalogue of Sources**

This item will be advertised in the newsletter.

**11.3. Reciprocal Agreement - Physical Society of China (Taipei)**

Prof. Zingu reported that he received an invitation from the President of the above society for the SAIP to sign a reciprocal agreement. The Department of Science and Technology will be contacted in light of the political implications. The NRF Liaison Office should also be contacted.

**11.4. Enhancing Links with IoP Publishing**

It was decided to accept the offer of a 10% discount to SAIP members ordering books from IoP Publishing. This should be advertised on the SAIP web-site as well as in the newsletter.

### 11.5. Reciprocal Agreement - Australian Institute of Physics

Dr. Whitelock will be in Australia in the near future and she will negotiate terms and sign the agreement with the Australian Institute of Physics.

## 12 MEMBERSHIP MATTERS

### 12.1. New Members since last meeting (52 new, 3 Upgrades, 46 Processed in May 2003)

Mr. M.S. Branch (S)	Mnr. W.E. Goosen (S)	Mr. M.K. Moodley (S)	Ms H.E. Seals (S)
Miss E. Breedt (S)	Ms. S.J. Grussendorff (S)	Mr. N.J. Mphirime (S)	Mr. K. Sedupane (S)
Mr. J. Brink (S)	Mr. E. Jurua (S)	Mr. L. Nduwayo (S)	Mr. N. Sibaya (S)
Mr. M. Brownstone (S)	MR MME KHOATHANE (Upgrade to O)	Mr. P.H. Neethling (S)	Mr. P.B. Southey (S)
Mr. M. Cavero (S)	Mr. J. Kotze (S)	Mnr. G.J. Olivier (S)	Mr. S.A. Talha (S)
Mr. S-H Chen (S)	DR RE KROON (Upgrade to O)	Mr B.O. Osano (S)	Mr. H.T.W. Tromp (O)
Miss C.H. Claassens (S)	Mev. H. Krüger (S)	Mr. O. Pagni (S)	Mr. T.O. Tshenye (S)
Miss D. Dale (S)	Mr. H-C Liu (S)	Ms S. Pillay (S)	Mr. H.L.J. Van Wyk (O)
Mr. D. De Villiers (S)	Dr. R.L. Mace (O)	Mr. A.J. Ramlakan (A)	Dr. D.S. Venables (O)
Mrs A. De Witt (S)	Mr. A.C.K. Mahlase (O)	Ms P.S. Ramoshebi (S)	Mr. L.A. Venter (S)
Mr. M.S. Dhlamini (S)	Mrs M.E. McIntyre (S)	Miss L Richter (S)	Dr. M.C. Wagener (O)
Mr. A. Du Plessis (S)	Dr. EL MEYER (Upgrade to O)	Ms. T. Salagaram (S)	Dr. P.C. Wagener (O)
Mnr. T.I. Du Plooy (O)	Ms. S. Mithry (O)	Mr. T. Scheidt (S)	Miss. M. Wiehahn (S)
A/Prof. P.K.S. Dunsby (O)	Mr. W. Miyoba (S)		Mr. E. Wurth (S)

### 12.2. SAIP Membership Summary as at 5 June 2003

By Category		By Specialist Area	
Honorary Members	12	Applied and Industrial Physics	38 81
Emeritus	12	Astrophysics	66 12
Ordinary Members	295	Education	34 53
Associate	26	Lasers, Optics and Spectrometry	40 26
Student	113	Nuclear, Radiation and Particle Physics	67 37
Retired	26	Plasma Physics	6 8
Institutional	3	Solar-Terrestrial & Space Physics	19 17
Honorary Institutional	1	Solid State Physics and Material Science	141 44
Total Members	488	Theoretical Physics	26 31
		General	8 24

### 12.3. Benefits for Members

Dr. Connell will investigate how benefits for Institutional Members can be improved.

### 12.4. Rob Adam's Membership Status

Dr. Adam will be invited to re-apply for membership.

### 12.5. Re-joining the SAIP

It was proposed that the re-joining fee be set at 20% of the current membership fee.

## 13 PHYSICS 2005

### 13.1. World Year of Physics 2005 Preparatory Conference

Prof. Zingu reported that he would be attending the 1<sup>st</sup> Preparatory Conference on the World Year of Physics in Graz, Austria.

*Due to time constraints, all other agenda items in this category were carried over to next meeting.*

## 14 GENERAL

### 14.1. Changes to the Constitution and By-laws

The changes to the constitution and by-laws following mainly from recommendations of the Transformation Committee were discussed. These will be circulated among members at the 2002 conference and mentioned at the AGM, to make council's intentions known. According to the constitution, members have to be informed of changes to the constitution at the same time as the AGM is announced. The suggested changes can therefore only be discussed at the 2003 AGM.

### 14.2. Portfolios of Council

Carried over to next meeting

### 14.3. The SAIP and Pseudo Science

It was felt that it was the responsibility of each physicist to respond to pseudo science issues in the popular press.

#### 14.4. Student Numbers

Carried over to the next meeting

At this point, Dr. Whitelock thanked outgoing members of Council for all their work during their term of office and then opened the first meeting of the new council to elect office-bearers.

### 15 ELECTION OF OFFICE BEARERS FOR THE TERM 2003 - 2005

- 15.1. Prof. E.C. Zingu was elected as **President**.
- 15.2. Prof. H. Moraal was elected as **Vice-President**.
- 15.3. The Executive will consist of the **President, Vice-President** and **Secretary** with the Treasurer and Past-President as alternates.
- 15.4. The **President** and **Treasurer** will have authority over the bank account. Prof. Engelbrecht will confirm.
- 15.5. **Prof. W.D. Heiss** will Chair the Awards Committee. Other members (to be confirmed) Prof. K. Bharuth-Ram, Prof. M. Feast, Prof. A. Leitch with Dr. R. de Mello-Koch as alternate.
- 15.6. **Prof. D.J. Grayson** will chair the Education Committee. Other members: Prof. H. Moraal and Mr. C. Rijdsijk.
- 15.7. **Dr. S.H. Connell** will chair the Marketing Committee. Other members (to be confirmed): K. Govender, D. Fish, H. Tromp

#### 15.8. Portfolios

- 15.8.1. **Communications Portfolio:** Ms. J. Padayachee
- 15.8.2. **Conferences Portfolio:** Dr. P.A. Whitelock
- 15.8.3. **Role and Function of SAIP/Transformation Portfolio:** Dr. N. Chetty
- 15.8.4. **Liaison with Other Societies - International and National:** Prof. E.C. Zingu
- 15.8.5. **Industrial Liaison:** To be appointed
- 15.8.6. **Fund-Raising:** Prof. E.C. Zingu

#### 15.9. Representatives

- 15.9.1. **JCSS-** To be appointed
- 15.9.2. **FEDSET-** To be appointed
- 15.9.3. **NSTF-** Prof. D.J. Grayson with Dr. S.H. Connell as alternate
- 15.9.4. **AS&TS-** To be appointed
- 15.9.5. **SACNASP-** Prof. H. Moraal (to be confirmed)

### 16 FINAL COMMENTS

Council re-affirmed Prof. Zingu's position as chair of the MPC, despite him having been elected as President of the SAIP for the 2003/2005 term of office. Council suggested that an Executive Committee be formed from existing MPC members.

Prof. Moraal was congratulated on his award of the Havenga Prize for Physics by the South African Academy of Science and Art.

### 17 NEXT MEETING

It was decided that the next meeting will be held on **24 October 2003** in Durban.

### 18 CLOSURE

Dr. Whitelock thanked all Council members especially the Vice-President, Prof. Zingu for all his work. Prof. Zingu, on behalf of the out-going Council thanked Dr. Whitelock for her leadership of the Institute over the past two years. The meeting closed at 16h45.

**MISS J PADAYACHEE**

Secretary

**DR. P.A. WHITELOCK**

President

