



MINUTES OF THE 162nd MEETING OF THE COUNCIL OF THE SAIP

DATE: Friday, 24 October 2003
TIME: 10h00 – 16h15
VENUE: Mangosuthu Technikon, Durban

1. OPENING

The President of the SAIP, Prof. Zingu, chaired the meeting and welcomed all present to Mangosuthu Technikon.

2. ATTENDANCE

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

3. ITEMS FOR DISCUSSION UNDER "GENERAL"

There were no items added for discussion under "General".

4. MINUTES OF THE PREVIOUS MEETING

Council **considered and approved** the minutes of meeting R159 and R160 held on 24 June 2003 at the Stellenbosch Institute for Advanced Study, Stellenbosch.

5. MATTERS ARISING FROM THE MINUTES

There were no items from the minutes.

6. SHAPING THE FUTURE OF PHYSICS IN SOUTH AFRICA

6.1. Update

Prof. Zingu gave a short progress report. The Management and Policy Committee (MPC) was established at the National Stakeholders Meeting (16 May 2003, NRF, Pretoria) and their first meeting was reported on during Council meeting 159. Since that meeting, communication between MPC members has been via email.

The MPC has compiled a preferred list of candidates for the International Panel (4 foreign, 1 French, 2 South Africans, 1 convenor), based on nominations received from the physics community. DST and the NRF approved the list, as these are the two major funders of *Shaping the Future of Physics in South Africa*.

The Technical Committee (TC) has been constituted:

Members of the Evaluation Division of the NRF
 Secretary of the SAIP
 Ms. P. Maruping (DST)
 Ms. Lizel Kleingbiel (contracted by the NRF)
 Additional physicist (to be appointed)

Members of Council are requested to submit names for the additional physicist on the TC to the Secretary **before 29 October 2003.** **Action: Everyone**

Suggestions for additional physicist on TC

Dr. Chris Engelbrecht (DJG)

The TC has started contacting nominees to confirm their availability for a two-week visit to South Africa in March 2004. The target date for submission of the report is end of March 2004.

The TC will start soliciting input from local stakeholders, identified by the chair of the MPC, within the next few weeks. It was suggested that responses to specific questions be solicited, in order to be able to directly compare responses. Responses could also be restricted to a specific amount of space, in this format. Prof. Engelbrecht raised concerns about the lack of time for heads of physics departments to submit input to the International Panel, as it was approaching exams.

Members of Council were requested to submit (in electronic form, if available), any reports on past, physics-related reviews, which will be used to assist the Panel. **Action: Everyone**

Details of on-site visits and interviewees have yet to be finalised by the MPC. Dr. Chetty suggested that video conferencing could be a potential means of conducting the interviews more efficiently.

One task that needs to be carried as part of *Shaping the Future of Physics in South Africa* is a compilation of details of physicists working in industry. Dr. Whitelock suggested that the description of a “physicist” be kept as open as possible as many people were currently doing physics in industry but whose job descriptions did not include the word “physics”.

Dr. Connell gave a short description about the Science and Technology Education Forum which has been set up to bridge the gap between research in science, technology and engineering and industry. Dr. Connell recommended that the SAIP become a partner in the Forum as well as soliciting input from the Forum for *Shaping the Future of Physics in South Africa*.

6.2. Biotechnology Strategy in South Africa

Prof. Zingu reported that the South African biotechnology community has been very successful in its strategy to get more exposure for the field. The success started with partnerships between researchers in the field and major industrial role-players (ARC, MRC, pharmaceutical companies), which got the attention of DST. This led to a foresight exercise (similar to *Shaping the Future of Physics in South Africa*) which yielded a report which has since helped increase biotechnology funding in South Africa. New biotechnology centres have also been established around the country and there is now a “Public Understanding of Biotechnology” exercise.

7 FINANCIAL MATTERS

7.1. Treasurer’s Report

The Treasurer, Prof. Engelbrecht reported on the current status of the Institute’s finances. Email reminders to those members with outstanding fees and the conference profits of the 2001 Durban conference and the 2002 Potchefstroom conference have helped improve the financial standing of the Institute. However, there was still an estimated R31 068 owed to the Institute by members who have not yet paid their 2002 and 2003 membership fees.

Dr. Chetty raised the issue that if the annual conferences had some continuity then the profits from each conference could be maximised.

The Treasurer mentioned that membership fees for professional societies were no longer tax deductible and Council requested that Prof. Engelbrecht contact the SA Revenue Service and query the matter.

Action: Treasurer

Advisors/supervisors should be encouraged to pay the membership fees for their students. This issue was raised at the Heads of Departments meeting in June in Stellenbosch and heads of departments will be reminded again.

Action: Secretary

7.2. Access to SAIP Bank Account

The Treasurer and President will have access to the SAIP bank account. Prof. Engelbrecht will send the relevant bank forms to Prof. Zingu for signing.

Action: Treasurer

8 CONFERENCE MATTERS

8.1. Annual SAIP Conferences - General

8.1.1. Screening of Abstracts at Annual Conference

Prof. Heiss raised concerns over certain inappropriate presentations by senior physicists at the 2003 annual SAIP conference and suggested that all abstracts should be screened to prevent this from happening. Dr. Whitelock raised concerns over the oral programme being too full, with no time for discussion and suggested that screening of abstracts could be used to limit the number of oral presentations to allow more time for discussion. Specialist group chairs should grade the quality of the abstracts to fill up a 3-day programme.

It was decided to set up a Conference Committee to look at the purpose of the conference and investigate methods of how this purpose can be best achieved. This will include looking at the quality of presentations, continuity of conferences, electronic publishing of presentations, etc. The Committee consists of:

Dr. P. Whitelock (Chair)
 Dr. N. Chetty
 Prof. H. Moraal
 Prof. H. Geyer (to be confirmed)
 Dr. P. Anagnostaras (to be confirmed)

Dr. Whitelock shall liaise with Conference organisers.

8.1.2. Inclusion of Membership fees for Students in Conference Registration Fee

The Treasurer recommended that the membership fees for 3rd year and Honours students be included in the conference registration fees. Many of these students only attend the conference once and join the SAIP to benefit from the lower conference fees. It was decided that this would create logistical problems as the conference organisers would then have the added responsibility of handling membership registration fees as well. The treasurer mentioned that some physics departments have requested a single invoice for their students. It was suggested that this be done to a greater extent.

8.2. Other Conferences

8.2.1. International Physics Education Conference, 5-8 July 2004, University of Natal, Durban

Prof. Grayson reported that she has received IUPAP's support for the conference. An International Advisory Committee has been set up and is being consulted on the format of the conference. Since the theme of the conference is "What Physics Should We Teach", Prof. Grayson hopes that the conference will provoke lively debate that will continue long after the conference ends. Issues to be addressed include how much modern physics should we teach, how can physics topics be integrated with each other and other disciplines, and how should physics courses be structured to address the needs of different groups of students. There will be between 200 and 300 delegates at the conference.

8.3. Stellenbosch (US) 2003

Nothing to report

8.4. Bloemfontein (UFS) 2004 (29 June to 2 July 2004, UFS)

The proposed budget was noted with thanks. The organisers will be requested to realign the conference registration fees to take into account the discounts currently offered by Council for certain categories of membership.

The proposed plenary speakers were discussed and council agrees to the 5 plenary speakers (Dr. C. Cress, Dr. K. K. Mueller-Nedebock, Prof. P.H. Holloway, Prof. E.N. Parker, Prof. B.A. Sherwood) and would discuss the 6th via email. It was uncertain whether all plenary slots were filled and if there was an empty slot that the conference organisers would be strongly encouraged to invite someone who would illustrate the diversity of people in physics in respect of race and gender and that could serve as a role-model for young South African physicists.

Dr. Chetty proposed that a longer meeting between Council and the Heads of Physics Departments be planned. Organisers will be requested to arrange a supper meeting on the Thursday evening. More time for the meeting between Council and the Specialist Group chairs should also be allocated. It was suggested that the SAIP AGM be held after the Friday morning tea and that the most interesting plenary lecture be held on the Friday afternoon. Time should also be allocated for a student meeting where student issues can be discussed and reported on at the SAIP AGM. The student meeting could be planned for the same time as the meeting of HoDs. Organisers will also be advised to try to arrange the Education Specialist Group AGM so that it doesn't clash with other sessions or other SG meetings.

Action: Secretary

8.5. Pretoria (UP) 2005

Council has still not received official written confirmation that the University of Pretoria is prepared to host the 2005 conference.

Action: Whitelock

8.6. 2006 and 2007

Venues are still required for 2006 and 2007. Dr. Connell is prepared to campaign for Wits to host the conference in 2007. Dr. Whitelock will try to find a host for the 2006 conference. The Conference Committee will investigate holding the annual conferences on a regional basis.

Action: Connell, Conference Committee

9 COMMITTEES OF COUNCIL

9.1. Awards Committee

Nothing to report.

9.2. Education Committee

FET Curriculum Statement for the Physical Sciences

Prof. Grayson met with Dr. Nkopodi Nkopodi after the 2003 SAIP Conference and reported that there were still major concerns with the FET curriculum statement for the physical sciences. After a second meeting with Dr. Nkopodi and Mr. Lebs Mphahlele, Prof. Grayson was invited to submit an example of how she felt the curriculum should be structured. They were happy with the example and requested that Prof. Grayson apply the same reasoning to the rest of the curriculum. In a two-week period, Prof. Grayson together with Prof. Max Braun (UP) restructured the FET physics curriculum, while Prof. John Bradley (Wits) restructured the

Chemistry component. This current version of the curriculum will be published and tested in a pilot programme in 2004 at schools yet to be decided. There is however a great need for teacher training to teach the new curriculum. Prof. Grayson was congratulated for her success.

9.3 Marketing Committee

Dr. Connell reported that the marketing committee had been established and consisted of Mr. Henry Tromp (NLC), Mr. Derek Fish (UniZul Science Centre) and Mr. Kevin Govender (NECSA).

9.3.1. Physics Emasondosondo and Science Clubs

Dr. Connell reported that Physics Emasondosondo now had a new fully equipped trailer and the 5-week outreach programme (including after hours teachers training sessions) in August was very successful. There was a larger than expected response to the science clubs. It was initially planned that most of the documentation and contact information will be entirely on a web-site, which the schools would then access, however, since most schools do not have internet access, this approach had to be re-structured. The documentation is now being written to take this into account.

The next step is to get an evaluation of Physics Emasondosondo and prepare a business plan which would help with getting further funding to expand the programme.

9.3.2. Physics Video

No progress on obtaining funding has been made.

9.3.3. Learners at SAIP Conference

The parallel programme for learners at the 2003 SAIP conference was very successful and should be planned at future conferences. Mr. Govender would be asked to liaise more closely with the Education specialist group.

Action: Secretary

9.3.4. Logo Competition

Dr. Whitelock has prepared a press release for the logo competition which will be released on 1 November 2003. Dr. Chetty expressed a problem with some of the current design guidelines which he thought were too restrictive and would prevent some designs from being entered. Dr. Whitelock will review the guidelines.

Action: Whitelock

The judging of the entries was discussed and it was decided that there would be a two-stage judging process: Council will decide on a short-list of logos and the membership will vote online for the final design. Members of Council entering the competition will be excluded from discussions about the short list.

10 PORTFOLIOS OF COUNCIL

10.1. Communication

Ms. Padayachee reported that the web-site was doing well. There had been a minor problem with the mailing list which resulted in the newsletter not being sent out on time.

No press releases were made concerning the new Council or the Silver Medal winners. It was decided that press releases about these special events will be prepared in advance. The Awards Committee will be asked to help with drafting a press release.

It was decided that a list of where recent physics graduates were employed together with what they are doing should be on the web-site.

10.2. Role and Function of the SAIP

Dr. Chetty has compiled a document summarising the goals that need to be achieved by the SAIP following from recommendations of the Transformation Committee's as well as outputs from the two surveys. Dr. Chetty has been requested to draw up a schedule together with deadlines for specific tasks (in the order that they need to be completed). Dr. Chetty will initiate discussions on individual issues raised in his document, via email, starting with a phrasing of the vision and mission statements for the SAIP.

Action: Chetty

10.3. Monitoring of Political Developments that Impact Physics

It was decided that if there is someone already monitoring political developments, then they will be asked to help out the SAIP.

10.4. SAIP Constitutional Changes

This will be addressed as part of 10.2. above.

10.5. Student Numbers

It was decided that the Secretary should continue to request student numbers from heads of departments as at present. Numbers should be compiled into a spreadsheet until required.

11 SPECIALIST GROUPS

Carried over to the next meeting due to time constraints.

12 SAIP AFFILIATIONS AND REPRESENTATIONS

12.1. Representations

Carried over to the next meeting due to time constraints.

12.2. Affiliations

The various affiliates of the SAIP as well as the South African Association of Physicists in Medicine and Biology were approached to formalise their affiliations with the SAIP. The South African Acoustics Institute (SAAI) has responded positively to the invitation however, Prof. Zingu has since learned that the organisation as well as the discipline in South Africa could be at risk. Prof. Zingu will contact SAAI and discuss whether the SAIP can be of assistance. **Action: Zingu**

13 INTERNATIONAL LIAISON

13.1. Nominations to the SA IUPAP Liaison Committee

Prof. Zingu reported that the following people currently serve on IUPAP commissions and therefore automatically serve on the SA IUPAP Liaison Committee: Prof. R. Bharuthram, Prof. D.J. Grayson, Prof. M.S. Potgieter, Dr. P.A. Whitelock, Prof. E.C. Zingu. The following were nominated: Prof. F.G. Scholtz, Dr. T.K. Marais, Dr. R. de Mello Koch, Prof. J. Rodrigues, Dr. S. Malinga. **Action: Zingu**

13.2. History of Physics in SA (AIP)

Carried over to the next meeting due to time constraints.

13.3. Report on IUPAP Activities

Carried over to the next meeting due to time constraints.

14 MEMBERSHIP MATTERS

14.1. New Members since last meeting (14 new, 1 Upgrade)

| | | |
|-----------------------------------|----------------------------|-----------------------|
| Mr. J.L. Schaffler (Upgrade to O) | Dr. R.S. de Mello Koch (O) | Ms. M. de Jager (S) |
| Mrs. S.E. Malatje (O) | Mr. P. Ferrer (O) | Mr. M.G. Mashapa (S) |
| Dr. G. Munyeme (O) | Mr. M.E. Mohamed Eisa (S) | Mr. T. Kubai (S) |
| Dr. K.E. Rammutla (O) | Ms. S. Woudberg (S) | Mr. M.G. Matshaba (S) |
| Dr. O.M. Osiele (O) | Mr. C. Visagie (S) | Mr. M.A. Mehlope (S) |

14.2. SAIP Membership Summary as at 14 October 2003

| By Category | | By Specialist Area | | |
|------------------------|-----|--|-----|----|
| Honorary Members | 12 | Applied and Industrial Physics | 31 | 73 |
| Emeritus | 11 | Astrophysics | 60 | 13 |
| Ordinary Members | 269 | Education | 30 | 53 |
| Associate | 19 | Lasers, Optics and Spectroscopy | 35 | 27 |
| Student | 113 | Nuclear, Radiation and Particle Physics | 64 | 30 |
| Retired | 22 | Plasma Physics | 5 | 7 |
| Institutional | 3 | Solar-Terrestrial & Space Physics | 16 | 18 |
| Honorary Institutional | 1 | Solid State Physics and Material Science | 139 | 38 |
| Total Members | 450 | Theoretical Physics | 26 | 29 |
| | | General | 7 | 21 |

14.3. Lifetime Membership

Carried over to the next meeting due to time constraints.

15 PHYSICS 2005

15.1. Report on World Year of Physics 2005

Prof. Zingu reported on his attendance at the 1st Preparatory Conference on the World Year of Physics in Graz, Austria. A wide range of activities have been proposed and the website of the conference and the websites of the various physical societies provide useful resources for ideas.

The World Congress of Physical Societies will not be held in South Africa.

Funding needs to be obtained for Physics 2005 activities in South Africa.

Prof. Zingu requested that another member of Council co-ordinate WYP2005 activities in South Africa.

15.2. SAIP 50th Anniversary Commemorative Stamp

Prof. Moraal reported that the letter to the Philatelic Services of the SA Post Office was sent without Council's approval because there seemed to be some confusion about the deadline and Prof. Moraal thought it best to get the application in as soon as possible.

15.3. SAIP 50th Annual Conference – Pretoria

This item was discussed under 15.1. above.

15.4. IUPAP General Assembly 2005

This item was discussed under 15.1. above.

15.5. UNESCO World Conference on Physics and Sustainable Development

The conference is planned for 31 October to 2 November 2005 and will be held at the International Conference Centre in Durban. The venue has been reserved and a down payment of R10 000 is required to secure the reservation.

15.6. Regional Activities - Public

This item was discussed under 15.1. above.

15.7. Regional Activities - School

This item was discussed under 15.1. above.

15.8. History of the SAIP

Prof. Moraal informed Council that after much communication with Dr. D. Reitmann, Prof. B. Spoelstra, Prof. F. Hahne and the National Archives in Pretoria, he determined that, Prof. Spoelstra sent most of his SAIP material to the National Archives, that the historical items collected by Prof. C.A. Engelbrecht in the late 1980's for the purpose of writing up the history of physics in South Africa was not part of the material sent to the archives and that the material is possibly in the possession of Prof. Hahne who has not yet found the time to ascertain whether or not he is. Prof. Moraal will contact Prof. Hahne again. **Action: Moraal**

16 GENERAL

16.1. Changes to the Constitution and By-laws

This will be addressed as part of 10.2. above.

16.2. Portfolios of Council

This will be addressed as part of 10.2. above.

16.3. Discussion of Student Numbers

Carried over to the next meeting due to time constraints.

16.4. Registration of Nuclear Physicists as Radiation Protection Scientists/Officers

Prof. Zingu thanked all those involved in the discussions thus far for their input. Dr. Connell requested that Dr. E. Sideras-Haddad be allowed to follow up with the matter with the chair of the Nuclear, Particle and Radiation Physics. **Approved** **Action: Connell**

17 NEXT MEETING

It was decided that the next meeting will be held on **20 or 23 February 2004** in Bloemfontein.

18 CLOSURE

Prof. Zingu thanked all Council members for attending the meeting. Prof. Zingu was thanked for hosting the meeting. The meeting closed at 16h15.

MISS J PADAYACHEE

PROF. E.C. ZINGU

Secretary

President

