



MINUTES OF THE 166TH MEETING OF THE COUNCIL OF THE SAIP

DATE: Friday, 29 October 2004

TIME: 09h00 – 17h10

VENUE: South African Astronomical Observatory, Cape Town

1 OPENING

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

2 ATTENDANCE

Present: Dr. S.H. Connell, Prof. J.A.A. Engelbrecht (Treasurer), Prof. D.J. Grayson, Prof. H Moraal (Vice-President), Miss. J. Padayachee (Secretary), Dr P.A. Whitelock, Prof. E.C. Zingu (President and Chair)

Apologies: Dr. N. Chetty, Prof. W.D. Heiss

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 R164 held on 29 June 2004 at the University of the Free State, Bloemfontein, with the following amendments:

The following should be added to item 7.2.: Institutional Membership (R1800)

Item 8.2.1.: International Conference on Physics Education, 5-8 July 2004.

The following should be added

15.2.15. Opening of SALT

The official opening of SALT will be on 11 November 2005 and this will be followed by the IAU/IUPAP sponsored symposium on "The Science Case for Extremely Large Telescopes" (Cape Town, 2005 November 14 to 18).

Item 16.6. should read: ... had not received funding and **not** much progress had been made...

5 MATTERS ARISING FROM THE MINUTES

There were no matters arising from the previous minutes.

6 SHAPING THE FUTURE OF PHYSICS IN SOUTH AFRICA

6.1. Strategy Discussion

Council discussed how to approach the meeting with Dr. K. Mokhele (President of the NRF). It was decided that the meeting should focus on the strategy to move forward from the International Panel report.

6.2. Meeting with Dr. K. Mokhele (NRF)

Dr. K. Mokhele joined the meeting at 10h00. Prof. Zingu thanked Dr. Mokhele for attending and for the contribution the NRF has made thus far. Prof. Zingu summarised the SAIP's views on the report and then Dr. Mokhele summarised the NRF's views on the report and suggested that a ½ day workshop be held after each partner has had time to put together an organisational response report. The suggestion was for the workshop to be held in late January/early February 2005 and for the SAIP to organise the workshop.

6.3. Meeting with Dr. R. Adam (DST)

Dr. R. Adam and Dr. T. Seekoe (DST) joined the meeting at 13h45. Dr Adam indicated that the recommendations of the International Panel should be costed and prioritised, so that their implementation could be properly considered. The strengthening of SAIP was also something he welcomed.

This prioritised list should then be submitted to DST. Dr. Adam suggested that the DST should meet with the SAIP in the near future to get an idea of projects currently being worked on by DST. He further indicated that DST would welcome the opportunity to address the SAIP at its annual conference on issues of common interest. He also indicated he was willing to provide financial support for a South African contingent to attend the opening of the International Year of Physics in Paris in January 2005.

Responsibility for Costing Each Recommendation (Deadline: 30 November 2005)

Recommendation Exec. 1	DJG
Recommendation Exec. 2	JP
Recommendation Exec. 3	NC
Recommendation Exec. 4	SHC
Recommendation Exec. 5	HM
Recommendation Exec. 6	WDH with SHC to assist
Recommendation Exec. 7	JAAE
Recommendation Exec. 8	liase with community
Recommendation Exec. 9	liase with community
Recommendation Exec. 10	(none)
Recommendation Exec. 11	JAAE
Recommendation Exec. 12	(being done)
Recommendation Exec. 13	HM
Recommendation Exec. 14	ECZ
SAIP Secretariat	PAW
Curriculum issues	DJG

Action: Council

6.4. Proposal from Theoretical Physics Specialist Group

Prof. Zingu will explain the process of assessment and funding planning to Prof. H.B. Geyer.

Action: Zingu

6.5. Proposal from Lasers, Optics and Spectroscopy Specialist Group

Prof. Zingu will explain the process of assessment and funding planning to Dr. E. Rohwer. However, the proposal will be have to re-written using the Theoretical Proposal as a template.

Action: Zingu

7 FINANCIAL MATTERS

7.1. Treasurer's Report

The Treasurer, Prof. Engelbrecht reported that the financial situation of the Institute remains healthy, despite the fact that many members have not paid their membership fee for 2004. The financial situation at the time of this meeting is as follows :

1. Arrears 2003. A total of 44 members (down from 82 at last meeting), still owe their membership fees for 2003, totalling an amount of R 3 094.47. (The number may be less, due to 11 payments that were deposited directly into the bank account, without names or invoice numbers).

2. Arrears 2004. There are currently ± 175 members (~ 37%, down from 253 at the last meeting) in arrears for 2004, but members still have until the end of the financial year (31 March 2005) to pay. The outstanding amount is R 31 701.50 (which includes the amount in arrears for 2003).

The above numbers are subject to correction, as payments may have been made directly into the bank account since the end of September, without members informing the Treasurer about such deposits.

3. Reminders were sent out during September to all members that are in arrears, either by email or ordinary mail.
4. Membership of the IoP currently stands at 20 members, of whom 2 are in arrears. Both have promised to pay by the end of this year. Membership fees have been paid over to the IoP.

Balance of Accounts

Current Account : R 24 192.22 (01/10/2004)

32 Day Call Account : R 66 842.06 (30/09/2004)

Money Market Account : R 100 000.00 (Interest of R 1 063.64 was earned on this account as at 01/10/2004. Since this amount was transferred to the Current Account, Council agreed for the amount to be topped up to R2 000 which is the minimum deposit into the MMA. The Treasurer would however try to get the bank to rectify the error without having to transfer the extra money across.)

It was requested for an updated Balance Sheet to be tabled at future Council meetings.

Action: Treasurer

7.2. Tax Implications: Membership Fees of Professional Societies

Prof. Engelbrecht reported that he had contacted the Academy of Science and the matter was referred to the NSTF. The matter was discussed at the NSTF SETAG Exco meeting and it was decided that it is a relevant and important matter for the Science, Engineering and Technology community and should be submitted to the next NSTF Executive Committee meeting for consideration of the way forward. The treasurer will be informed of the outcome of the NSTF Exco meeting at the end of November 2004.

Action: Treasurer

8 CONFERENCE MATTERS

8.1. Conference Committee

Nothing to report.

8.2. General Conferences

8.2.1 Energetic Electron Radiation Belt Dynamics, Hermanus, 14 - 18 March 2005

The organisers of the above workshop on Space Physics have requested support/endorsement for the workshop from the SAIP. Additionally, the organisers have offered the SAIP the opportunity to host one or more of the workshop speakers on a tour of SA campuses engaged in Space Physics research, involving a series of seminars/tutorials to be held at the relevant institutions. The SAIP has been requested to cover the local travel costs of the speaker.

Result of Discussion: The SAIP funds only one speaker per year to attend the Annual SAIP Conference.

8.3. Bloemfontein 2004 (UFS)

Nothing to report.

8.4. Pretoria 2005 (UP)

Winterschool – 4 July 2005: The topic is Biophysics. The organisation/action of this will take place in the near future. Only one speaker has been invited yet – Prof Wole Sobojejo from Materials Science & Engineering, Princeton University.

SAIP Conference – 5 – 7 July 2005:

Einstein Day: The middle day (Wednesday, 6 July) will be devoted to invited talks and discussions on modern topics relating to Einstein's legacy.

Plenary speakers

The following speakers have been identified, contacted and agreed to give a plenary talk provided that Council agrees:

1. Prof Gerhard t'Hooft. Nobel Laureat 1999.
2. Prof Wole Soboyejo, Materials Science & Engineering, Princeton University.
3. Prof Lenny Feldman, Department of Physics, Vanderbilt University, USA
4. Prof Professor M.S. Allie, Department of Physics, UCT
5. Prof R Raab, Gold Medal Winner 2004

Members of Council are requested to comment on the invited speakers within a week.

Action: Council

8.5. Cape Town 2006 (UWC, SAAO, iThemba LABS, HMO)

Nothing to report.

8.6. Johannesburg 2007 (Wits)

Nothing to report.

9 COMMITTEES OF COUNCIL

9.1. Awards Committee (WDH)

Nothing to report.

9.2. Education Committee (DJG)

Prof. Grayson reported that she had approached DST and DE for funding to host a workshop for representatives of physics departments to train teachers to teach the new curriculum. Despite repeated follow-ups by telephone and email over a period of three months, the application was not attended to by either department in time for a workshop to be held in 2004. DST has agreed to consider the proposal next week and there is a possibility that it will be funded in 2005.

Prof. Grayson also reported that she had been approached by SAUVCA to serve on a moderation panel for matric physics examination papers.

9.3. Marketing Committee (SHC)

Nothing to report.

10 PORTFOLIOS OF COUNCIL

10.1. Communication (JP)

Newsletter

There has been 1 issue of the newsletter since the last meeting.

Web-site

As of 22 October 2004, there were 6914 hits on the web-site.

Communication with Members

Items that are of interest to members but which would be out of date for the newsletter are emailed out as they arrive.

Miss. Padayachee requested that a professional writer be hired to write press releases. **Agreed.**

Information that was requested from heads of departments on equipment available in their departments for *Shaping the future of Physics in South Africa* is available. Miss. Padayachee requested permission for this information to be made available on the SAIP web-site. It was suggested that HoDs be contacted to confirm whether they wanted the information made available.

10.2. Role and Function of the SAIP (NC)

10.2.1. Rewriting the Constitution

Council discussed the possibility of establishing a Constitution Committee to re-write the constitution. It was felt that Dr. Chetty should chair Committee and that it should be constituted after Dr. Chetty returns from the USA in January 2005. The following were suggested to serve on the Committee: Dr. Chetty (chair), Prof. M. Hellberg, Dr. P. Martinez.

Action: Chetty

10.3. Industrial Liaison

Nothing to report.

10.4. Fund-Raising (ECZ)

Nothing to report.

11 SPECIALIST GROUPS**11.1. Applied and Industrial Physics**

Nothing to report.

11.2. Astrophysics and Space Science

Nothing to report

11.3. Condensed Matter and Materials Science

Nothing to report

11.4. Education

Nothing to report

11.5. Lasers, Optics and Spectroscopy

Nothing to report

11.6. Nuclear, Particle and Radiation Physics

Nothing to report

11.7. Theoretical Physics

Nothing to report

12 SAIP AFFILIATIONS AND REPRESENTATIONS**12.1. Representations****12.1.1 SACNASP**

Nothing to report.

12.1.2 SAASTA

Nothing to report

12.1.3 NSTF

Prof. J.B. Malherbe tabled the following report on the launch and AGM of SETAG on 14 September 2004 at the University of Pretoria. Prof. Malherbe felt that the SAIP should remain a member of SETAG/NSTF. SETAG replaces AS&TS (defunct) and FEDSET. It is thus the collective voice of the learned societies. The meeting was attended by about 100 people.

1. DECISIONS

- a. To formally agree to the launch of SETAG (Scientific, Engineering, Technological Societies and Allied Professions Group of South Africa)
- b. Interim Executive will continue until the next AGM.

2. OBJECTIVES

- a. The support and promotion of SET and allied professional and educational bodies and their practitioners in Southern Africa.
- b. To support the endeavours of SET societies in areas of professional standards and education;
- c. To promote the support of SET educators and quality of careers guidance;
- d. To facilitate discussions within the SET community concerning matters of common interest;
- e. To take an active interest in the state of research as conducted in South Africa in the fields of SET in all sectors;
- f. To enhance communication between the SET community and parliament, government and industry; and
- g. To promote understanding among the Southern African public of the work done within the SET community of the nation.

3. MEMBERSHIP

Through NSTF – SAIP is, thus, automatically a member.

4. VISION OF CURRENT EXCO

- ❑ Lobby: Government, DoE, DST, DTI, Etc.
- ❑ Communication: Each other, Public, Specific interest groups
- ❑ Projects: Endorse current and new projects, Facilitate projects, Run projects

12.2. Affiliations

12.2.1 General

The following Institutes have signed Memoranda of Agreement:

1. South African Association of Physicists in Medicine and Biology

12.2.2 National Society of Black Physicists (NSBP-US)

Prof. Zingu will contact the NSBP with an invitation to become an affiliate of the SAIP. The agreement will contain details of inviting an NSBP member to the Annual SAIP Conference as a plenary speaker, on alternate years.

Action: Zingu

13 INTERNATIONAL LIAISON

13.1. Proposal for Merging the SAIP Council and the IUPAP Liaison Committee (ECZ)

The Council of SAIP consisting of 9 members and the IUPAP Liaison Committee consisting of 12 members have 6 members in common. Whereas the IUPAP Liaison Committee is expected to consider physics issues that are related to IUPAP, the Council's sphere of interest and responsibility includes but is not limited to those matters covered by the Liaison Committee. The effectiveness of both structures in respect of IUPAP matters could be improved by consolidating the two bodies. This arrangement is common in most of the other Science Liaison Committees.

Proposal: That all members of the SAIP Council be members of the IUPAP Liaison Committee.

Benefits

- Once a year, a meeting of the IUPAP Liaison Committee could be followed by a meeting of the Council on the same day since all members of Council will be present.
- The cost of one meeting of Council per year will be carried by the International Science Liaison Division of the NRF.

- It would eliminate the need for IUPAP reports to be tabled at the meeting of Council except in cases where formal consideration by the Council is required. The presence of members of Council during the Liaison Committee meeting will ensure that Council is fully briefed in respect of IUPAP matters.

Decision: **Agreed**

Action: Zingu

14 MEMBERSHIP MATTERS

14.1. Applications Processed since last meeting (9 new, 0 Upgrades)

Miss. S-L Blyth (S)	Mr. S.S.S. Madiseng (S)	Ms. D.R. Ramaboea (S)
Dr. S. Chikwembani (O)	Mr. N.O. Monama (S)	Mr. J.M. Rapetsoa (S)
Mr. M.J.N. Horner (S)	Mr. M.B. Mukhawana (S)	Dr. S. Singh (O)

14.2. Membership Statistics as at 22 October 2004

By Category		By Specialist Area		
Honorary Members	12	Applied and Industrial Physics	26	73
Emeritus	10	Astrophysics	83	19
Ordinary Members	259	Education	26	48
Associate	17	Lasers, Optics and Spectroscopy	35	28
Student	149	Nuclear, Radiation and Particle Physics	58	31
Retired	20	Plasma Physics	8	11
Institutional	4	Solar-Terrestrial & Space Physics	15	23
Honorary Institutional	1	Condensed Matters and Materials Science	148	33
Total Members	472	Theoretical Physics	26	32
		General	8	21

14.3. Application for Emeritus Membership

Carried over to next meeting.

14.4. Benefits of Corporate Membership

Carried over to next meeting.

15 PHYSICS 2005

Prof. Moraal tabled the following report on the status of activities for 2005.

15.1. Status

The details of the extensive report to the Council meeting in June 2004, containing all the planned activities, refer. After this Council meeting there was a budget planning meeting of the IYP2005 Steering Committee on 12 July. The following budget was requested from the Department of Science and technology:

1. World Conf. Phys. & Development: operational costs	1 724 000
300 Sponsored participants	2 850 000
2. General Assembly of IUPAP: operational costs	276 000
50 Sponsored participants	475 000
3. SciFest: invited speaker (Basri)	27 000

4. Physics on Parade	86 950
5. SA Physics Olympiad: operational costs	65 500
SA Physics Olympiad: prizes	42 500
6. Physics in Films	52 000
7. Chris Engelbrecht Summer School: invited speaker (Giulini)	12 500
8. IYP Postage stamp: 500 complimentary issues @ R 8 each	4 000
9. Schools/Youth programme	102 827

Total **5 718 277**

On 9 September 2004 the following amounts were approved by DST, while the department also provided a formal letter of endorsement.

1. Media Launch	100 000
2. World Conf. Phys. & Development: operational costs	504 000
3. General Assembly of IUPAP: operational costs	111 000
4. SciFest: invited speaker (Basri)	27 000
5. Physics on Parade	86 000
6. SA Physics Olympiad: operational costs	65 500
7. SA Physics Olympiad: prizes	42 500
8. Physics in Films	72 000
9. Chris Engelbrecht Summer School: invited speaker (Giulini)	12 500
10. Posters/games/jingles/table of the elements	250 000
11. Print and electronic promotions	229 500
12. Schools/Youth programme	102 827

Total **1 500 000**

On the basis of this budget another Steering Committee meeting took place on 20 September. All the abovementioned activities are now proceeding.

In addition, a letter was written to all heads of departments to activate them to stage at least one special activity to celebrate this year.

An interactive forum to exchange ideas for IYP2005 has now been established on the SAIP web site at <http://www.saip.org.za/physics2005/>.

Heads of departments will be requested to submit budgets for their 2005 activities.

Action: Secretary

15.2. IUPAP General Assembly

Nothing to report.

15.3. UNESCO World Conference on Physics and Sustainable Developments

Nothing to report.

15.4. Regional Activities: Lecture Tour

Dr. Michael M. Shara (American Museum of Natural History: Curator and Curator-in-Charge, Department of Astrophysics, Division of Physical Sciences; and curator of Einstein) is interested in visiting South Africa to participate in the IAU/IUPAP sponsored symposium on "The Science Case for Extremely Large Telescopes" (Cape Town, 2005 November 14 to 18) and has kindly offered to give 5 public lectures on "Einstein" in Pretoria and Cape Town. He would also be the SAAO's guest at the opening of SALT on 11 November 2005. DST will be approached for funding to cover Dr. Shara's costs while traveling in South Africa.

Action: Moraal**15.5. Lab in a Lorry**

Council discussed the IoPs/Schlumberger Foundation's project "Lab in a Lorry". Lab in a Lorry is an interactive mobile physics laboratory staffed by volunteer practising physicists and engineers. Young people do experimental physics while experienced scientists provide guidance when experiments take off into new arenas. The Institute of Physics (IOP) and the Schlumberger Foundation (SF) have partnered to launch three bespoke Lab in a Lorry (LIAL) vehicles in early 2005.

The Schlumberger Foundation and the IOP are currently building the UK-based LIAL programme; however, it is the intention of Schlumberger, with the support of the IOP, to deploy the program globally. The format would be transferable from country to country, where the experiments contained within the vehicle and the content hosted on the LIAL website would be tailored for each country. To maximise success and participation in each country, it is essential that local partners be identified and empowered.

The idea is to have the "Lab in a Lorry" at the World Conference on Physics and Sustainable Development in 2005 and use the conference to recruit international support for the project.

Council agreed to become an international partner with Dr. Connell as the SAIP Liaison.

Action: Zingu, Connell**15.6. History of the SAIP**

Nothing to report.

15.7. Commemorative Stamp Issue

Nothing to report.

15.8. Proposal from Johan van Staden

Council has received a request from Dr. J. van Staden (U. Pretoria) to endorse his proposal to put together a group of young scientists to attend the launch conference of IYP2005 in Paris in January 2005.

DST has indicated their willingness to support the young scientists.

SAIP endorsed the proposal.

Action: Zingu**16 GENERAL****16.1. Eminent Physicists of South Africa**

Prof. P.C. Wagener has requested endorsement from the SAIP for a book entitled, *Eminent Physicists of South Africa*, that he is in the process of compiling.

Decision: The SAIP thought that the idea of a book of eminent physicists was a good one and would endorse the project. Council felt that **all** recipients of the De Beers Gold Medal Award over the years should be included. The Council also saw an opportunity to request Prof. Wagener to write a history of physics in South Africa. The history should be sensitive to the issue of physics in SA. Tentative title: "Physics and the SAIP".

Action: Zingu**16.2. Promotion/Formation of Physics Societies at Universities**

The formation of physics societies at universities is a good method of promoting physics to the general student population at universities. Activities include talks videos etc. The proposal submitted by Miss. Padayachee for the SAIP to host a dedicated page on the web-site where societies can find information on other societies, activities around the country, ideas, etc was discussed.

Decision: It was agreed that a web-page would be set up to promote physics societies.

Action: Secretary**16.3. Buyers Guide**

Council considered the suggestion submitted by Dr. M. Chithambo to publish a Buyers' Guide as is done by the American Institute of Physics. The guide listing contact details of companies in one section, and in another a list of possible items that might be of interest to physicists would ease the problem that some SA physicists face of having to always rely on overseas suppliers when there are local companies that supply the same products.

Decision: The idea of publishing a Buyer's Guide will be handled when the permanent SAIP office is set up. In the interim, a page on the web-site with URLs of SA suppliers will be set up.

Action: Secretary

16.4. Constitution Changes

41 members voted on the constitutional changes. All proposed changes to the constitution and by-laws were passed. The constitutional changes will be put to the 2005 AGM for final acceptance while the by-laws take effect immediately.

Transitional Implementation of Changes to the Constitution

Since the changes to the constitution that have recently been voted on will only be put to the 2005 AGM for final acceptance and there are contradictions between the new by-laws (which take effect immediately) and the current constitutional clauses, Council needs to think about what can be done in the interim for the election of the 2005-2007 Council before the 2005 AGM.

Members of Council will submit ideas as to how the issue could be resolved. The Secretary will put together a list of implications of holding the elections before and after the 2005 AGM.

Action: Council, Secretary

The issues surrounding the election of the student member was referred to the meeting of physics students where it was decided that the Students prefer to have the representative serve a one year term. Otherwise, for the two year term, the student representative would be re-elected if the current student representative on Council completes his/her degree.

16.5. Project 500 (NC)

Carried over to next meeting

16.6. Women in Physics: Africa Network Workshop

The SAIP has received a request from DST to coordinate activities for the "Women in Physics" workshop where plans to develop a broader network of women physicists in Africa will be discussed. The workshop has been proposed by the IUPAP Working Group on Women in Physics.

Decision: UNISA will be asked to host the workshop. SAIP endorses the initiative and DST will fund the workshop.

17 NEXT MEETING

The next meeting will be held on 25 February 2005 at the University of Pretoria, Pretoria. The meeting will start at 09h00.

18 CLOSURE

Prof. Zingu thanked all Council members for attending the meeting. The meeting closed at 17h15.

MISS J PADAYACHEE

Secretary

PROF. E.C. ZINGU

President

