



## A48

# MINUTES OF THE 48<sup>TH</sup> ANNUAL GENERAL MEETING OF THE SAIP HELD AT THE UNIVERSITY OF STELLENBOSCH, STELLENBOSCH ON 26 JUNE 2003 AT 16H00

### 1. OPENING

The President of the SAIP, Dr. P.A. Whitelock chaired the meeting and welcomed all present.

### 2. ATTENDANCE

Apologies were received from Prof. A. Hughes, Dr. E.E. van Dyk Prof. J. Smit and Prof. H. Moraal. The meeting was attended by **46 members** and **10 non-members**.

### 3. MATTERS FOR DISCUSSION UNDER GENERAL

The meeting decided to discuss the following matters under "General":

3.1. Parallel event for High School Learners at SAIP – Feedback (K. Govender)

3.2. Update on FET Curriculum (D.J. Grayson)

### 4. MINUTES OF THE PREVIOUS MEETING

The minutes of the meeting held on 26 September 2002 (A47) were approved.

### 5. MATTERS ARISING FROM THE MINUTES

There were no matters arising from the minutes of the last meeting.

### 6. NEW COUNCIL FOR 2003 TO 2005

Dr. Whitelock presented the new council for 2003 to 2005.

<b>President</b>	Prof. E.C. Zingu
<b>Vice-President</b>	Prof. H. Moraal
<b>Secretary</b>	Ms. J. Padayachee
<b>Treasurer</b>	Prof. J.A.A. Engelbrecht
<b>Members</b>	Dr. N. Chetty
	Dr. S.H. Connell
	Prof. D.J. Grayson
	Prof. W.D. Heiss
	Dr. P.A. Whitelock

### 7. PRESIDENT'S REPORT FOR 2002 – 2003

Prof. Zingu took over as chair and Dr Whitelock, presented her report for the year 2002 – 2003. (Copy attached).

#### *Highlights of Report*

**Web-page and Newsletter:** Dr. Whitelock reported that Ms. Judith Ncapayi took over from Dr. Elmarie Mortimer as editor of the SAIP newsletter, from January 2003. She thanked both for their efforts and commented that the newsletter could be used to a greater degree than at present. Members were encouraged to contribute to the newsletter regularly. The web-page is now being hosted by a commercial company with a new URL (<http://www.saip.org.za>) and a new look. Ms. Jaynie Padayachee was thanked for the re-design and maintenance of the new site.

**Transformation Committee:** As a result of recommendations made by the Transformation Committee, certain clauses of the constitution and by-laws would have to be changed.

**Education:** Dr. Whitelock thanked Prof. Diane Grayson for her efforts on the FET curriculum. An international Physics Education conference is being organized under the auspices of the International Commission on Physics Education and the SAIP for 58 July 2004 in Durban, following the Annual SAIP conference in Bloemfontein. The conference is being organized by Mr. Case Rijdsdijk and Prof. Grayson and the theme will be "What physics should we teach?"

**Marketing:** Dr. Whitelock thanked Dr. Simon Connell and Mr. Kevin Govender for their efforts in marketing physics and the SAIP over the past year. Projects highlighted were Physics Emasondosondo, Promoting STYLE and the organization of a parallel event at the annual conference for high school learners.

**International Liaison:** Dr. Whitelock reported that thanks to the efforts of the Vice-President, Prof. Zingu, the 2005 General Assembly of IUPAP will be held in Cape Town. A UNESCO conference is also being planned for 2005 in South Africa.

Dr. Whitelock concluded her report by thanking members of Council for their support over the last year.

There were no comments to the report. The report was then accepted. Prof. Zingu thanked Dr. Whitelock for her work as President and returned the chair to Dr. Whitelock.

Dr. Simon Connell then gave a short presentation on the Physics Emasondosondo project.

## 8. FINANCIAL REPORT FOR 2002 – 2003

The Treasurer, Prof. Engelbrecht tabled the audited statements for the financial year 1 April 2002 to 31 March 2003. (Copy attached to these minutes). He explained aspects of the statements, especially the difference in income due to membership statements having been sent out late. The financial statements were accepted with thanks to Prof. Engelbrecht.

## 9. BUDGET FOR 2003 – 2004

Prof. Engelbrecht presented the budget for the next financial year and proposed a 10% increase in membership fees. The meeting proposed and **approved** the following increase to membership fees for 2004.

Category	2003	2004
Full Members	R200	R220
Institutional Members	R1600	R1800
Associate Members	R100	R1100
Retired/Student Members	R50	R55

Prof. Engelbrecht then appealed to members to inform him if membership fees have been deposited into the SAIP account so that he can track who has paid.

The budget was approved with thanks to the Treasurer.

## 10. SHAPING THE FUTURE OF PHYSICS IN SOUTH AFRICA

Prof Zingu presented a short report on the status of the Shaping the Future of Physics in South Africa.

**Activities to Date:** Regional workshops were held in 2002, with participants mostly from academia. The National Stakeholders Meeting was held on 16 May 2003 and was attended by 51 delegates from academia, government, science council and industry. The Management and Policy Committee (MPC) was appointed at this meeting. The MPC is:

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, 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 MPC had their first meeting on 12 June 2003 at the NRF. The International Panel consisting of 4 overseas physicists and 2 South Africans was discussed. 29 nominations for the International Panel were received, all overseas candidates and no South Africans. The funding available at the moment: R290 000 from DST, R350 000 from the NRF and the French Embassy has agreed to cover the costs of a French reviewer. Prof. Zingu requested that nominations for a French as well as South African reviewers should be sent to the Secretary.

## 11. PROPOSED CHANGES TO THE CONSTITUTION AND BY-LAWS

Proposed changes to the constitution, as a result of the recommendations of the Transformation Committee were presented and discussed. According to the constitution members have to be informed of the proposed changes **before** the Annual General Meeting. These proposals will therefore be officially presented before the next AGM in Bloemfontein. The proposed changes will be made available on the SAIP web-site and comments are welcome from the membership.

The Transformation Committee has also recommended that the logo of the Institute be changed. A competition will be held with a R3000 prize to the winner. Terms of reference and judging criteria will be drawn up. The competition will be open to everyone.

## 12. REPORTS FROM SPECIALIST GROUPS

### 12.1. Applied Physics and Industrial Physics

The Chairperson Prof. D. Raubenheimer reported that the group was in dire straits and requested assistance from the AGM and Council. While there were 37 presentations in the Applied and Industrial Physics section at the conference, only 8 people attended the group AGM, which suggests that while there is applied physics research taking place, no one is interested in the management of the group.

### 12.2. Astrophysics

The Astrophysics and Solar-Terrestrial and Plasma Specialist groups merged to become the "Astrophysics and Space Science" Specialist group. The group is co-chaired by Dr. P.J. Meintjes (UFS) and Prof. R.A. Burger (PU). The merger

was well accepted by the local astrophysics and space science community, and the wish was expressed that opportunities for collaboration between the disciplines must be explored.

The conference was well attended, and over 30 contributions were hosted, with two parallel sessions being necessary to accommodate all the talks. This year close to 50% of the contributions were student contributions, and the standard was exceptionally high. Three prizes were awarded with the prize money sponsored by the SAIP (R1000) and SAAO (R1000).

### **Other highlights of the past year in Astrophysics and Space-Science:**

Candidates for the Stobie scholarships were accepted to SALT partner institutions at Rutgers in the USA and Southampton in the UK. They will start in September/October 2003.

The Hermanus Magnetic Observatory has made significant progress in developing its science outreach activities.

On 26th May 2003, South Africa submitted its initial offer to host the Square Kilometre Array (SKA) radio telescope to the International SKA Steering Committee (ISSC). This document was the result of four months of intensive work by the South African SKA Steering Committee under the chairmanship of Dr Rob Adam (DG: DST) with Dr. Bernie Fanaroff as Project Manager. Further details of South Africa's involvement in the SKA can be found at: <http://www.ska.ac.za>. The ISSC will meet at SAAO in Cape Town in January 2004.

Prof Justin Jonas has succeeded Dr George Nicolson as Director of HartRAO from 1 June 2003. Prof. Jonas will continue as Chair of the Department of Physics & Electronics at Rhodes University in a joint, 2-year appointment.

The SHARE radar in Antarctica continues to operate successfully in Antarctica as part of the international Super Dual Auroral Radar Network (SuperDARN) programme. At the 2003 annual workshop of SuperDARN in Helsinki, Prof ADM Walker (UND) was presented with a framed award incorporating diagrams from some of his papers with a citation reading: "Presented to Prof A D M Walker for enduring contributions to STARE and SuperDARN and for outstanding contributions to our current understanding of hydromagnetic waves in geospace."

Building of the R2 000 000 UFS-Boyden education centre will commence in July 2003 at the University of the Free-State.

The first two-telescope events were observed by the HESS array of imaging atmospheric Cherenkov telescopes in Namibia on 5 March 2003.

The Honours and Masters components of the National Astrophysics and Space Science Programme commenced simultaneously in February 2003, with 13 Honours and 5 Masters students.

### **Awards**

Andrew Collier (UND) obtained a Young Scientist Award to attend the URSI Conference in Maastricht in July 2002.

Prof Marius Potgieter (PU for CHE) was awarded an A-rating by NRF.

Prof Harm Moraal (PU for CHE) was awarded the Havenga Prize for Physics by the South African Academy of Science and Art.

## **12.3. Education**

There were two conferences in which the group was directly and indirectly involved: the ICPE conference to be held in Durban in July 2004 and the SAARMSE conference in Cape Town in January 2004.

Members were asked to provide the Council of the input for the "Shaping of Physics" by submitting this to the chair who would collate it and forward it to the council.

The situation with the Olympiad was indecisive since at the crucial time FEST was undergoing changes as a result of its being incorporated into the NRF and its own role was being redefined. It appeared that there would be little change this year, but the chairman hoped that by the conference next year that there may well be more positive things to report - this is ongoing!

The current FET curriculum was still a major source of concern and we are hoping to collect enough feedback from members to submit a letter to council to formally apply to the minister for an audience. Although a number of our suggestions have been taken up, we still have grave concerns about the proposed physics content and want to try to secure the involvement of physicists in any further content development

## **12.4. Lasers, Optics and Spectroscopy**

The Chairperson, Dr EG Rohwer reported that the Group held a very successful winter school on Lasers and Applications, with more than 150 attendees. We are particularly grateful for contributions by Prof Carl Wieman, Dr Sarah Gilbert and Dr Tony Parker from Rutherford laboratories. We wish to thank the NLC for sponsorship, and Prof Piet Walters and his team for the perfect arrangements. On Monday the annual report back session of the NLC was held at the University of Stellenbosch. Although not formally coupled to the SAIP conference, it was meant to coincide with the conference. The idea is that in future this should continue to be coupled to the SAIP conference. In 2002 the African Laser Centre was established. Processes have been started to generate funding and to determine the structure of the ALC. It will be a virtual centre, and it was decided that the head office would be in SA. During August (11-14<sup>th</sup>) there will be an international workshop and Conference on Optics and Laser Applications held in Windhoek, supported by the ALC.

## 12.5. Nuclear, Particle and Radiation Physics

The Chairperson, Dr. Z.Z. Vilakazi, reported that the attendance in the nuclear physics section at this annual conference was higher, in comparison to the previous year. There were 29 oral and 4 poster presentations (nearly double the figure of the previous year). This is good news indeed – whether this a fluctuation or a start of a trend still remains to be seen. The span of topics presented at the conference was also much larger. This might indicate the diversification of activities within the group. A larger than usual high-energy physics contribution was also noted. The workshop on nuclear structure was also a success. Among the distinguished speakers were Prof. A. Richter and Dr. P von Neuman-Cosel from TU Darmstadt, Germany. Three prizes were awarded (best MSc oral, best PhD oral, and best poster). Prizes were sponsored by Oscar Redivo from BioTeknik. Following from a new and highly successful “millennium” summer school, we are pleased to inform the community that a third summer school on nuclear physics is planned for January 2004 at Hluhluwe, KZN. The school will be hosted by the Universities of Zululand and the Witwatersrand.

## 12.6. Solar, Terrestrial & Plasma Physics

This group officially does not exist anymore.

## 12.7. Solid State Physics and Material Science

The Specialist Group for Solid State Physics and Materials Science held two Executive meetings the past year. Speakers were identified and invited for presentations at the annual conference. In 2002, Prof Frank Steglich presented the Specialist Lecture, while Prof A Every (Wits) presented the Non-specialist Lecture. A successful Spring School on Magnetism was also hosted by the group at RAU, with Dr ARE Prinsloo as organising chairperson. The student awards programme continues to be a vehicle to inspire students in the fields of Solid State Physics and Material Science, and last year 9 prizes were awarded from the SSPMS funds, and by sponsors (Continental Tyres and Goodfellow). Members of the SSPMS also played leading roles in the initiative on the “Shaping the Future of Physics in South Africa” initiative, by hosting regional meetings, and participating in the National meeting, where several members were elected to the Management and Policy Committee. Dr Nithaya Chetty (UN) also delivered a presentation on the activities of the SSPMS at this meeting. Several workshops were hosted by members of the Specialist group during the past year, with more being planned for later this year. Prof. Engelbrecht reported that the group will now be known as the **Condensed Matter Physics and Materials Science Specialist Group**.

## 12.8. Theoretical Physics

The 15th Chris Engelbrecht Summer School in Theoretical Physics takes place 21-30 January 2004. The venue is Alpine Health Resort, Natal Drakensberg. The 5 lecturers have already been confirmed as Altshuler, Beenakker, Glazman, Kouwenhoven and von Delft. Funding is available to subsidise local graduate students. Further details are available on the URL <http://www.sun.ac.za/summerschool/2004.html>. The first three postdoctoral positions in the Stellenbosch Institute for Advanced Study's African Theoretical Physics Program have been advertised internationally and 23 applications have been received. The appointments will be effective from October 2003. The African Institute for Mathematical Sciences will be launched 18-19 September 2003. Prof FJW Hahne, OTP member and former SAIP President has been appointed as the first Director. See <http://www.aimsforafrica.org> for further details. The theoretical physics seminar at SAIP2003 was oversubscribed time-wise (30 contributions) and some presentations had to be restricted to 15 minutes while a few were presented as posters.

## 13. REPORTS FROM REPRESENTATIVES ON OTHER BODIES

13.1. SACNASP – Nothing to report

13.2. FEDSET – Nothing to report

13.3. NSTF – Nothing to report

13.4. MSSA – The MSSA representative Prof. J.A.A. Engelbrecht reported that the society remains vibrant. The annual conference will be hosted at UCT from 35 December, and is hosted by Prof Candy Lang, who is also a member of SAIP.

## 14. CONFERENCE MATTERS

### 14.1. Increase in Conference Fees to Alleviate Stress of Sponsorships

Dr. Whitelock reported on the request by conference organisers that the conference registration fees be increased to alleviate the stress of finding sponsorships. She also expressed her disappointment in the low numbers of senior scientists that attend the conference.

### 14.2. Format of Future Conferences

Members were reminded that from 2004, the conference will be held over three days with the banquet on the Friday evening to take increasing numbers of presentations into account. Organisers should also be more selective of which abstracts are accepted for oral presentations.

### 14.3. Future Conferences

2004	Bloemfontein hosted by UFS	approved 2002
2005	Pretoria hosted by UP	approved 2003

2006 No venue

2007 No venue

## **15. GENERAL**

### **15.1. Feedback on Parallel Event for Learners at Conference**

Mr. K. Govender reported that learners from local schools and teachers from Sutherland attended the talks, demonstrations and workshop organised for the event at the conference. Guidelines to form science clubs at schools were presented and the day was a success. A similar event will be planned for the 2004 conference. Mr. Govender thanked the sponsors: NECSA and Parc Scientific. Comments and criticisms may be submitted to [kg@necsa.co.za](mailto:kg@necsa.co.za).

### **15.2. Update to FET Curriculum**

Prof. Diane Grayson reported on the current status of the FET curriculum. There have been approximately 5 drafts thus far and all requests to involve a professional (i.e. physicist/chemist) in the development process have been ignored. The current version is full of mistakes, omissions and incoherencies. There is a strong feeling that the only way to stop the process is to get an audience with the minister of Education.

### **15.3. World Year of Physics 2005**

The SAIP is preparing for a celebration of physics in 2005. The declaration of 2005 as the World Year of Physics by IUPAP co-incides with the 50<sup>th</sup> anniversary of the SAIP. Prof. E. Zingu will be attending the 1<sup>st</sup> Preparatory Conference on the World Year of Physics in Graz, Austria in July 2003. One plan is that initiatives resulting from the outputs of Shaping the Future of Physics in South Africa could be launched in 2005.

## **16. CLOSURE**

The Vice-President, Prof. Zingu expressed his thanks and appreciation to Dr. Whitelock for all her hard work as President over the past two years: she has done a great deal for physics and the SAIP. The President thanked members for their attendance. The meeting closed at 18h10.

**Secretary**

**Ms. J. Padayachee**

**SAIP URL: <http://www.saip.org.za/>**

**President**

**Dr. P.A. Whitelock**