



R161

MINUTES OF A MEETING OF THE COUNCIL OF THE SAIP WITH CHAIRPERSONS OF THE SPECIALIST GROUPS

DATE: 26 June 2003

TIME: 13h00

VENUE: Bloukamer, Neelsie Student Centre, University of Stellenbosch, Stellenbosch

1. OPENING

Dr. Whitelock chaired the meeting and welcomed everyone to the meeting. She invited those present to introduce themselves.

2. ATTENDANCE

Name	Representing	Email
PA Whitelock	President, SAIP	paw@sao.ac.za
J. Padayachee	Secretary, SAIP	jpadayachee@bonbon.net
JAA Engelbrecht	SSPMS/MSSA/Council	phajae@upe.ac.za
H Geyer	Theoretical Phys./Council	hbg@sun.ac.za
D. Grayson	Council	graysdj@unisa.ac.za
E. Zingu	Council	zingu@julian.mantec.ac.za
C. Rijdsdijk	Education	case@sao.ac.za
P.J. Meintjes	Astrophysics	meintj@uovs.ac.za
EG Rohwer	Lasers, Optics and Spectroscopy	egr@sun.ac.za
A. Burger	Space & Plasma	fskrab@puknet.puk.ac.za
Z.Z. Vilakazi	Nuclear, Part. & Rad. Phys.	
N. Chetty	Council	chettyn@nu.ac.za
W.D. Heiss	Council	dieter@sun.ac.za
D. Raubenheimer	Applied and Industrial	rbhm-rd@pelican.vista.ac.za

3. MINUTES OF THE PREVIOUS MEETING

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

4. REPORTS

4.1. Applied 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.

4.2. 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.

4.3. 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! There was funding for the chairman to travel to Taiwan to attend the 34th IPhO as an observer, but there seemed little point in doing so unless there was some commitment from FEST (now SAASTA) as to how they saw the way forward. The chairman would be submitting a full report on this to the council in the future.

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 as our previous communications have had no impact on the process. We feel that it is difficult to draw up a new physics curriculum without consulting the experts in the field.

The chairman also requested that there should be a sort of "job description" for Specialist Chairs, as, other than the brief mention of their role in the constitution there are no rules or guidelines as to what their exact role and function is. He believed he was not alone in this matter.

There was a request that in future the Education Group split their presentations into those dealing with Physics Education Research and other educational aspects. This was agreed to and falls in line with the request from council for the group to extend its activities beyond those of the tertiary institutions. It was suggested that for the next conference that the abstracts be sent to the Chairman of the group and they are then selected for the appropriate section.

Finally the chairman wanted to thank Kevin Govender for his efforts in organizing the "teachers/pupils" workshop during the conference. The chairman had spoken at length to him and suggested that in future we should try and set this up on the day prior to the main conference to avoid clashes. This timing proved better, as was shown at the Durban conference in 2001.

4.4. Lasers, Optics and Spectroscopy

The Chairperson, Dr. E. Rohwer, reported that the group held a very successful winter school on Lasers and Applications, with more than 150 attendees. We were fortunate to have had the services of both Prof Carl Wieman and Dr Sarah Gilbert. Together with Dr Tony Parker from Rutherford laboratories (Head: Lasers for science facility), they gave the winter school an international flavour. The NLC sponsored Dr Parkers visit, which we gratefully acknowledge. Thanks to Prof Piet Walters and his team, the arrangements were perfect, and this needs to be conveyed to them. We thank the council for allowing us the opportunity.

NLC report back: On Monday the annual report back session of the NLC was held at the US. Although not formally coupled to the SAIP conference, it was meant to be coinciding with the conference. The ideal is that in future this should continue to be coupled to the SAIP conference.

Attendance at the lectures 50-70 persons at SAIP lectures. The number of presentations maintained the same level as 2003, despite the fact that NLC report back was separate from the SAIP.

ALC: 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 (11-14th) there will be an international workshop and Conference on Optics and Laser Applications held in Windhoek, supported by the ALC.

Sponsorship: We obtained sponsorship from the NLC for prizes for student lectures at the conference.

Shaping the future of Physics: The committee is tasked with contacting all Physics departments working in this field as well as industry to contribute, and to use the inputs to formulate a report. This report will be circulated for comment and correction before submission. The NLC database and infrastructure will be used to trace all possible contributors. The NLC will also provide reports to be incorporated.

Present committee: Dr EG Rohwer (Chairperson) Dr A Forbes (Vice chairperson) and Prof H von Bergmann. New elections will be held again in 2004

4.5. 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.

Summer schools: Following from a new and highly successful "millenium" 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.

4.6. Solar, Terrestrial & Plasma Physics

This group doesn't exist anymore.

4.7. Solid State Physics and Material Science(SSPMS)

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 Future of Physics in South Africa", 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.

4.8. Theoretical Physics

The 15th Chris Engelbrecht Summer School in Theoretical Physics takes place 21-30 January 2004. The venue is Alpine Heath 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 Septemeber 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.

4.9. Microscopy Society of Southern Africa (MSSA)

Prof Engelbrecht, the MSSA representative reported that the society remains vibrant. The annual conference will be hosted at UCT from 3-5 December, and is hosted by Prof Candy Lang, who is also a member of SAIP

5. General

5.1. Pseudo Science

It was decided that it is the responsibility of each physicist to comment on pseudo science articles, etc in the popular press.

5.2. Prizes

Chairpersons were reminded that funding for student prizes is available and should be applied for in advance of the conference.

6. CLOSURE

The meeting closed at 13h50.

Secretary
Ms. J. Padayachee

President
Dr. P.A. Whitelock