



PRESIDENT'S REPORT TO THE ANNUAL GENERAL MEETING OF THE SOUTH AFRICAN INSTITUTE OF PHYSICS

7 JULY 2005

Council

The Council was elected into office in 2003 and has served the second year of its term. The members of Council were as follows:

Edmund Zingu	President
Harm Moraal	Vice President
Patricia Whitelock	Past President
Japie Engelbrecht	Treasurer
Jaynie Padayachee	Secretary
Nithaya Chetty	
Simon Connell	
Diane Grayson	
Dieter Heiss	

Executive Committee

Edmund Zingu
Harm Moraal
Jaynie Padayachee
(alternates: Patricia Whitelock, Japie Engelbrecht)

The awards committee comprised of Dieter Heiss (convenor), Krish Bharuth-Ram, Andrew Leitch and Michael Feast, with Robert de Mello Koch as alternate.

Three meetings were held during the past twelve months:

27 October 2004 at SAAO, Cape Town;

20 February 2005 at the University of Pretoria (with the conference organizers);

4 July 2005 (during the conference at the University of Pretoria).

Election of the members of Council for the period: 2005 – 2007

The election of new members of Council for the term: 2005 – 2007 was scheduled for April/May this year. Voting was not necessary because of the limited number of nominations that were received by the due date. I appeal to members of the Institute to make yourselves available to serve on Council and co-direct the development of physics in South Africa.

Membership

As of 19 June 2005 the SAIP membership was as follows:

By Category	June 2004	June 2005	By Specialist Area	
Honorary Members	12	12	Applied and Industrial Physics	30
Emeritus	10	11	Astrophysics	92
Ordinary Members	274	260	Education	25
Associate	19	17	Lasers, Optics and Spectroscopy	33
Student	154	166	Nuclear, Radiation and Particle Physics	57
Retired	20	18	Plasma Physics	10
Institutional	4	4	Solar-Terrestrial & Space Physics	19
Honorary Institutional	1	1	Condensed Matters and Materials Science	151
			Theoretical Physics	27
Total Members	494	492	General	9

We note with concern the drop in ordinary membership but we are delighted that the student membership is showing a steady growth. The decrease in ordinary members is due to the fact that names of members who are two years in arrears with their subscriptions are removed from the membership list, having been given a final reminder earlier in the year. The increase in student membership supports the change in the constitution to provide for a Student Member on Council.

Finances

The treasurer, J Engelbrecht, will report on the financial health of the society. The increased membership fees, the increasing number of fee-paying members, coupled with the healthy profits of large conferences, as well as various cost saving measures have all contributed to the positive bank balance.

International Liaison

The interests of the South African physics community in the affairs of the International Union of Pure and Applied Physics (IUPAP) is represented by the National Liaison Committee for IUPAP. The Liaison Committee which is appointed by the President of the NRF includes a number of members of the Council. The Liaison Committee did not meet during the past year because it had come to the end of its term of office at the end of 2003 and the expectation was that the new committee would be convened in the course of 2004. The committee was reconstituted at the end of 2004. However, the Council has recommended to the National ICSU Board that the entire Council should in future constitute the IUPAP Liaison Committee. The President of the NRF will have the prerogative to appoint additional members onto the Liaison Committee.

The IUPAP Working Group on Women in Physics has been active and plans to arrange a meeting for Women in Physics in Africa in Pretoria did not come to fruition. Instead an international meeting of Women in Physics was held in Rio in Brazil and two delegates from

South Africa participated. The Ministry of Science and Technology has agreed to support an initiative for Women in Physics in South Africa.

Annual Conference

The 49th annual conference of the South African Institute of Physics (SAIP) was hosted by the Department of Physics of the Free State University in Bloemfontein from 28 June to 2 July 2004. This was a very successful event and with 421 participants, it just managed to beat the record attendance of 420 at Stellenbosch in 2003. although the presentations were significantly fewer than the previous year (283 presentations: 181 oral and 102 posters). The five invited speakers from abroad were all from the US. The conference was well attended by post graduate students and several student prizes were awarded for excellent contributions. I wish to commend those Specialist Groups who negotiated with sponsors and secured prizes for the student competitions.

The conference was preceded by a successful Winter School on Surface Techniques, which was attended by 205 delegates. As in the previous year, special activities were arranged for high school learners and educators in the surrounding area. This stimulating initiative will hopefully attract large numbers of students into physics. A special word of appreciation is expressed to Mr Kevin Govender and his colleagues who were responsible for the school programme.

On behalf of the SAIP, I wish to record our appreciation to the members of the Physics Department of the University of the Free State for their tremendous efforts in successfully hosting the 49th Annual Physics Conference of the SAIP.

I am pleased to note that the 50th Annual Conference here in Pretoria has attracted a record number of participants, in excess of 500. We extend our gratitude to the Organizing Committee and members of the Physics Department of the University of Pretoria for the excellent arrangements that were made in hosting such a logistically complex meeting.

Other conferences

Several conferences and workshops are usually organised throughout the year by Specialist Groups or Departments. In some cases the Institute plays a minor role whereas others are organised without any involvement of the Institute. All these initiatives, especially those with international involvement, are welcomed as they stimulate the physics community and supplement the formal training that is being provided by the Physics Departments. I wish to express our appreciation to the organisers and sponsors of the following events and other similar initiatives that we might not have become aware of:

The Fifteenth Chris Engelbrecht Summer School in Theoretical Physics was held from 21 January to 30 January 2004 at the Alpine Heath Resort, Drakensberg, KwaZulu-Natal.

An International Physics Education Conference was held in Durban from 5 to 8 July 2004 under the auspices of the International Commission on Physics Education (ICPE) of IUPAP and the South African Institute of Physics (SAIP).

The International Conference on "Strangeness in Quark Matter" focusing on the physics of strange quarks in matter and heavy flavour production in nuclei was held in Cape Town from 14 to 20 September 2005 and hosted by the Physics Department of the University of Cape Town.

Future of Physics in South Africa

The revitalisation project, known as the "Future of Physics in South Africa" project, was initiated in 2003 and the report of the International Panel that consisted of three South Africans and five non-citizens (France, UK and US) was tabled last year. In response to the recommendations in the report, various groups and departments have formulated specific projects. The budgeting process of the Ministry is underway and it we are confident that the Ministry will allocate substantial funds in support of physics in its next financial year, in continuation of initial commitments that have already been made.

International Year of Physics

IUPAP has declared 2005 as the World Year of Physics. This declaration has been endorsed by UNESCO and was followed by a resolution of the General Assembly of the United Nations to declare 2005 as the International Year of Physics (IYP 2005). The year 2005 coincides with the centenary celebrations of the miraculous year 1905 in which Albert Einstein published three groundbreaking papers on Relativity, Photoelectric effect, and Brownian motion. The year 2005 also commemorates the death of Einstein 50 years ago. During 2004 several planning meetings were held, chaired by the Department of Science and Technology, towards an action plan for 2005 for South Africa. We are grateful to the Ministry of Science and Technology for sponsoring several activities. The following activities have already taken place:

1. The international launch of the International Year of Physics was hosted by UNESCO in Paris: 12-14 January 2005.
2. The national launch of the International Year of Physics on 18 March 2005 in Grahams Town was arranged to coincide with SciFest. The Minister of Science and Technology officiated. Several activities at SciFest were arranged specifically to promote physics amongst the youth in the context of the International Year of Physics.
3. National Science week (9-14 May 2005) throughout the country focused on promoting physics and several physicists participated and gave public lectures and demonstrations on campuses, at science centres and in other public venues.
4. The National Physics Olympiad was launched on 18 May 2005 and administered by Case Rijdsdijk.
5. The Einstein Day programme on 6 July 2005 at the conference

Two important events have been planned for later this year:

1. The General Assembly of the International Union of Pure and Applied Physics (IUPAP) will be held in Cape Town from 26th to 28th October 2005.

2. A world Conference on Physics and Sustainable Development will be held from 31st October to 2nd November in Durban. The conference is being co-hosted by IUPAP, UNESCO, ICTP, IAEA and SAIP.

I am pleased to have learnt of various other IYP 2005 activities that have been initiated on campuses and cities around the country. **It's Your Physics.**

General

I wish to record my sincere appreciation for the support that I have enjoyed from members of Council, and in particular the role that the Prof Moraal (Vice President) and Dr Whitelock (Past President) have played. The business of the SAIP would not have been conducted successfully without the financial management of the Treasurer (Prof Engelbrecht) and the meticulous administration of the Secretary (Ms Padayachee). We are indebted to them for their dedication. I have been privileged to have served the South African Institute of Physics over the past two years as president. These have been exciting years for Physics in South Africa. I wish to thank members of the Institute for the honour, the confidence and the support that I have enjoyed from you, and I trust that the future Councils will be assured of your support.

Edmund Zingu
President
7 July 2005