

REPORT FOR CCE MEETING, 31 JULY – 1 AUGUST 2011IYC ACTIVITIES IN SOUTH AFRICA1. 2011SACI CONVENTION, 17 – 21 JANUARY 2011

Although held before the IYC Opening Ceremony in Paris, the Convention served as an excellent opportunity for chemists from all disciplines to meet before the start of the 2011 academic year and to kick-start IYC celebrations in South Africa. During the week of the convention, a feast of plenary lectures, oral and poster sessions and a teachers' workshop was provided in Johannesburg on the University of the Witwatersrand Campus.

On 17 January 2011, RADMASTE hosted a Teachers' Workshop on the day devoted to Chemical Education. The local attendees came from far and wide and two overseas participants came from Ghana and Switzerland respectively. We were privileged to host Mme Nicole Moreau and Prof David Black, both from IUPAC. These two unexpected VIP guests became so engrossed in the Global Water Experiment that they conducted both the 'pH of the Planet' and the 'Water Treatment' activities.



Nicole Moreau (President, IUPAC) and David StC. Black (Secretary General IUPAC), conducting the Water Treatment activity.

2. ACTIVITIES RELATED TO THE GLOBAL WATER EXPERIMENT2.1 Training of Science Centres Staff

On 13 January 2011, RADMASTE trained staff from various Science Centres in two of the experiments (pH and Water Treatment). After the training, Science Centre Staff would be able to conduct the Global Water Experiment with groups of learners and would also be able to train other staff and teachers.

2.2 Launch of the Global Water Experiment, Cape Town 22 – 25 March 2011

The World-wide launch took place in Cape Town and the event was jointly organised by UNESCO and the Water Sanitation Department of Cape Town Municipality. A UNESCO report and a short video have been loaded on the website <http://water.chemistry2011.org>. E. Steenberg acted as Facilitator for the Global Experiment in Cape Town on behalf of UNESCO – an experience which was not only an honour, but also immensely valuable in gaining experience on how to guide large groups of learners to do the GWE over a number of consecutive days. Late in 2010, South African learners also participated in a workshop to record footage for the ICCA promotional video.

2.3 Gauteng Launch of the Global Water Experiment, 19 April 2011

Sci-Bono, the Science Centre for Gauteng, hosted a northern Launch of the Global Water Experiment. It was gratifying to note that a facilitator that had received training earlier in the year had sufficient confidence to arrange the function and the learners' workshops. The International Year of Chemistry received excellent publicity in a widely-circulated daily newspaper in Gauteng.

2.4 Corporate Sponsorship of the Global Water Experiment by SASOL

A major initiative has been undertaken by the SASOL Social and Community Trust. They are sponsoring equipment and reagents to 200 schools in areas where SASOL has operations, namely Mpumalanga, Free State, Limpopo and Kwa-Zulu Natal. They have added value to the equipment pack by adding educational materials such as posters and have greatly empowered schools to participate by providing a fax number for results. SASOL will log results on behalf of their schools. SASOL also provided training for teachers in four different provinces at five nodes.

2.5 Support given to various role players to participate in the Global Water Experiment

2.5.1 Local assistance

A significant number of local participants elected to use the microscience kits to participate in the Global Water Experiment. This is thought to be due to the lack of equipment in many local schools and the convenience of purchasing both equipment and reagents at a modest price. Examples of such assistance are:

- Pretoria Zoo, where the Global Water Experiment will be used in monitoring the Apies River which runs through the zoo;
- A rural research site in Kwa Zulu Natal;
- A Winter School for learners in the Northern Cape;
- Ten schools supported by Impala Platinum;
- Ten Schools supported by BASF.

2.5.2 Overseas promotion and support

Twenty complimentary Sample Sets of microscience equipment have been sent to various interested parties. During overseas microscience workshops in Kuwait, Addis Abeba and Tanzania, participants were informed about the Global Water Experiment and every effort was made to introduce them to the activities. Limited overseas sales (through RADMASTE contacts or promotion) have been to Gambia, Australia, the Netherlands and Spain.

3. Challenges Experienced

3.1 Local challenges

In spite of contacting the Department of Education (DoE) and all the Natural Sciences Coordinators countrywide, there has been no response or endorsement from the DoE for IYC 2011. No support could be obtained from large corporate or government water bodies such as the Department of Water and Forestry, Joburg Water and Tshwane Water.

Although the Department of Science and Technology has bought 40 sets of equipment and SAASTA has bought 75 sets, logging of data from South Africa is very limited. The reason for the lack of data is not clear at this stage.

3.2 Other challenges

The Global Water Experiment website requires schools to register individually before results can be logged. This is problematic in our setting where we were hoping that SASOL, RADMASTE and the Science Centres could act as data-logging agents on behalf of the schools that don't have internet access.

Participation from the remainder of Africa

At present this is very limited, but should improve once UNESCO support becomes available.

4. Future activities

As result of collaboration between Mary Ostrowski and Erica Steenberg on the Water Treatment Activity, i) the World Chlorine Council donated USD 20 000 to sponsor chlorine test strips in the microscience kits, and ii) a paper describing the development of the Water Treatment Activity has been accepted for oral presentation at the Congress in Puerto Rico.

A very exciting development in South Africa is the circulation of a Draft National Strategy and Framework for the Public Engagement of Science. Such policy will open the door for projects like YAC on government level and will contribute significantly to scientific literacy and awareness amongst the wider population.