

RSC/IOP Science Teachers Training Uganda & Rwanda



17 – 30 August, 2009

An ambitious joint RSC/IOP training event is to take place at Bukinda, Kabale, in SW Uganda from 17 - 21 August 2009 as well as in Kigali, Rwanda from 28 - 30 August with cooperation between scientists from Uganda, Rwanda and the United Kingdom.

This one week residential event is being coordinated by RSC members Jean Johnson and Pat Johnson (no relation!) on their 10th and 4th visits, respectively, to Uganda. They will be working with Byamugisha Alex, a young teacher from Bukinda who recently spent 3 months at St Dominic's College, Harrow, funded by a RSC Developing World Scholarship scheme.



Good Practice Chemistry Training

Thirty school chemistry teachers and thirty physicists from Uganda will participate, along with two Rwandan chemists, to explore the relevance of these scientific disciplines for their country.

The chemists will gain experience of simple, inexpensive ways to illustrate the theory sections of the O and A level chemistry syllabus studied in Uganda. Since many teachers had little opportunity to do practical chemistry during their teacher training, all of them will consequently receive training and a pack of equipment to enable them to carry out the experiments in their own school.

Equipment packs will include plastic droppers, plastic wallets and Petri dishes to do simple

reactions of aqueous ions and both preparations and tests for gases.

Small scale techniques to follow reaction rates will also be included, as well as the practice of titration techniques which are needed for practical examinations that compulsory even at O level. They will also gain practice in carrying out simple organic reactions and the use of molecular models to illustrate them. Each school will also receive a box of Molymod models. The training is funded by PACN.

Physics course

Moreover, the physics course will be taught by physicists from nearby Kigali, capital of Rwanda. The course is jointly funded by the Institute of Physics (IOP) and the RSC. This is a follow-up on last year's work on developing and putting in place a workshop to produce apparatus to help physics teachers do practical work in their classroom.

Francis Gatete, the local project manager, is a practicing physics teacher and runs the training





Jean Johnson with students in Uganda

course with the teachers. He will be bringing and distributing apparatus made in Kigali to the teachers in Uganda.

They will participate in joint sessions on good practice in teaching and learning in science as well as health and safety and basic first aid in the laboratory.

The detailed planning will take place at Bukinda, with visiting Kigali physicists to finalise the necessary arrangements. David Richardson, an UK physics teacher and IOP member who instigated and has overseen the physics project since 2003, will also be visiting to help ensure the material suits the needs of the teachers in Uganda.

Following the Uganda course, the Bukinda team will run a course in Kigali, from 28 - 30 August, at the request of the Chief Inspector for Education, to help prepare teachers for the first ever chemistry practical examination at a level equivalent to A level.

Ugandan science teachers have little access to IT but the course will give a taster using both physics and chemistry resources. Each science teacher will receive a memory stick with the RSC's ACCESS to Chemistry ebook as well as other texts donated by IOP. Next year, there are plans to organise a similar course in Ethiopia where Mr Ketema Wodajo, a chemistry school teacher from Addis Ababa, will be attending.

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