

COMMISSION ON PHYSICS FOR DEVELOPMENT (C13)
Report for the Council and Commission Chairs Meeting, October 2011)
Kennedy Reed (Chair)

Meetings

C13 has held three meetings in three years (August, 2009, August 2010, and August 2011). All three meetings were hosted by ICTP in Trieste and were well attended with active participation of 10 to 13 of the regular Commission members and two or more of the 4 Associate members - as well as guests from other IUPAP units and other international organizations working in Physics for Development.

Collaboration with C20 on Computational Physics Schools in Africa

In 2008 C13 initiated a collaboration with C20 and ICTP to organize a Computational Physics School Series in Africa. The first of these schools, held July 19-30, 2010 in South Africa, was very successful. C20 and C13 members successfully engaged other major sponsors - including ICTP, NITheP, SAIP, NRF, APS-DCOMP, and ICMR in Santa Barbara, USA. (See attached report.) Articles on this inaugural school were published in Nature Physics [**Nature Physics, 6, 830 (2010)**], and Physics Today [**Phys. Today 64, 28 (2011)**]. The next school in the series will be held in 2012 at Moi University in Eldoret, Kenya. Members of C13 and C20 have been working with the local organizers on arrangements. Our joint efforts have already resulted in substantial funding commitments from various sources for the 2012 school. This school series is a significant undertaking and has been a major accomplishment for C13 and our collaborators.

Visiting Scientist Program

C13 began and completed work on developing an IUPAP Visiting Scientist Program that will help research groups or institutions in developing countries benefit from interactions with experts in other countries. The Program Description, Application Forms, and Guidelines are now available on the IUPAP web site at <http://www.iupap.org/conferences/VisitingScientistDescription.html>.

Article on C13 Published

An article on C13 was published in the September 2010 issue of the Bulletin of the Federation of Latin American Physical Societies (**Revista Iberoamericano de Fisica, Vol 6, no. 1, 2010**)

Workshop in Brazil

The C13 Chair made an invited presentation on C13 activities in a Workshop entitled "World Cooperation In Physics: Bridging the Gap". The workshop was held on June 5, 2011 in connection with a meeting of the Brazilian Physical Society at Iguazu Falls, Brazil.

African Physical Society

C13 was a sponsor of the January 2010 LAM9/EBASI7 Conference in Dakar, Senegal that included the launch of the continent-wide African Physical Society. A C13 member

was the principal organizer of the Conference and is vice-president of the new African Physical Society.

New IUPAP Member Application

Following the recommendation and encouragement of C13, Kenya has applied for Category C IUPAP membership. We expect this request to be discussed by the Council at the meeting in October 2011.

Links with IUPAP units and other International Organizations

During the past 3 years C13 has developed connections with other IUPAP units and with other international organizations interested in promoting physics in developing regions of the world. Representatives from some of these organizations have participated in C13 meeting. We have also developed significant joint activity with some of them.

Connections with other IUPAP Units

- Commission on Computational Physics (C-20)
- Commission on Physics Education (C-14)
- Working Group on Women in Physics (WG.5)
- International Commission on Medical Physics (AC.4)
- Commission on Structure and Dynamics of Condensed Matter (C-10)
- U.S. Liaison Committee

Connections with other International Organizations

- International Centre for Theoretical Physics (ICTP)
- African Physical Society (AfPS)
- Association of Asia Pacific Physical Societies (AAPPS)
- The Academy of Sciences for the Developing World (TWAS)
- American Physical Society (APS)
- European Physical Society (EPS)
- National Institute for Theoretical Physics (NITheP)
- Institute of Physics (IOP)
- Brazilian Physical Society (SBF)
- Tunisian Physical Society

Conferences in Developing Countries Sponsored by IUPAP on behalf of C13 (2009-2011)

1. **Palestinian Conference on Modern Trends in Mathematics and Physics II**, held at AN-Najah National University in Nablus, Palestine, August 2 - 4, 2010.

2. **African School on Electronic Structure Methods**, held at AIMS in Cape Town, South Africa, July 19-30, 2010.

3. **New Trends in Conducting Materials From Fundamentals to Applications**, held at Sousse, Tunisia, November 3-7, 2010.

4. **Sixth International Meeting on Photodynamics**, held in Havana, Cuba, Jan 27 - Feb 5, 2010.

5. **International School on Nonlinear Dynamics of Complex Systems**, to be held in Yaounde, Cameroon, October 31-November 11, 2011.

6. **1st EOS Topical Meeting on Photonics for Sustainable Development**, planned for July 7-13, 2011 in Tunis, Tunisia

**Applications for conferences in 2012 approved at the C13 meeting in August 2011.
(To be discussed by the Council in October of 2011)**

1. **Third African School and Workshop on X-rays in Materials**, Dakar, Senegal, January 23–January 28, 2012

2. **African School on Electronic Structure Methods**, Eldoret, Kenya, May/June 2012
(The second in a series of workshops on Computational Physics to be held in different African countries every two years)

3. **SPECTRA 2012**, February 19 – February 25, 2012, Lima, Peru