Report of the Commission C15

Atomic, Molecular and Optical Physics

on the occasion of the IUPAP C&CC Meeting in New Delhi, Nov. 5 and 6, 2010

The Commission C15 has met on July 27, 2010 in Cairns during the International Conference of Atomic Physics 2010 (ICAP).

Our field of Physics is dominated by the two large International Conferences ICAP and ICPEAC which are held successively every 2 years. Unfortunately most members of our Commission have their main activities in only either ICAP or ICPEAC so that the attendence during each of these meetings is not satisfactory. One additional reason in the case of the ICAP in Cairns of course is the high cost for the conference in Australia.

On the other hand the ICAP in Cairns this year was attended by 619 physicist from 37 countries which is extremely high for Australia. A good number of the 250 students have been supported by us. This makes clear that our involvement and support from the side of IUPAP is very valuable. The participants had no problem to receive their visas, maximum time was 10 days which is acceptable.

It was proposed by IUPAP that to provide continuity as commission governances change, all the commissions be encouraged to enhance their web presence and host their web sites at www.iupap.org. Our Commission approves this Hosting Proposal.

Most important for our commission was the selection of the IUPAP Young Scientist Prize in AMO Physics. The overall response with 31 nominations was very good, although only 3 were new this year.

Jeremy L. O'Brien of the University of Bristol's Department of Physics and Electrical Engineering was selected to be the 2010 prize winner "for originating the field of integrated quantum photonics as well as pioneering contributions to quantum information, measurement and metrology". He presented his prize winning talk on "Integrated Quantum Photonics" at ICAP in Cairns. We decided that 25 of those nominated until now are still eligible for the 2011 competition. All nominations are still available at: http://physics.nist.gov/IUPAP2010.

It was decided that the Chairman informes all nominees about the outcome of this years Prize and asks for an update for the coming year.

It was discussed if it is not possible to have 2 Young Physicist Prizes in our field of AMO Physics. The chairman was authorized to put this question up at the C&CC meeting in New Delhi.

The other important part of our meeting was the decision on the support of next years conferences. The main Conference for 2011 is the "International Conference on Photonic, Electronic, and Atomic Collissions (ICPEAC)" which will be held at Queens University in Belfast, Northern Ireland from July 27 to Aug. 2, 2011. This is a Conference Type A with about 750 participants. Our vote for strong support of this conference is unanimous. The Commission declined to support "Quantum Optics V" in Cozumel, Mexico, 15 – 19 November 2010. The request made in March 2010 failed to meet the deadline of June 1 of the year preceding the date of the proposed conference.

It was decided to have the next Commission meeting during the ICPEAC in Belfast next year in July 2011.

Burkhard Fricke (Chair of C15)