

**Recommendations for IUPAP and IUPAP WG5 submitted by the  
5<sup>th</sup> IUPAP International Conference on Women in Physics  
Waterloo, Canada, August 5-8, 2014**

Physics is a key discipline for understanding our Universe, improving the global standard of living, and solving problems confronting society. Yet, globally, the involvement of women and girls in physics is very different across countries and is still limited in most of them. Learning from regional differences is thus relevant to continue improving the situation of women in Physics worldwide. The Fifth IUPAP International Conference on Women in Physics, held in August 2014 in Waterloo, Canada, brought together 215 women and men from 49 countries. It was the first such gathering in North America. In this way the Conference has travelled across the globe since its existence. The positive impact that the previous Conference, held in South Africa, had on the Physics community of the continent was reflected in that representatives from 16 African countries attended ICWIP in Canada (and more would have attended it if it had not been for visa problems). At the final conference assembly, participants unanimously endorsed the following resolutions for approval by the 28th IUPAP General Assembly in Singapore.

1. IUPAP is asked to support and encourage Physical Societies, through their National Liaisons, to facilitate the sharing of insights and successful strategies for inclusion and advancement of women in Physics. Adaptation of shared international material to local circumstances should be considered by the National Liaison members.
  - a. The National Liaison Committees should encourage Physical Societies to organize Workshops on Professional Development for Women in Physics at all educational and career stages. A training workshop specifically on publication culture for young researchers and students is advisable.
  - b. The IUPAP Working Group on Women in Physics is tasked to promote the sharing of workshop material between countries.
2. We reiterate our stand regarding the need to promote gender equity at all levels in physics practice. In order to have a set of guidelines in this regard, we ask IUPAP to mandate the Working Group on Women in Physics to craft out a “Waterloo Charter” based on the Baltimore Charter and the Pasadena Recommendations formulated by the American Astronomical Society in 1993 and 2003, respectively, for the IUPAP to uphold in the future. It would be advisable that this Charter be also shaped and guided by the principles dictated by the JUNO project initiated by the Institute of Physics (UK).
3. There is a need to continue to conduct regular updates of the Global Survey of Physicists presented in 2011 in Stellenbosch.
  - a. We ask IUPAP to take the necessary steps to continue the Global Survey of Physicists periodically, ideally every 5 years.
  - b. The continued survey should use the same questions and translations as the first Survey.

4. We charge the IUPAP Working Group on Women in Physics with further analysis of country data presented at ICWIP2014 from the 2010 global Survey, including
  - a. evidence-based implementation of policy within countries,
  - b. Seeking of consistent data according to guidelines,
  - c. Inclusion of some qualitative analysis where quantitative data not available.
  - d. This analysis should be included in WG report and distributed via the IUPAP website.
5. We recommend that IUPAP endorse an annual International Women in Physics Day.
  - a. The recommended date is November 7th, in commemoration of the birthday of Marie Curie and of Lise Meitner and of the announcement of the first Nobel Prize in Physics awarded to a woman.
  - b. A campaign is recommended on this day to reduce conscious and unconscious bias and its consequences. Improvement of the Public perception of physicists, with special reference to gender, would be included in the campaign.
  - c. We recommend that awareness of subtle gender bias should be incorporated into the training of teachers/physicists as teachers.
6. Recognizing that Physics Education Research has just begun to take effect for girls in physics, we request IUPAP to recommend that the outreach activities required for IUPAP-funded conferences include:
  - a. a content-based physics learning session for school teachers, and
  - b. an event for girls under 16.
7. Given the success with which the IUPAP International Conferences on Women in Physics have met as a means of providing a forum for both men and women to exchange best practice on involving women in IUPAP and in physics in general, we charge the Working Group to organize the 6<sup>th</sup> IUPAP International Conference on Women in Physics.