

THE FIRST REGIONAL CONFERENCE ON WOMEN IN PHYSICS, ISLAMABAD, PAKISTAN

BY ADRIANA PREDOI-CROSS

There are many documented efforts worldwide to increase the representation of women in physics at all academic levels. Regardless, some would argue that women are still under represented, in particular at the senior academic levels and in industry. One way we can facilitate an increase in the participation of women in physics, is by sharing our understanding of challenges faced by women, knowledge about good practices, successful policies and lessons learned in attracting and retaining those who have the interest and choose to pursue a career in physics and contribute to innovation and the advancement of scientific knowledge, at community, national and international levels. “Talent knows no gender” says an author.

Many countries try to ensure that the solution to increasing the number of women in science needs to bring to the table representatives of stakeholders at all levels: community, educational, industry, policy makers, and government. In this setting the *First Regional Conference on Women in Physics* was organized in late April, 2016 in Islamabad, Pakistan by the University of Peshawar and the National Center for Physics with support from several national and international organizations: the Centre for Physics Education Karachi, The Abdus Salam International Centre for Theoretical Physics, Italy, the Higher Education Commission, Islamabad, and the Organisation of Islamic Cooperation Standing Committee on Scientific and Technological Cooperation.

The approaches in fixing the problem of the low representations of women in physics have cultural and ethnic aspects, but there are common elements to them such as increasing the participation of young girls in scientific activities by changing the way we teach, thus enhancing the existing curricula with hands-on demonstrations, physics related animations and PhysClips, and by enrolling young girls in science fairs, physics tournaments and olympiads. The importance of mentoring and networking at all academic levels cannot be ignored as well as the importance of outreach activities. In addition, having positive female physicists as role models portrayed in publications and in the media, plays an important role and breaks the stereotype of female geeks in lab coats, and also informs the younger generation of the multitude of career paths, many of them considered non-traditional career paths, or even unpredictable career paths.

Balancing a career in physics and having a family sometimes requires customized solutions, making personal sacrifices and a staggered approach to academic achievement. We also have to emphasize that the interest in physics should be nurtured in females of all ages, even if their interest aroused later in life. Professional societies, student clubs can play an important role in making sure that more and more individuals understand the way things work, the importance of education. Paraphrasing, we could say that it takes a community to bring up a budding scientist and help him or her become a science wiz.

One hundred participants (mostly Pakistani and a few South Asians) attended the conference and presented their thoughts and research results through plenary and invited talks, oral contributions and poster presentations. Several of the invited speakers were from the U.S.A., Iran and Canada (myself). There were many thought provoking discussions and informal or candid discussions, sharing of ideas and suggestions. The participants of the conference discussed many of the challenges faced by women in physics of different ages in Pakistan and made plans for informal mentoring and networking activities. A special issue of the Canadian Journal of Physics planned for November 2016 will feature papers based on the conference presentations and discussions. The organizers are already making plans for the next conference in this series that will take place in 2020.



Organizers, plenary and invited speakers at the *First Regional Conference on Women in Physics-2016*.

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