

Challenges of Young Women Scientists in New and Emerging Areas

Shamima K Choudhury

Department of Physics, University of Dhaka, Dhaka-1000, Bangladesh

shamima@univdhaka.edu; skc.phy@gmail.com

Women succeed in science as a result of their own merit, initiative and drive. Family support, institutional support and most importantly government support are very important for women to succeed in their professional career. At present success remains an exception, not the rule as the women have to face challenges at all levels of ladder in their career. Right at the beginning, access to basic and secondary education — especially in science — is a challenge. Again access alone is not enough: without encouragement in the classroom, family and environment girls may still turn away from scientific fields which are a common phenomenon in developing countries. Even after initial barriers are overcome, women and girls suffer discrimination in terms of employment, promotion and retention within S&T careers. Biological & social roles of women need to be recognized, including the unequal division of household labor, such as housework and childcare. For women scientists who reach higher education and launch their careers, institutional policies such as mentoring, childcare and funding can influence whether they advance or fall behind male colleagues. Finally to achieve development goals, more support and incentives should be provided to encourage girls and women to become scientists and innovators. Both institutions and policy makers need to consider gender issues in science as an integral part of their research policy, not just as an optional extra. Gender issues should become an integral part of research policy in developing countries. The leadership status of women in science and technology must be improved to inspire and help young women scientists to achieve success in their research and in their organizations and to create positive impact in their communities. Women scientists should be sensitized themselves for self-actualization and self-realization of potentials. International research collaboration, networking and the ability to communicate science among fellow women scientists and others will help enhance women scientists' visibility in science and technology. There should be a concerted effort to abolish discrimination for appointments of professors, Vice chancellors, Chief Executives and top positions in other scientific bodies. The science professional bodies particularly the national academies of sciences should increase number of women scientists in the respective organizations. For young women scientists who reach higher education and launch their careers, institutional policies such as mentoring, childcare and funding can influence whether they advance or fall behind male colleagues. Finally to achieve development goals, more support and incentives should be provided to encourage girls and women to become scientists and innovators.