

**PHYSICISTS IN HIGHER EDUCATION SECTOR
BY INTERNATIONAL CONFERENCES ON WOMEN IN PHYSICS DATA**

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Since 2002 the International Union of Pure and Applied Physics (IUPAP) once in three year holds International Conferences on Women in Physics (ICWIP). One of its primary purposes is to analyze the roots of underrepresentation of women worldwide in physics and develop strategies for attracting girls and inclusion advancement of women in physics in order to use their talents in the global scientific workforce. Each country is represented by a team of limited size, selected by national Physical Society. Programs of ICWIP usually contain plenary talks by distinguished speakers from around the world, science poster sessions and workshops including physics education, professional development and leadership, gender studies. Team leader of each country delivers brief reports regarding the status and progress for women in physics. All country team posters are available for observing and discussions during entire conference. Results of conferences are published in the proceedings available at internet [1]. Resolutions of ICWIP are presented at the IUPAP General Assembly.

6th ICWIP was hosted at the University of Birmingham, UK. 100 science posters were presented and 43 country reviews including Russia [2]. A common characteristic is the fact that percentage of women in physics and engineering in all countries decreases markedly with each step up the academic ladder and with each level of promotion in research laboratories. In European Union women make one fifth of heads of higher education institutions and full professors but only 10 % of them in engineering and technology and 16% in natural sciences. There are underrepresentation of female PhD graduates in natural science, mathematics and computing - 42% and engineering, manufacturing and construction - 28% [3]. In Russia share of women from all university graduates were 27% in IT, 40% in physics and mathematics and 66% in the unified science (biology, chemistry, earth science). The smallest proportion of female PhD holders is in technical sciences - 17%, and this share in the natural sciences is 42%. One third of all full professors in universities are women, a bit above 10% are in physics, mathematics and technical sciences [4]. Physics is a key discipline for understanding Universe and the most important scientific breakthroughs of the near future are expected at junction of physics and other sciences. The general goal of schools and universities, the State, employers and mass media is to promote the successful use of female potential in these areas.

References

1. <http://iupap.org/working-groups/wg5-women-in-physics/>
2. *Didenko N., Ermolaeva E., Kunitsyna E., Medvedeva I., Vitman R.* Features of Academic Career of Women-Physicists in Russia. 6th IUPAP International Conference on Women in Physics. University of Birmingham, Institute of Physics, UK, 2017. P.21.
3. *She Figures 2015. Research and Innovation.* – Brussels: European Union, 2016. 224 p.
4. *Women and Men of Russia.* – M.: Stat.Book / Rosstat, 2016. 208 p.