



The Hyderabad Charter for Gender Equity in Physics

This charter is the outcome of the work of the GIPWG since its inception and of the deliberations of the Pressing for Progress 2019 conference by the IPA hosted by the University of Hyderabad, which was a first-of-its-kind inter-disciplinary national conference, in which 240 physicists, social scientists and educationists gathered for three days to bridge disciplinary divides and deliberate upon topics in both physics and social processes in physics practice.

Fundamental Principles

- ★ *People of all genders have equal potential to excel in all aspects of physics practice*
- ★ *Utilizing the talents of all is essential for the physics enterprise to achieve its full potential*

Guiding Principles

- Gender disparity in physics is due to both patriarchy in wider society and gender bias within the enterprise
- Time alone will not achieve gender equality and therefore conscious action is essential
- Closing the quantitative gender gap at all levels of physics practice is a necessary step to achieve equality
- The culture of physics also needs to transform in order to make all talent feel welcome, be acknowledged and used
- The practice of physics is a social activity and addressing its gender bias requires insights from the social sciences
- The interventions and strategies must be such that they do not endorse societal patriarchy
- The interventions must adapt to the evidence from regular monitoring of the status of the enterprise
- When a process of selection reduces the gender fraction from that in the pool, it is a signature of a biased process
- Institutions must assume immediate and ongoing responsibility to move towards gender equality
- The commitment of institutional leaders is key to make progress

Context

There is wide acknowledgement by the government that the gender disparity in the sciences seriously impacts scientific productivity and excellence and should therefore be urgently addressed. The physics profession has among the largest gender gaps. The fraction of women with PhDs in physics who are employed in tertiary education country-wide is just 20%, far less than in, say, biology. That fraction plummets to 10% and lower in the elite research institutions, in leadership positions and in honours lists. The low fraction cannot be explained by a lack of interest in physics among girls - they win 50% of the INSPIRE fellowships in physics. Existing studies have found neither a systematic competence deficit nor a productivity deficit among women scientists compared to men scientists. While discriminatory familial responsibilities may contribute to the gender gap, the fact that the gap is higher in physics compared to, say biology, implies that this factor is not the whole story and that there is clear bias within the profession. Indeed the fraction of women in positions of prestige being lower than in the pool (of 20% qualified women in the case of physics) is a clear signature of bias in the selection processes.

It is absolutely critical that policies must follow from the evidence in order to be meaningful and effective. Existing studies do need to be acknowledged, repeated and expanded. Countrywide studies have to be complemented by local and institute-wide studies to understand the causes for the gender gap and assess the impact of interventions if any.

The **recommendations** that are listed below have emerged both from the work of the Gender in Physics Working Group of the Indian Physics Association- since it was formalized in May 2017, and from the deliberations and feedback from the first-of-its-kind inter-disciplinary national conference that the working group organized in the University of Hyderabad titled Pressing for Progress 2019. Other long-standing recommendations from the past that are consistent with the guiding principles have also been added.



Recommendations

For Institutions and Departments

1. *Work-life balance policies, such as child-care leave and “mobility schemes” should be gender neutral*
2. *Criteria for hiring should be formulated beforehand, and no hidden norms or criteria should be used*
3. *The age-bar for hiring should be removed*
4. *The hiring process should provide full information on all the steps and time-line of hiring to all candidates*
5. *Status/position/background of a life-partner should not be criteria in hiring*
6. *Hiring processes should have a wait-list so that ‘likelihood of joining’ is eliminated as a criterion in selection*
7. *Self-declaration of sexual misconduct indictments should be mandatory for staff applications*
8. *Institutions should invest in diversity officers as observers on selection, hiring and promotion committees*
9. *Policies that facilitate spousal hiring, employment in the neighbourhood and/or transfer should be formulated*
10. *Gender sensitization training should be mandatory, especially for senior management, directors and deans*
11. *Mentoring mechanisms for young faculty must be made available within institutions*
12. *Child-care facilities must be mandatory in institutions and preferably subsidized*
13. *Grievance cells should include at least one external member who is a gender equality expert*
14. *Current and potential members of ICCs should undergo training in the legal aspects of sexual misconduct*
15. *Safeguards should be formalized to protect members of ICCs from intimidation and harassment*
16. *Action-taken reports and statistics of sexual misconduct enquiries should be filed mandatorily*
17. *The sexual harassment policy should include guidelines for ensuring awareness among all concerned*
18. *Do’s and Don’ts for a healthier environment should be publicized and also reviewed regularly*
19. *Mandatory gender audit of staff at all levels should be published on the organizational webpage*
20. *Institutions should adopt gender neutral language in forms, documents, publications and daily practice*

Additional Recommendations for Physics Teaching

21. *A critical review of multiple-choice based tests to short list research scholar candidates should be done*
22. *A sociology course on social processes in science practice should be part of the graduate physics curriculum*
23. *Concerted efforts must gender-balance role models in physics text books and pedagogic multi-media material*

Additional Recommendations for Conferences

24. *All physics conferences should adopt the IUPAP guidelines for conferences*
25. *Funding support for conferences should be contingent on adoption of the guidelines*
26. *Child-care facilities must be mandatory in conferences and preferably subsidized*
27. *A priori compliance with conference guidelines should be required from all conference host institutions*

Additional Recommendations for National Agencies

28. *Diversity officers should be appointed as observers on editorial boards, nomination committees and funding agency committees*
29. *Self-declaration of sexual misconduct indictments should be mandatory for all positions of administrative responsibility and leadership, including academy fellows, editorial board memberships and project funding committee memberships*