

## **Case Study on Gender Enabling initiatives at the Indian Institute of Technology, Roorkee**

The institute known today as Indian Institute of Technology Roorkee, is the oldest institute of technical education and engineering in Asia. Established in 1847 AD as the Roorkee College, it became a university in 1948 and an IIT in 2001. The Institute ranks amongst the best technological institutions in the world and has contributed to all sectors of technical development. A trend-setter in the areas of education and research in the fields of science, technology, and engineering, IIT Roorkee is known not only for its academic integrity and accountability, but also for its sensitivity to social responsibilities. It can be discerned from the fact that in 1989, a school (*Anushruti*) was established as a social initiative to impart special education to the hearing impaired children on modern and scientific lines. This sensitivity is displayed in the acts which have been taken by the organization to create a gender enabling environment for girls and women so that they can realize their dreams of education and career in a constructive environment.

The creation of a gender enabling environment pre-envisages liberatory gender policies; with equal necessity it also requires administrative foresight and vision to think beyond conventional stereotypes. IIT Roorkee has taken government regulations not simply as tools to check misdemeanor against women, but also as facilitator of processes through which women can contribute to their own empowerment. This has resulted in systematic and organized practices, instead of individual acts of resistance/valorization. Situated in a quaint location, IIT Roorkee has kept pace with academic breakthroughs and sociological changes, nurturing and facilitating the participation of women at all levels over a period of time and has successfully countered multiple and overlapping patriarchal practices which inhibit the self-actualization of women.

Traditional educational stereotypes in India encourage girls to opt for courses which lead to desk jobs. IIT Roorkee showcases that this taboo can be countered. It is exhibited by the number of women faculty members in disciplines related with pure sciences and technology. In a total strength of 395 faculty members at present there are 49 women in IIT Roorkee, out of which 27 are in engineering departments, 15 in pure sciences and seven in Humanities, Social Sciences and Management. Fifteen women faculty members are either heading or are members of decision making bodies, e.g., Heads of Academic Departments, Coordinator of Quality Improvement Program, Chief Wardens, Program Officers etc. Thirteen women Professors are members of the Senate, the highest academic body of the system. It can be mentioned that there is no separate ruling/reservation to promote/include women at any stage. All these women have risen to these positions because the Institute looks only at the merit – gender is neither an encumbrance, nor a catalyst in the selection criteria at any stage. Several women faculty members are internationally acknowledged in their fields – their presence in itself is a motivating factor for young girl students. This aspect indicates the presence of the gender enabling environment in IIT Roorkee.

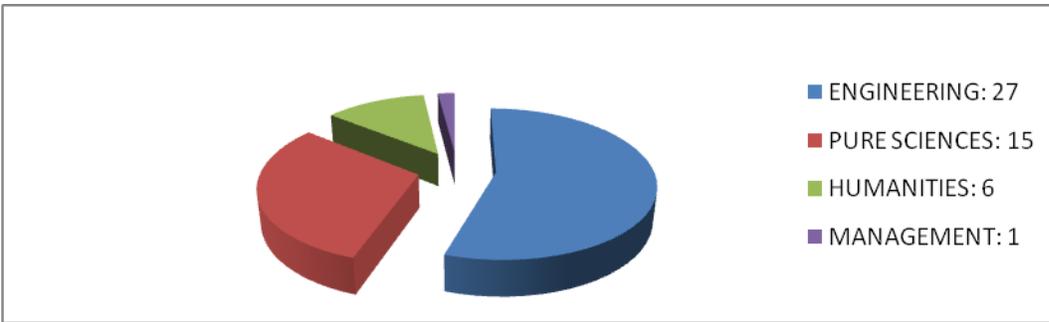


Fig.1:-Strength of Women Faculty Members in Different Departments at present

The ratio of girls in various disciplines ascertains this fact. In the total student strength of 7,382; the number of girls in technology, sciences and management is 1,025. There are 408 students at undergraduate level and 364 at post graduate level in core engineering and science disciplines. 253 girls are pursuing the doctoral programs including Liberal Arts and Social Sciences. At UG and PG levels, the presence of girls is not limited to those branches which lead to cushioned jobs of set hours. They can be seen in all engineering departments and are willing to join fields which were considered to be male bastions previously, e.g., jobs in oil exploration rigs, civil construction, steel plants etc.

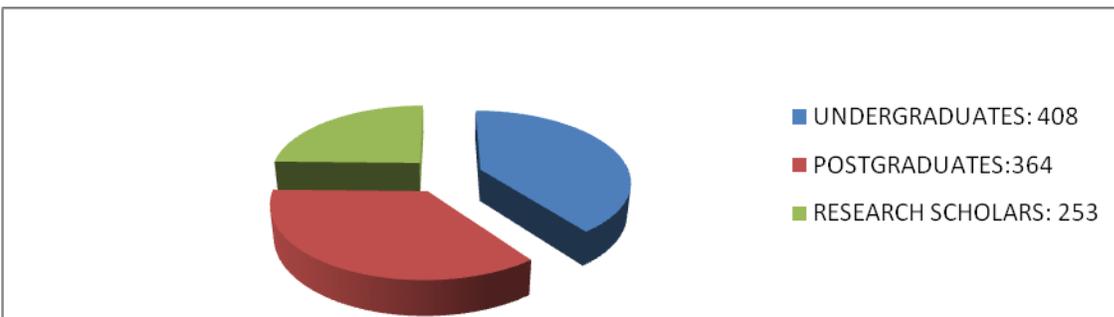


Fig.2:- Number of Girl Students in Sciences and Engineering at present

One of the major initiatives which were taken by the Institute on the suggestion of women faculty members and IWSA (Indian Women Scientists' Organization) was the establishment of the Child Care Centre in 1981. Initially the Institute provided a three room residential apartment and a support staff of three women. Its working hours tallied with the teaching hours of the faculty. Very soon it was equipped with certain other amenities – refrigerator, gas connection, free electricity, intercoms, milk and fruits provided by the Institute. The age group of children it took was from two months to eleven years. The Centre also had other regular facilities – toys, snacks, woolen wraps etc. It was supervised by a woman faculty member. These facilities were open to women scientists working in NIH (National Institute of Hydrology) and CBRI (Central Building Research Institute) also. The security and care which was provided by this centre enabled generations of women faculty members and research scholars to continue their work without gratuitous qualms or worries. Its presence was a factor which often encouraged women to decide to join IIT Roorkee. It also enabled the faculty wives to take up gainful employment locally.

Keeping pace with sociological changes, IIT Roorkee had foreseen the enhancement in the number of girls in different academic programs and prepared itself for it. It has two hostels exclusively for girls, with a total capacity of 1200. The hostels have cyber rooms (40 systems with printers, scanners, Xerox facilities), recreational rooms with a number of TV sets, bilingual newspapers, magazines, indoor games and sports facilities, fully equipped gyms; also ATM, shops, and mess. The snack shop within the hostel is open till 2:00 A.M. The bathrooms have solar and power geysers, fully automatic washing machines and dryers. The hostels have round-the-clock electricity and water supply. Besides the regular supervising and support staff, the services of beauticians, tailors and ironing are also routinely available. Slot machines for tea and coffee were also installed but did not become popular. Girls have full participation in the day-to-day management of the hostel affairs. There is also a separate hostel for married students. To encourage outdoor sports among girls, there are separate timings for swimming pool, separate courts for basket ball, tennis and badminton. Strict security regimen at entry points and within campus has also helped in creating secure surroundings.

The medical facilities in the campus have also included the needs of girls and women. Headed by a woman medical superintendent, the IIT Roorkee hospital has a regular gynecologist. Further, in a team of seven doctors, two are women. The hospital has facilities for labor, ultrasound, caesarian and hysterectomy; as well as other routine operations and support staff for it. It also organizes Pap smear tests for cancer detection with the help of outside medical facilities. The hospital has regular emergency services, ambulance, regular OPD and family wards. Recently in collaboration with NSS team the hospital is planning for regular counseling of girls to address the increasing cases regarding menstrual irregularities and related anxieties.

The Committee for Prevention of Sexual Harassment of Women at Work Place was formed in 2004 as per the judgment of the Hon'ble Supreme Court in the case of Vishakha and Others vs. State of Rajasthan and Others. Its constitution follows the Supreme Court guidelines. So far only one case has been reported to the Committee which has been finally resolved. The Committee meets when a case is reported. The guidelines are circulated to all Departments and are also available on the Institute website. As per the government rules, employees avail the benefits of the provisions of Maternity, Paternity and Child Care Leave. Complaints regarding misdemeanor with girls/women are taken seriously. Prompt action is taken to reprimand offenders in such manner that it also acts as a deterrent.

The presence of women faculty members in core engineering fields from early 1960's has had an ameliorating impact on various administrative reforms and policies in IIT Roorkee. Present generation of faculty and students owes a lot to these women. Owing to their vision and the steadfast support of the system, the campus provides conveniences for autonomous self-hood to women. Most of the women faculty members are involved in the popularization of Science and Technology among young girls in nearby areas. They organize camps for Science experiments, educational guidance, and lecture series for the +2 level students of various local schools to encourage understanding of basic sciences and develop a scientific disposition. As the campus is situated in remote Garhwal region, such initiatives are social requirements too. In such schemes women faculty are also helped by the Roorkee Chapter of IWSA (Indian Women Scientists' Association), a Mumbai-based NGO. In collaboration with IWSA, women faculty members have organized several National and International Conferences and Workshops to

promote and popularize careers in Sciences and Technology. Of late, this group of IITR women faculty has started holding regular workshops to support interaction among women scientists and engineers at international level and to sensitize women professionals to sustain global pressures.

Through various measures of policy, action and vision, IIT Roorkee has been successful in creating an environment which does not legitimize the structure of male dominance in gender binaries. It is an Institute where women can remain agentic and their career growth is not stunted by strategies of acquiescence, subservience, or subversion. Silently and steadily, IIT Roorkee encourages women to follow a realistic route to empowerment and helps them in becoming integral and equal segments of the society. The present Director of IIT Roorkee Prof Pradipta Banerjee has taken a pro-active interest in further enhancing collective feminist resiliency and scholarship in the area of education and research. Under his leadership the Institute has navigated the massive institutional official procedure with great success and, most importantly, remains dedicated to our gender related agendas at the institutional level. Today, the Indian Institute of Technology, Roorkee stands out as one of the finest, most exuberant places to study, teach, research, and work for women. To achieve this status of gender enabling, our Institute continuously challenges its own organizational structure and its theoretical and pedagogical goals.

Contact Info:

Indian Institute of Technology, Roorkee  
Century Road, Roorkee, UT 247667  
01332 285 311  
[www.iitr.ac.in/](http://www.iitr.ac.in/)