Report on Diversity, Equity, and Inclusion in Quantum Science and Technology in India

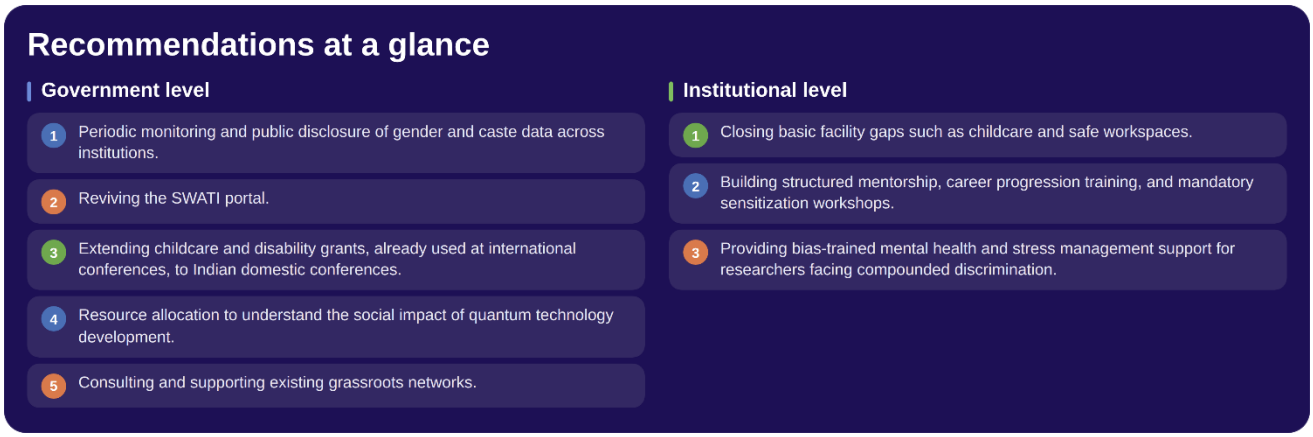
Shantanu Sharma and Ishika Joshi

July 2026

Executive Summary

Given the national security and economic significance of quantum technology, quantum talent is increasingly treated as a strategic resource. India produces more quantum-relevant graduates than any other country, but this demographic advantage does not translate into strategic gains. Talent that is recruited but not retained ultimately represents a loss to India's quantum ambitions. This challenge is particularly acute for marginalized quantum scientists, including women and researchers from Scheduled Caste, Scheduled Tribe, and other underrepresented communities, who face disproportionate barriers to career advancement and exit the field at far higher rates than their peers.

India produces the highest share of female STEM graduates of any major economy, at 43%, yet fewer than one in five research and development positions are held by women. These losses compound further in quantum specifically, where gender, caste, disability, and regional disadvantage combine to narrow an already constrained talent pool. India does not lack policy commitments on inclusion. Currently, India has weak implementation, and lacks dedicated facilities and sustained support for grassroots organizations. Closing this gap is not a matter of fairness, it is a precondition for India to convert its talent advantage into durable leadership in quantum science and technology.



This paper is organized into four parts:

- **Part 1** makes the strategic case for inclusion in India's quantum ecosystem and sets out policy recommendations for government, institutions, and industry.
- **Part 2** is a resource sheet of grassroots associations and communities working at the intersection of diversity, equity, inclusion, physics, and quantum science and technology, offered for readers who wish to support or contribute to their work.
- **Part 3** is a directory of women leaders in Indian quantum science and technology, listed with specialization and institutional affiliation, offered as a resource that showcases the depth of India's existing diverse leadership.
- **Part 4** compiles grants, fellowships, and support schemes across India's broader STEM funding ecosystem, covering the public and private sector instruments available to women researchers, entrepreneurs, and professionals working in quantum science and technology.

Introduction

As quantum technology is becoming important to strategic calculus, attracting and retaining talented quantum experts is becoming vital to sustain an ecosystem capable of reaping the strategic, economic, and social benefits quantum technology promises. India is leading the talent race by producing more quantum-relevant graduates than any other country, ahead of the United States of America and China.[1]

Talent that is developed but not retained does not translate into strategic advantage. In an era where quantum talent is treated as a strategic reserve, India is hurting retention and losing talent from its diverse quantum workforce. India's efforts to include and retain talent from marginalized groups including women, while notable, fall short in certain aspects.

A survey with over 1000 respondents, across 36 countries, found that marginalized quantum scientists report experiencing hardships and challenges on every measured metric such as career opportunity, workplace climate, discrimination, harassment. This is hurting retention and influencing their career decisions.[2] This pattern appears consistent with domestic reporting

The gender divide in quantum remains stark, as 79% of quantum companies have no female senior leaders and only 1 in 54 applicants for quantum jobs is female.[3] Globally, the percentage of women in quantum declines further for higher positions, with under-representation in senior scientific and leadership positions, and decision-making bodies, which is in-turn creating scarcity of female role models and mentors.[4]

The situation in India is even more alarming. India accounts for half of the world's gendered digital divide and ranked 131st in the Global Gender Gap Index in 2025.[5] As reported by Confederation of Indian Industry in 2025, while India produces the world's highest percentage of women STEM graduates, at 43%. However, this pipeline narrows sharply after graduation and participation drops sharply in research and development. Women in India only account for fewer than 20% of those involved in research and development activities, compared to the global average of 28%.[6]

Furthermore, women and students from minority groups are underrepresented in disciplines such as physics and computer science fields which are natural feeders into quantum, where enrollment growth itself remains low and discontinuous.[7] Restricted access to high-quality resources and a lack of support infrastructure are both contributing factors, well before the quantum pipeline itself is even reached.[8]

While India excels in recruitment, it falls short in retention due to structural barriers. This shortfall is not limited to gender. Caste, disability, and regional disadvantage widen it further. This paper argues that India's problem is not a shortage of policy. It is a shortage of implementation, of facilities, and of support for the grassroots organizations already doing this work with limited resources. It also argues that inclusive quantum governance is not peripheral to India's quantum strategy but a route to leadership.

Structural Challenges of Today

> The underrepresentation of women in many scientific fields, including quantum science is not due to a lack of talent, drive, or potential, but rather the result of systemic barriers and biases that have historically limited women's access to education, resources, and opportunities.
>
> - Prof. Madhu Dixit, Vice President of the Indian National Science Academy [9]

A 2024 CSIR–National Institute of Science Communication and Policy Research (CSIR-NIScPR) report identifies the same pattern in Indian institutions. The report states a “dearth of female leadership” at ministerial and institutional levels across India’s scientific establishments and “glass ceiling in the workplace with multiple bottlenecks at the higher echelons of professional hierarchy for women”.[10]

The glass ceiling is due to systemic challenges. Prevalence of discriminatory practices, gender bias, and traditional gender-role segregation within the workplace are some of the key reasons for underrepresentation of women in STEM careers in India.[11]

Gender pay gap,[12] disparities in due recognition, credit, and promotion eligibility;[13] discriminatory recruitment and nominations; and unsafe work environment[14] are some of the realities women face while working in STEM in India.

The majority of women in STEM in India also shoulder an excessive burden of community service, and familial responsibilities such as childcare, and caregiving for in-laws, parents or siblings.[15] This burden shapes career trajectories directly, regardless of professional seniority.[16] Isolation encountered in academic and professional settings further compounds it.[17] Women in STEM in India are frequently excluded from the informal networks, resulting in missing out opportunities for funding or grants.[18]

Underrepresented Communities in India

Addressing social marginalization in India requires recognizing that the issue is intersectional. It extends beyond gender to caste, class, sexuality, disability, and regional disparity, which compound gender disadvantage.

India's National Education Policy (NEP) 2020 commits to inclusive, equitable and quality education for Scheduled Caste (SC), Scheduled Tribes (ST), Divyangjan, and Economically Weaker Section (EWS) students.[19] In reality, the commitment has not addressed the gap fully. SC/ST students have lower enrollment and high drop-out rates than their peers in higher education,[20] and face caste-stigma from professors even in reputed universities.[21] Drop-out rates from central universities, IITs, and IIMs have also increased, with more than 17,000 students from SC/ST and Other Backward Classes dropping out between 2012-2023.[22]

The University Grants Commission (UGC) has mandated SC/ST cells, grievance redressal mechanisms, and counselling services in universities, specifically to reduce discrimination, harassment, and fear of exclusion that drive dropouts[23] from academics from diverse gender and sexual identities,[24] and underrepresented castes and religions in India.[25] In 2023, The Hindu reported, "just a look at the IITs would show that not all of them have an SC/ST cell despite the UGC mandating it a decade ago in its guidelines"[26]

By 2025, all IITs report a functioning SC/ST cell. A closer look at the data shows that the support these cells actually provide is uneven across institutes.[27] Funding follows the same pattern with budget allocations for these cells vary widely across institutes, with several reporting that they had not received allocated funds at all.[28]

The same gap between policy and practice that defines gender inclusion in Indian quantum science also defines caste inclusion. For both, the cost of exclusion is not merely ethical. It is strategic, economic, and a matter of innovation for India's quantum ambitions.[29]

This paper draws more heavily on evidence concerning women than on other underrepresented communities. That imbalance reflects the availability of data. While schemes addressing caste, disability, and regional disadvantage in Indian STEM do exist, structured and sustained data collection and tracking specific to these communities within India's STEM and quantum workforce is lacking. Without that data, a structural analysis for caste, disability, and regional disadvantage is harder to build with the same rigor as the gender analysis in this paper.

Some forms of marginalization are also specific to the Indian context. Caste-based exclusion in particular has no direct international equivalent, unlike gender exclusion in STEM, which India has addressed in part by adapting best practices. Closing the caste, disability, and regional gaps in India's quantum workforce will require strategies built for the Indian context specifically, not best practices imported from other countries.

The Case for Inclusion in Quantum

As the QUAD countries have formally recognized, embracing diversity does more than advance equity. It draws on a wider range of perspectives and talents, and this breadth strengthens innovation and creativity across the quantum sector.[30]

Safer systems, stronger innovation pipelines, and more mature technologies are realized when researchers with a wide range of lived experiences, spanning gender, race, disability, culture, language, and identity, shape quantum technologies. This breadth of experience surfaces issues such as privacy, accessibility, bias, and social impact earlier and more accurately.[31]

The economic argument is equally compelling, particularly for India. Demand for STEM and technology-related occupations, including quantum, has increased by over 37% in five years. Women in science-based careers are more likely to be employed, and earn 28% more, than women in non-technical fields. Increasing women's participation in STEM not only advances gender equity but also holds the potential to narrow the pay gap.[32]

Beyond equity, diversity and inclusion are a demonstrable business advantage. It functions as a competitive differentiator for organizations and a proven mechanism for retaining talent and should be treated as any other business-critical issue. Organizations that build it deliberately tend to out-retain those that do not.[33]

Critically, improving retention of the quantum science workforce directly increases the size of that workforce, because researchers who are retained do not need to be replaced from an already limited talent pool. In a field where talent is treated as a strategic reserve, and where the countries with the largest working quantum research workforce set the pace of the race, this is an advantage no nation developing quantum technology can afford to overlook. The effort required to implement diversity and inclusion is intrinsically valuable, and it pays tangible dividends in both innovation and financial terms.[34]

What India is Doing: Government Interventions

India has made measurable progress for inclusion of women in STEM. The Government of India and the Department of Science and Technology restructured its women-specific programs (see Figure 1) under a single umbrella, WISE-KIRAN (Women in Science and Engineering- Knowledge Involvement Research Advancement through Nurturing), to address career breaks, relocation, and training through a coordinated framework.[35]

Underneath that umbrella sit programs targeted at specific career stages and needs. WISE-PhD and WISE-PDF support doctoral and post-doctoral fellows and address career-break re-entry, WIDUSHI[a] for senior women scientists, WISE-SCOPE[b] for translation research, WISE-IPR for intellectual property training; WINGS[c] for international conference access; and CURIE[d] for infrastructure support at women's institutions.[36]

INSPIRE,[e] Vigyan Joti, and DST Women Scientists Scheme encourage girls in school and the undergraduate level through various year-round activities such as parent-student counselling, career counselling, special academic classes, tinkering activities, role model interactions, lab and industry visits, and science camps. Collectively, these programs have benefited over 3,000 women scientists.[37]

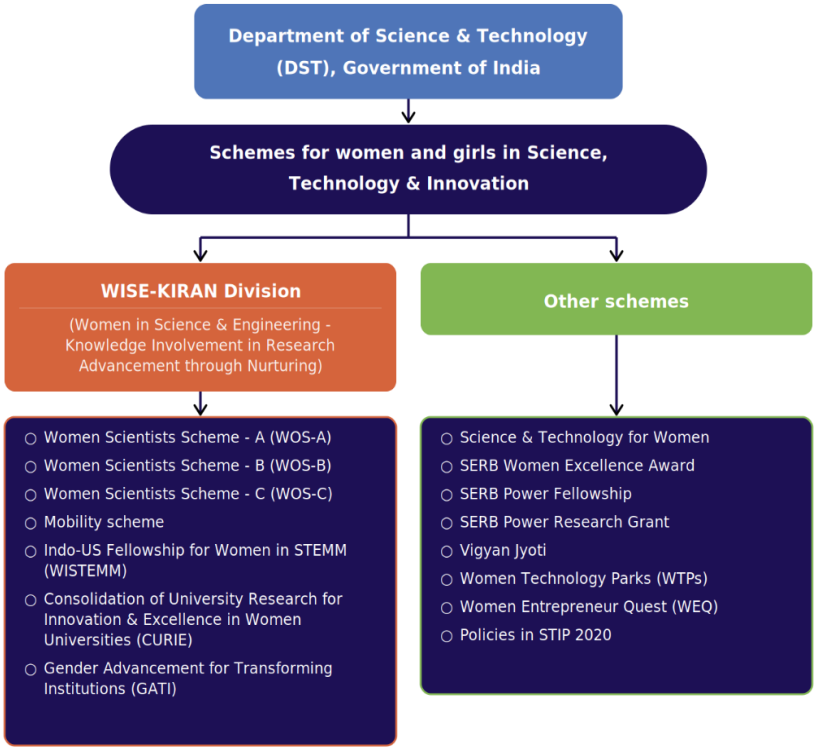


Figure 1: Schemes offered by DST for women in STEM.[38]

[a] WIDUSHI: Women's Instinct for Developing and Ushering in Scientific Heights & Innovation
[b] WISE-SCOPE : WISE-Societal Challenges with Opportunities
[c] WINGS: Women International Grant Support
[d] CURIE: Consolidation of University Research for Innovation and Excellence
[e] INSPIRE: Innovation in Science Pursuit for Inspired Research

Across India, women's participation in extramural R&D projects, a critical indicator of their role as principal investigators and research leaders, has increased. Women's representation on expert committees, review panels, and national advisory bodies has grown in parallel.[39]

India has built a strong scaffolding to bring women and underrepresented communities to open the door to quantum science. What happens once they enter the field is largely invisible to policy. Current schemes track enrolment numbers but do not track structural barriers that have historically limited equitable participation such as workplace culture, leadership pipelines, career continuity after a career break, sectoral awareness, or whether women in a given lab know a scheme exists.[40]

The GATI pilot illustrates this pattern of implementation gaps. GATI was a pilot gender-equality charter, developed with the British Council and modeled on the UK's Athena SWAN framework towards systemic inclusion. It has not been scaled or formally updated, and its outcomes have not been formally integrated into national science policy architecture.[41]

Recommendations

Ms. A. Dhanalakshmi, joint secretary (DST), has called for industry and academia to adopt policies that actively combat implicit biases and create an inclusive culture.[42] Improving diversity has no silver bullet; it requires multi-year, multi-layered approach to achieve systemic change for a system that has worked well for some, but excludes others.[43]

India is among the world's leading producers of quantum-related graduates, with more than 91,000 graduates, representing a significant strength of the Indian ecosystem in the global quantum value chain.[44] However, in a field that is expected to shape strategic and economic competitiveness over the coming decades, graduate numbers alone are unlikely to be sufficient. Sustained advantage will depend on the extent to which this diverse talent is supported and retained by robust institutional capacity, and research opportunities.

Government-level Recommendations:

1. Data Collection, Compliance, and Implementation

Gap in India's capabilities exists due to weak implementation and absence of data collection and assessment.[45] Implementation of existing initiatives can create a big dent and has been flagged as a major concrete option by previous reports.[46] Data and statistics collection on inclusion through structured surveys (especially for caste and gender-based diversity), tracking obligations, fair-hiring audits, and administrative compliance and financial utilization are first steps to adopting data-driven policies.[47]

The government can also support gender diversity and awareness through existing platforms such as iGOT Karmayogi continuous learning portal (accessible to civil servants and government officials), by creating new modules for gender sensitization, stress management, and sexual harassment reporting. A related step would be to ensure necessary formal linkages between programs which exist in parallel or are contributing to the same objectives and serve overlapping populations. Currently, there is no formal linkage between NQM, a strategic national science and technology mission with policies in Ministry of Education, and Ministry of Skill Development and Entrepreneurship, WISE-KIRAN.

2. Central Hub

Launched in 2024, SWATI[f] Portal illustrates India's reality of promises that fail to materialize. The SWATI portal was announced in 2021 and launched in 2024.[48] As of May 2026, the SWATI Portal website is defunct.[49]

[f] SWATI: Science for Women- A Technology and Innovation Portal

The SWATI portal was designed to serve as a single online portal representing women and girls in STEM; support reliable, statistically robust, long-term research on the issues of equality, diversity and inclusivity in India; provide a central platform to highlight women role models, faculty, women entrepreneurs, STEM-background professionals in alternate careers; and act as a shared space across academia and industry.[50]

Internationally, portals such as Australia's STEM Equity Monitor provide a case-study for creating impact by providing space for women and marginalized genders to inform, support, empower and connect through sharing experiences, and listing funding programs, grants and awards.[51]

In the absence of such a central portal and program, several Indian grassroots programs such as Indian Academy of Sciences' Council's Inter-Academy Panel for Women in STEMM (IAP-WiSTEMM), Indian Women Scientists' Association, and Indian Physics Association's Gender in Physics Working Group (GIPWG), are trying to fill the gap.[52]

NITI Aayog's Women Entrepreneurs Portal[53] is a useful comparison. It exists for entrepreneurship, but nothing equivalent exists for women and underrepresented communities seeking STEM-specific fellowships, schemes, and opportunities. India needs a central functioning portal for awareness creation and promoting events. Reviving and reviewing existing initiatives such as SWATI portal with the help of grassroots with over 30+ years operation in diversity in STEMM space would be a lower-cost route to closing that gap.

3. Specialized Grants

International grants offered by UNESCO's International Year of Quantum, Optica, and American Physical Society to cover additional costs associated with caregiving responsibilities (e.g. traveling with children) and disability-related accommodations (e.g. accessible transportation, traveling with a personal aide) has been proven successful. This paper recommends adapting that model in India, starting with domestic conferences where the cost and administrative barriers would be smaller.[54]

4. Social Science Research and Promotion of Responsible Quantum

While national quantum strategy documents frame the scale and pace of social disruption to justify investment in scientific research, no dedicated resources have been allocated to understand the practical social impacts and how India should prepare for them.[55]

Quantum technology poses downstream risk of compounding gender-specific harm that digital technology already demonstrates including surveillance, anonymity erosion, targeted harassment and disinformation attacks.[56]

The Indian scientific community would benefit from engaging more closely with social scientists, government, civil society organizations, and industry to better understand the factors contributing to gender disparities, strengthen the framing of gender disparity and alleviation, and develop

proactive, human rights-based strategies to anticipate and mitigate technology-facilitated community-based violence and related harms.[57]

Drawing on lessons from its AI strategy, India can adopt a similar domestic-first approach to quantum technologies while advancing responsible quantum leadership that integrates gender equality and social inclusion. Such an approach would enable India to contribute meaningfully to the development of emerging global quantum governance frameworks. Delayed engagement may reduce opportunities to shape these evolving international norms.

5. Connect to Local and International Grassroots Networks

India could expand the pipeline of women in quantum science by adapting proven international outreach and capacity-building models through existing institutional partnerships. Initiatives such as WISER's Womanium courses and networks, and UNESCO's Empowering African Women in Quantum Science program, could be adapted for India through collaborative partnerships and existing channels.

Playbooks and lessons from Australia's Quantum Girls program and the United States' Q-12 Education Partnership could inform school-based quantum education and outreach. [58] These models could be implemented in partnership with organizations such as VigyanShaala[59] and university research centres through classroom activities, after-school programs, hackathons, and mentorship initiatives tailored to the Indian context

Institution-level Recommendations:

1. Facilities

Physical infrastructure gaps push women out of Indian STEM careers before culture or policy issues even become relevant. A significant portion of women in STEM in India still face challenges in accessing childcare support and flexible work arrangements within their organization. Indian institutions and labs frequently lack adequate restroom facilities, crèche facilities, flexible working hours, and lactation rooms.[60]

These challenges have been recognized for more than a decade. In 2014, then-Science and Technology Minister Kapil Sibal promised on the International Day for Girls and Women in Science, a package of measures to improve the retention of women scientists, including institutional support, flexible working arrangements, research grants, and residential accommodation. The standing committee formed to implement those promises never met.[61]

2. Access, Training, and Sensitization

Students from marginalized and underrepresented groups lack support systems such as recommendation networks for PhD recruitment, and communications training, including interview and grant-proposal writing.[62]

As noted by CSIR-NIScPR, gender-sensitive institutional policies such as mentorship for decision-making and leadership roles, formal and informal mentorship for junior researchers, highlighting role models and female peers, play a crucial role in creating a conducive environment.[63]

Support should extend beyond early-career researchers to include those providing mentorship. Global evidence on the quantum workforce indicates that while senior researchers are often aware of the additional barriers faced by individuals from marginalized backgrounds, many lack the tools and training to provide effective support. Awareness is a necessary first step, but it is not sufficient on its own. This paper recommends that mentorship reform include training and resources for the senior scientists doing the mentoring, not only for the junior researchers being mentored.[64] Data from QETCI's 2022 Hackathon found strong interest among women in entrepreneurship and the commercialization of quantum technologies, yet fewer than 10 of India's more than 110 quantum startups have a woman in a C-suite position. Interest at the entry point is not converting into leadership representation further down the pipeline.

Furthermore, institutions would also benefit from mandatory sensitization workshops, outreach programs, and modules for all members of institution, university or lab.[65]

Domestic evidence already points in the same direction. Awareness-raising sessions by QETCI and Qmet Tech drew higher participation from women when offered online rather than in person, suggesting that format and accessibility shape who engages, not only content.

Case Study: IIT Delhi's Office of Diversity and Inclusion

Across the IIT system, several inclusion initiatives have grown from grassroots efforts into formal institutional mechanisms. Faculty-led initiatives such as *Pravritti* at IIT Kanpur inspired similar LGBTQ+ support groups across IITs, including *Indradhanu* at IIT Delhi, *Ambar* at IIT Kharagpur, and *Unmukt* at IIT Kanpur, demonstrating how locally driven efforts can be replicated across institutions.[66]

Building on this momentum, IIT Delhi established the Office of Diversity and Inclusion (ODI), bringing together initiatives on gender, LGBTQ+ inclusion, persons with disabilities, and SC/ST communities under a single institutional framework. Its work has been accompanied by tangible campus interventions, including the introduction of gender-neutral restrooms and coordinated inclusion program illustrates how grassroots initiatives can be institutionalized to strengthen campus-wide diversity and inclusion by creating platforms for dialogue, peer support, and awareness across campuses.[67]

3. Mental Health and Stress Management Support

The intersectionality of social marginalization in the form of caste, class, gender, sexuality, or disability can further impact the mental health of researchers, among whom stress is already

prevalent.[68] Institutions can provide access to stress management through bias-trained medical and psychological counsellors.[69] Such facilities already exist at some of India's leading institutions, including several IITs, but coverage remains uneven and is far from universal across the country's research institutes.[70]

Conclusion

The issue of diversity, inclusion, and equity in quantum is of strategic importance. India's Ministry of Defence identified this as a gap and proposed introduction of special recruitment drives, incentives, fellowships, mentorship programs, and flexible work policies to incentivize more women to pursue careers in quantum technologies.[71]

The government frames public messaging for government's approach to view women not merely as beneficiaries of science and technology, but as principal architects and decision-makers in the knowledge economy. The framing should extend into how strategic missions are resourced.[72]

Structural change is possible without compromising institutional excellence. Carnegie Mellon University reduced its computer science gender gap by removing the prerequisite of prior coding experience and rebuilding its entry process around competence rather than existing exposure. It did this while remaining a top global program demonstrating that inclusion and excellence are not necessarily trade-offs, they are often mutually reinforcing policy objectives.[73]

India does not need a new quantum diversity policy. It needs the policies it has already written to be implemented, audited, and funded at the level its own strategy documents claim quantum technology deserves. That is a matter of budget allocation and institutional accountability, not new legislation.

Support and Contribute to the Community

The following section lists some national and international grassroots associations and communities that interested researchers can join and contribute to:

Girls in Quantum

Girls in Quantum aims to democratize Quantum Education by empowering students with free multilingual educational resources to girls and students worldwide to explore the future of quantum science and technology. Girls in Quantum has an Indian presence with Girls in Quantum Pune Chapter.

More information can be found at:
https://www.girlsinquantum.com/

SheQuantum

SheQuantum is an eLearning and quantum awareness creation platform and was established in 2020 with the mission of revolutionizing simplified quantum computing education to the global masses & enabling women to enter the quantum workforce. SheQuantum has a global community across 70+ countries, 300+ research institutions, and 30+ companies and research labs. The community has a significant presence in India.

More information can be found at:
http://shequantum.org

IAP-WiSTEMM

Inter-Academy Panel for Women in STEMM (IAP-WiSTEMM) is a joint initiative of the Indian Academy of Science, the Indian National Science Academy and the National Academy of Sciences. An inclusive one-stop resource for women working in India in any area of STEM, Medicine and allied fields, IAP-WiSTEMM was formed in 2014 with the aim to assess and enhance the status of women and promote greater inclusivity and equality in the realm of science and technology.

More information can be found at:
https://wistemm.in/

Indian Women Scientists' Association

Indian Women Scientists' Association (IWSA) is a pan-India social welfare, voluntary, non-political, non-profit NGO formalized in June 1973 as a representative body for women working in natural, physical, and applied sciences. It has 12 branches and has 2000+ life members. IWSA's Membership is open to all women with a background in S&T and Associate Membership is open for those interested in science. IWSA main activities include Community welfare programs, science awareness programs, and green initiatives.

More information can be found at: https://iwsa.net/

Diversity in Quantum (DiviQ) an international non-profit established in 2023 to support underrepresented groups to thrive in quantum careers. Women in Quantum was merged into DiviQ as a chapter to continue to focus on women in addition to other underrepresented groups. DiviQ offers mentorship programs, scholarships for attending scientific meetings, and affinity groups that provide professional support.

More information can be found at:
https://www.diviq.org/

Women for Quantum (W4Q) was set up by a group of female physics professors based in Europe and Asia, who work in the field of quantum optics, quantum many-body physics and quantum information. W4Q aimed at improving gender balance in quantum and making the professional environment more welcoming to diversity.

More information can be found at:
https://women4quantum.eu/

atom*innen is an interactive platform that aims to provide an international central contact point for women and gender minorities in quantum science. *innen in German is meant to include all genders, symbolizing the commitment to inclusivity. atom*innen goal is to advocate for a safe and inclusive environment and create a dynamic space for women and gender minorities to share their experiences, seek advice, and collaborate.

More information can be found at:
https://atominnen.at/

Quantum Women is a professional network with the mission to support and empower current and future women leaders in quantum science and technology by addressing barriers to career advancement while integrating women's perspectives and experiences to foster creativity and innovation. Quantum Women and Quantum Australia organizes Elevating Quantum Women's Voices (EQWV), an 8-week program that supports women and non-binary people in quantum.

More information can be found at:
https://www.quantum-women.com/

We in Quantum Development (WIQD) is a professional network founded in 2020 with members from industry, academia, and policy across the Netherlands, with the mission to connect and retain underrepresented groups in the quantum sector in the Netherlands through support, networking, and community growth. WIQD embraces an intersectional approach to identity and fosters and inclusive quantum sector by bringing together all underrepresented groups

More information can be found at:
https://www.wiqd.nl/

Women in Quantum (WIQ) is an OneQuantum initiative providing 9000+ members in over 40+ countries access to members to resources geared towards giving them a voice, opportunities to collaborate & network with fellow female quantum academics, students, entrepreneurs, investors and government representatives.

More information can be found at:
https://onequantum.org/women-in-quantum/

Womanium advances students in STEM + Entrepreneurship by introducing them to the opportunities by direct exposure to industry, national and international labs, incubators, factories, manufacturing plants, design centres, and also preparing students with the right kind of knowledge, skills, outlook and perspective required to understand, rise, succeed and make their own marks in those domains. Starting from 2026, Womanium global summer programs and efforts have been integrated with **The Washington Institute for STEM, Entrepreneurship and Research (WISER).** WISER focuses on quantum education and workforce development, bringing together students, researchers, and professionals to focus on practical, applied quantum skills and real-world impact.

More information can be found at:
https://womanium.org

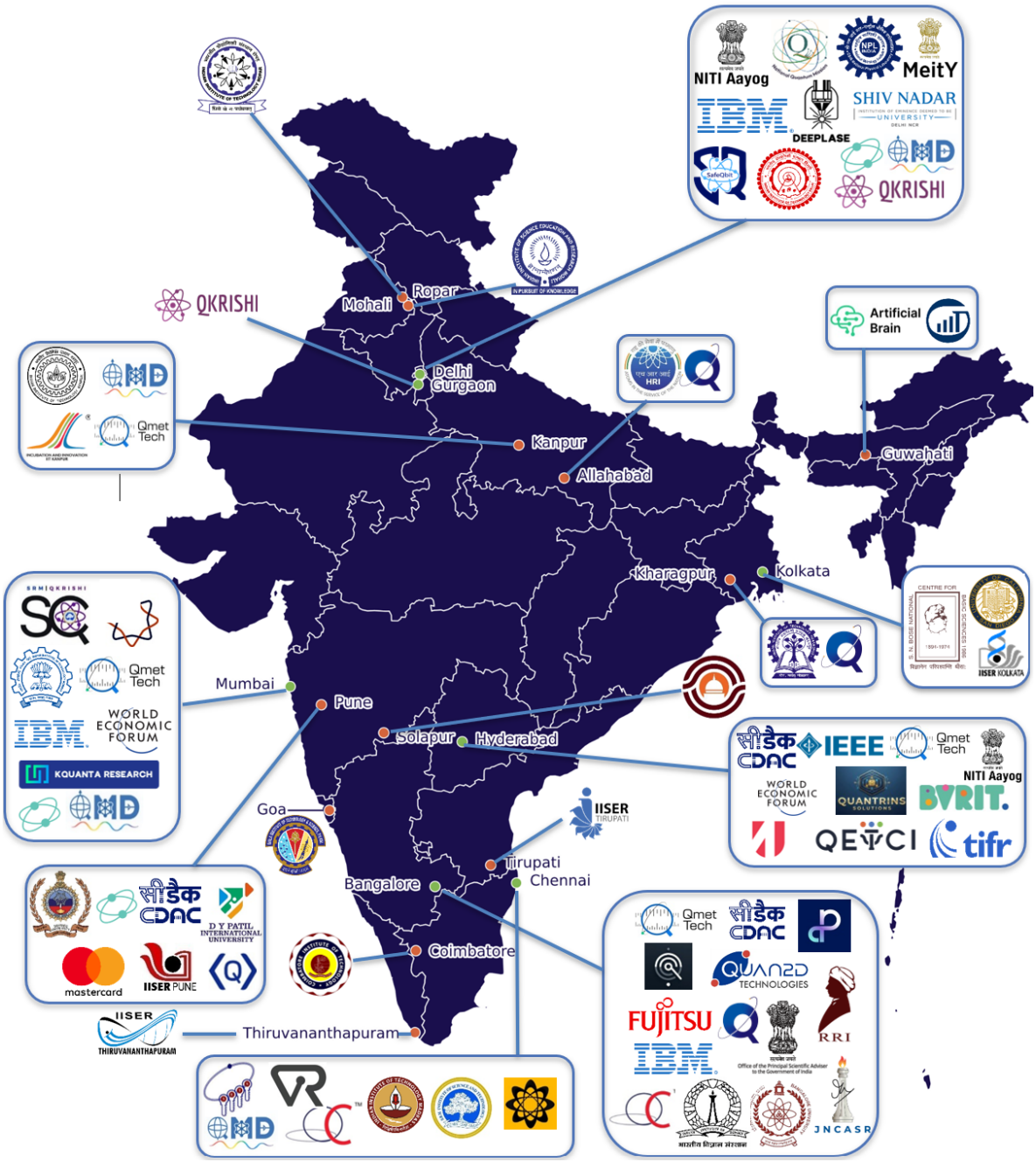
Quantum Ecosystems Technology Council of India (QETCI) is a not-for-profit NGO enabling and accelerating the growth of India's quantum ecosystem by bringing together industry, academia, government, and partner associations in quantum. QETCI frequently organizes capacity-building and awareness sessions in quantum.

During 2025-2026, QETCI and Qmet Tech (Quantum Sensing and Metrology Hub under India's National Quantum Mission) organized in-person and online quantum awareness session training over 272 women, with 150+ women from underrepresented communities in India. QETCI also organizes online QuantumPulse sessions such as Responsible Quantum Technologies.

More information can be found at:
https://qetci.org/

Women Leaders in Quantum Science and Technology in India

The following section presents a non-exhaustive list of women leaders in quantum science and technology, together with their areas of specialization and affiliated institutions. The list is intended as an illustrative resource of the diverse expertise and leadership present within India's quantum science and technology ecosystem rather than a comprehensive directory. It acknowledges that India is home to many accomplished contributors from underrepresented communities, women scientists, engineers, and practitioners whose valuable contributions to the field extend well beyond those included here.



Mohali

Kavita Dorai
Professor, IISER Mohali
Professor S. Subramanian 60th Birthday Lecture Award
Specialization: NMR Spectroscopy, Quantum Information Processing

Ropar

Asoka Biswas
Associate Professor, IIT Ropar
Specialization: Quantum Information Theory, Quantum Thermodynamics, Quantum Optics

Delhi

Monika Aggarwal
Professor, IIT Delhi & Director, Qkrishi
Specialization: Quantum Computing, Signal Processing, Underwater Technology

Nirat Ray
Assistant Professor, IIT Delhi & Member Principal Investigator (TG 1), QMD Foundation
Specialization: Nanomaterial synthesis, Magnetic nanowires, Computational material science

Shruti Taksali
Scientist and Assistant Professor, CSIR-NPL & Advisory Board, Girls in Quantum
Specialization: Nanoelectronics, Quantum systems

Laxmi Chandolia
COO and Co-Founder, SafeQbit Technologies
Specialization: PQC, Cybersecurity

Swati Rawal Dang
Scientist-D, Quantum Technology Cell, Department of Science & Technology
Specialization: Photonics, Non-linear Optics

Debjani Ghosh
Distinguished Fellow and Chief Architect Frontier Tech Hub, NITI-Aayog &
Board of Directors, Reserve Bank Innovation Hub
Specialization: Technology Policy, Quantum, AI, Digital Transformation

Sunita Verma
Scientist-G and Group Coordinator (R&D), MeitY & Hub Governing Board, I-HUB QTF
Specialization: Nanotechnology, Semiconductors & VLSI, Quantum Technolog

Delhi

Jagrati Dwivedi
Project Consultant, QMD Foundation
Specialization: Spintronics, Catalysis, Nanoscience

Nahid Chaudhary
Technology Manager, QMD Foundation
Specialization: Nanoscience, Material Science, Sensors

Richa Goel
Quantum Technical Engineer, IBM Quantum
Specialization: Photonics, Plasmonics, Quantum Computing

Rupamanjari Ghosh
Former Vice Chancellor, Shiv Nadar University Delhi & Expert Committee Member, NQM
Stree Shakti Science Samman
Specialization: Quantum Optics, Laser Physics, Quantum Information

Joyee Ghosh
Professor, IIT Delhi
Specialization: Quantum Information Technologies, Quantum & Nonlinear Optics

Mansi Jain
CEO and Director, DeepLase Technologies
Specialization: Photonics, Communication, Quantum Computing

Mitali Sisodia
Principal Project Scientist, IIT Delhi
Specialization: Quantum Safe Communication, Quantum Information, Quantum Optics

Gurgaon

Tulasi Anaparthi
CEO, Qkrishi
Specialization: Cybersecurity, Quantum Algorithms, Education

Prabha Narayan
Director, Qkrishi
Specialization: Cybersecurity, Quantum Algorithms, Education

Kanpur

Shilpi Gupta
Associate Professor, IIT Kanpur & Member PI (TG 2), Qmet Tech Foundation
Specialization: Photonics, Plasmonics, Quantum Optics

Sapam Ranjita Chanu
Assistant Professor, IIT Kanpur & Member PI (TG 2), Qmet Tech Foundation
Specialization: Quantum Computation and Simulations, Cold atoms, Quantum Metrology

Sudipta Dubey
Assistant Professor, IIT Kanpur & Member PI (TG 2), QMD Foundation
Specialization: Physics of atomically thin materials, Valleytronics, Twistronics

Amruta Gadge
Domain Head Quantum Technologies, Startup Incubation and Innovation Centre, IIT Kanpur
Specialization: Quantum Computing, Optics

Allahabad

Aditi Sen De
Professor H, Harish-Chandra Research Institute & Member PI (QuEPRAN), IITM CDOT Samgnya Technologies Foundation
Shanti Swarup Bhatnagar Prize for Science and Technology, and
G.D. Birla Award for Scientific Research
Specialization: Quantum Information, Quantum Optics, Condensed Matter Physics

Guwahati

Babita Jajodia
Assistant Professor, IIIT Guwahati & External Consultant, Artificial Brain
Specialization: Signal Processing, Quantum Computing, Circuit Design

Kolkata

Tanushree Saha Dasgupta
Director and Senior Professor, S.N. Bose National Center for Basic Sciences &
Fellow of the American Physical Society and the World Academy of Science
Dr. P. Sheel Memorial Award National Academy of Sciences, &
DAE Raja Ramanna Prize Lecture Award, & APJ Kalam HPC Award
Specialization: Computational Materials Physics, Quantum Materials

Kolkata

Swastika Chatterjee
Assistant Professor, IISER Kolkata
Specialization: Computational Mineral Physics, Theoretical Condensed Matter Physics

Susmita Sur-Kolay
Fulbright Nehru Academic Excellence Fellow, University of California San Diego
Specialization: Quantum Computing, Quantum Algorithms

Kharagpur

Sarani Bhattacharya
Assistant Professor, IIT Kharagpur & Member PI (PIPETA), IITM CDOT Samgnya Technologies Foundation
Specialization: Computer Architecture, Computer Security, Quantum Safe Communication

Mumbai

Kasturi Saha
Associate Professor, IIT Bombay & Project Director, Principal Investigator (TG 2) and Professor-in-Charge, Qmet Tech Foundation
Specialization: Nanophotonics, Quantum optics, Magnetometry, Color centers in diamond

Mugdha Zadkar
Senior Engineer (Quantum Tech), Quantico Technologies
Specialization: Quantum Thermodynamics, Quantum Computing

Tanushree H. Choudhury
Assistant Professor, IIT Bombay & Member PI (TG 2), QMD Foundation
Specialization: Layered materials, Alloys and Heterostructures, Characterization

Rachana Shiriskar
Program Manager, Qmet Tech Foundation
Specialization: Operations Management, Capacity Building, Human Resource Development

Arunima Sarkar
Head of Initiatives, World Economic Forum (WEF)
Specialization: Technology Policy, Quantum, AI

Mumbai

Shalaka Verma
Executive Director (Data and AI), IBM & Member of Board of Directors, <SQ|QuIC>
Specialization: Quantum Computing, Post Quantum Cryptography

Anita Nandi-Ray
Policy Director, Kquanta Research & Advisory Board, Girls in Quantum
Specialization: Economic and Financial policy, Quantum in Finance

Amrita Bhattacharya
Professor, IIT Bombay & Member Principal Investigator (TG 2), QMD Foundation
Specialization: Computational Materials Science, Thermoelectricity, Semiconductors Defects

Pune

Anindita Banerjee
Project Manager AIQT, Centre for Development of Advanced Computing (C-DAC) Pune
Specialization: Aerial and fiber-based Quantum Key Distribution, Quantum Computing

Jyoti Shakya
Assistant Professor, D. Y. Patil International University
Specialization: Low-dimensional (2D) Quantum Materials, Neuromorphic Devices

Aditi Vaidya
Chief Product Officer and Co-Founder, Quanfluence
Specialization: Quantum Computing, Photonics

Raani Aaher
Manager (Software Engineering), Mastercard & Advisory Board, Girls in Quantum
Specialization: Data Engineering, Quantum Machine Learning

Manisha J Nene
Professor and Director (School of CE & Maths), Defence Institute of Advanced Technology
Specialization: Cyber Security, Quantum Algorithms, Data Engineering, AI Fairness

Ashna Bajpai
Associate Professor, IISER Pune
Specialization: Condensed Matter Physics, Nanomagnets & Spintronics, 2D-Materials

Solapur

Vidya Niranjan
Pro Vice Chancellor, MIT Vishwaprayag University
Specialization: Sequencing, Chemo-genomics, Molecular simulations, Quantum Computing

Hyderabad

Jayasri Dontabhaktuni
Professor, Mahindra University
Specialization: Quantum Algorithms, Soft photonics, Dielectric Metasurfaces, Nanophotonics

Rajalakshmi Gurumurthy
Scientific Officer (F), TIFR Hyderabad & Member PI (TG 2), Qmet Tech Foundation
Specialization: Solid State NMR, Optical Magnetometry, Precision Measurement

Reena Dayal
Founder and CEO, QETCI & Steering Committee, IEEE Quantum Initiative &
Member of Global Futures Council for Next-Generation Computing, WEF &
Member of Global Forum on Technology, OECD
Specialization: Quantum Technology Leadership, Ecosystem and Innovation Management

Swathi Mummadi
Founder, Quantrins Solutions & Associate Professor, BV Raju Institute of Technology &
Academic Advisory and Quantum Consultant, QubitSemi Solutions
Specialization: Quantum Computing, Quantum Information, Quantum Safe Communication

P R Lakshmi Eswari
Scientist ‘G’ and Centre Head, C-DAC Hyderabad
Specialization: Secure Software Development, Quantum Simulation

Rama Devi Lanka
Lead Architect (Senior Consultant) Frontier Tech Hub, NITI Aayog
Digital India Award
Specialization: Innovation Ecosystems, AI, Technology Governance

Goa

Indrakshi Raychowdhury
Associate Professor, BITS Pilani (K K Birla Goa Campus) &
Member, Lattice Diversity and Inclusion Committee
Specialization: Quantum Algorithms, Quantum Chromodynamics, Quantum Simulations

Tirupati

Padmabati Mondal
Assistant Professor, IISER Tirupati
Specialization: Excited State Quantum Chemistry, Multiscale Simulations

Bangalore

Urbasi Sinha
Senior Professor, Raman Research Institute & Lead PI (QuEPRAN), IITM CDOT Samgnya Technologies Foundation & Founder and Executive Advisor, QuSyn Technologies
Canada Excellence Research Chair in Photonic Quantum Science and Technologies, & Chandrasekarendra Saraswathi National Eminence Award, & ICO/ICTP Gallieno Denardo Award, & Gates-Cambridge Impact Prize
Specialization: Experimental Quantum Information Science, Quantum Photonics

Preeti Banzal
Adviser and Scientist-G, Office of the Principal Scientific Adviser to the Government of India
Specialization: Telecommunications, AI, Quantum Communications, Cyber-Physical Systems

Anupama Ray
Advisory Research Scientist, IBM Research & Adjunct Faculty, IIT Jodhpur
IEEE Best Woman Professional (Early Career), & WOC STEM Technology Rising Star
Specialization: Quantum Machine Learning, Quantum Algorithms

Ruchira V Bhat
Quantum Computing Researcher, Fujitsu Research
Specialization: Quantum ML, Variational Quantum Algorithms, Quantum Computing

Gayathri H N
Co-Founder, Quan2D Technologies
Specialization: Nanomaterials, Soft Matter Physics, Quantum materials

Richa Hukumchand
Co-Founder and CEO, Pramatra Space
Specialization: Quantum Key Distribution, Cybersecurity, Space Technologies

Shikha Mehrotra
Scientist-E and Joint Director, C-DAC Bangalore
Specialization: Quantum Computing, Cybersecurity

Bangalore

V.S. Vaishnavi Adurti
Scientist-D, Centre For Development of Telematics (C-DOT)
Specialization: Quantum Communication, FPGA and Embedded Systems Design

Sanjukta Roy
Associate Professor II, Raman Research Institute
Letter of Appreciation for Realizing the 1st Bose-Einstein Condensate in India
Specialization: Quantum Information, Quantum Optics, Ultra-Cold Atomic Physics

Usha Devi A R
Senior Professor, Bangalore University
Specialization: Quantum Information, Open Quantum Systems, Mathematical Physics

Shobhana Narasimhan
Professor, Jawaharlal Nehru Centre for Advanced Scientific Research & Member PI (Silicon Spin Qubits), Foundation for QC Innovation & Fellow, American Physical Society
Specialization: Computational Nanoscience, Condensed Matter Physics

Simimol A.
Technology Manager, Foundation for QC Innovation (FQCI)
Specialization: Nanotechnology, Material Characterization

Vini Gautam
Assistant Professor, IISc & Member PI (TG 3), Qmet Tech Foundation
Specialization: Nanotechnology, Neural Interfaces, Quantum Sensing

Debadrita Ghosh
Director and CTO, QuSyn Technologies & Scientist-C, Raman Research Institute
Specialization: Optical Imaging and Microscopy Systems, Single Photon Sources

Anjani Priyadarshini
Quantum Industry Specialist (Independent)
Specialization: Quantum Computing, Computational Mathematics

Coimbatore

Manjula Gandhi S
Professor and Head of Department of Computing, Coimbatore Institute of Technology
Specialization: System Software, Quantum Computing, Data Analytics

Chennai

Kiran Kaur Raina
CEO and Founder, NucelQi & + Quantum Security Engineer, Vyapti Resonance
Specialization: Quantum Security, Quantum Machine Learning

Prabha Mandayam
Associate Professor, IIT Madras & Member PI (Superconducting Qubits), FQCI
Specialization: Quantum Information and Computing, Quantum Error Correction

Jayeeta Bhattacharyya
Professor, IIT Madras & Member Principal Investigator (TG 1), QMD Foundation
Specialization: Quantum Dots, Spectroscopy, Condensed Matter Physics

Foram P Shingala
Scientist-C, Society for Electronic Transactions and Security (SETS)
Specialization: Quantum Safe Communication, Quantum Computing, Embedded Systems

Sunethra Ramanan
Assistant Professor, IIT Madras
Specialization: Nuclear Structure, Cold Atoms, Computational Many-body Physics

S. Lakshmi Bala
Professor, IIT Madras
Specialization: Classical and Quantum Dynamics, Quantum Information Theory

M. Pushpalatha
Associate Chairperson, School of Computing, SRM Institute of Science and Technology
Specialization: Wireless Networks, Edge Computing, Quantum Computing

Gayathri M
Associate Professor, S.R.M Institute of Science and Technology
Specialization: Biometric Security, Visual Cryptography, Quantum Computing

R. Thilagavathy
Associate Professor, SRM Institute of Science and Technology
Specialization: Machine Learning, Unmanned Ground Vehicles, Quantum Computing

Eswari Devi N
Scientist-C, Society for Electronic Transactions and Security
Specialization: Cryptographic Hardware Implementation, Post Quantum Cryptography

M Samyuktha
Scientist-C, Society for Electronic Transactions and Security
Specialization: Post Quantum Cryptography, Quantum Algorithms

Chennai

Selvagangai C
Scientist-C, Society for Electronic Transactions and Security
Specialization: Quantum Key Distribution, Quantum Information Processing

Thiruvananthapuram

Deepshikha Jaiswal-Nagar
Associate Professor, IISER Thiruvananthapuram
Specialization: Condensed Matter Physics, Energy Materials, Quantum Information Theory

Grants, Fellowships, and Support schemes for Women in Quantum Science and Technology in India

While no scheme specifically dedicated to supporting underrepresented communities in quantum science and technology was identified in India, a range of public and private-sector funding instruments are available to women researchers, entrepreneurs and professionals that are applicable to activities in this field. This section presents a compilation of such grants, fellowships and support schemes within the broader STEM funding ecosystem that may facilitate women's participation and career progression in quantum science and technology.

For a more comprehensive inventory of relevant initiatives in India, readers may refer to the report Initiatives for Empowering Women in Science & Technology.

Note: The eligibility criteria, funding provisions, application timelines and other operational details of these schemes are subject to periodic revision by the respective administering organizations. Applicants are therefore advised to verify the latest information through the official scheme guidelines before applying.

1. Government research grants and fellowships

Scheme	Administering body	Description and eligibility
Women Scientist Scheme A (WOS-A)	DST	Research grant for bench-level research in basic or applied science. For women aged 27-57 with a career break. Duration up to three years.
Women Scientist Scheme B (WOS-B)	DST	Supports S&T-based solutions to societal challenges, including training of marginalised groups for livelihood generation.
Women Scientist Scheme C (WOS-C)	DST	Internship in intellectual property rights for women with a career break, leading to careers as IPR professionals.
SERB POWER Fellowship	DST / SERB	Structured funding mechanism addressing gender disparity in science and engineering research grants for active women researchers.
CURIE	DST	Research infrastructure grants for women's universities and postgraduate colleges, established in basic and applied sciences.
Swarna Jayanti Fellowship	DST	Open fellowship for outstanding young scientists aged 30-40 in frontier research areas, including physics and materials science.
Indo-US Fellowship for Women in STEMM (WISTEMM)	DST / Indo-US S&T Forum	Collaborative research placements at premier United States institutions for early- and mid-career women researchers and engineers.

Scheme	Administering body	Description and eligibility
DST-CEFIPRA Women Post-Doctoral Fellowship	DST / CEFIPRA	Postdoctoral research placement for women researchers under the India-France science partnership.
National Postdoctoral Fellowship (SERB)	DST / SERB	Open postdoctoral support for frontier research in science and engineering; not women-specific but broadly accessible.

Readers can also access IISc Office of Research Grants' Women in Science Portal for latest information on government schemes for women. For a comprehensive list of all schemes please refer to myScheme Portal. For marginalized community, Indian government has launched targeted tuition subsidies, relaxed eligibility norms, scholarships and fellowships, and mentoring schemes.

For international prizes, fellowships, and funding opportunities for women, readers can also find more information on atom*innen.

2. Entrepreneurship, infrastructure and institutional reform

Scheme	Administering body	Description and eligibility
Women Entrepreneurship Development Programme (WEDP)	DST	Entrepreneurship training for S&T graduates and diploma holders.
NIDHI-EIR Programme	DST	Fellowship, mentoring and market research support for entrepreneurs-in-residence.
DBT Women Entrepreneur Seed Funding	DBT / BIRAC / TiE	Seed funding of INR 5 lakh per selected entrepreneur, with mentor network access and a one-year TiE Delhi-NCR membership. Fifteen entrepreneurs selected annually.
GATI	DST	Pilot programme driving gender-equity reform within science and technology institutions.
National Mission on Nano Science and Nano Technology	DST	Shared research infrastructure and human resource development relevant to quantum materials research; open to funded researchers generally.
SATHI	DST	Shared, professionally managed R&D infrastructure and equipment access across institutes.
State startup incentives for women-led ventures	State governments	Vary by state. Karnataka mandates a minimum 10% incubator seat allocation for women co-founders; Telangana's WE-Hub supports

Scheme	Administering body	Description and eligibility
		women-led business incubation at no cost; Kerala's KSUM offers soft loans up to INR 15 lakh.

Women entrepreneurs can also engage with NITI Aayog's Women Entrepreneurship Platform (WEP) knowledge portal for detailed information on schemes, access to finance, and incubators and accelerators; and for collaboration opportunities.

3. Career re-entry, mobility and recognition

Scheme	Administering body	Description and eligibility
KIRAN Mobility Scheme	DST	Addresses relocation barriers for women scientists moving between government postings.
DBT Ramalingaswami Re-entry Fellowship	DBT	Attracts researchers working abroad back into Indian research institutions.
SERB Women Excellence Award	DST / SERB	Recognition for exceptional research contributions by women scientists.
Stree Shakti Science Samman Award	Government of India	National recognition for original and impactful scientific contribution by women.
INSA Women Fellows and Young Scientists	Indian National Science Academy	Dedicated fellowship categories for women within the Academy's fellowship structure.

4. Private sector and Industry

Scheme	Administering body	Description and eligibility
IBM Research, Diversity and Inclusion Programme	IBM	Supports an inclusive research environment for women scientists and addresses career-stage professional challenges. Directly relevant given IBM's quantum computing research programme.
Intel Protégé Sponsorship Initiative	Intel	Sponsorship and development track for senior technical women employees.
Google Women Techmakers	Google	Global community, visibility and leadership programming for women in technology, reaching over 70,000 women annually.

Scheme	Administering body	Description and eligibility
Grow with Google for Women in STEM	Google	Three-month Associate Cloud Engineer certification course with mentorship from the Google Cloud team.
L'Oreal India For Young Women in Science Scholarships	L'Oreal India	Scholarship support for young women pursuing graduate-level science study.
TCS-MWM Joint Initiative	Tata Consultancy Services / Million Women Mentors	Structured mentoring and a digital platform for best practice sharing on gender equity in science.
Larsen & Toubro Renew: Career Re-entry for Women	Larsen & Toubro	Recruitment track exclusively for women professionals returning after a significant career break.
TATA SCIP	Tata group	Flexible re-entry roles for women returning to careers, tailored to availability.
Rolls-Royce Unnati Scholarship Programme	Rolls-Royce	Financial support for women pursuing engineering study from underprivileged backgrounds.
Women of Wipro (WOW)	Wipro	Leadership pipeline and equal-opportunity programme supporting career advancement for women in technology.
Hitachi Energy India Women in Technology Programme	Hitachi Energy / Shikshana Foundation	Scholarships, training and mentorship for aspiring women engineers from less privileged backgrounds.

References

[1] Sribala Vadlapatla, "India Emerges as Quantum Powerhouse with 91K Graduates, Eyes Global Leadership." *The Times of India*, December 6, 2024. https://timesofindia.indiatimes.com/city/hyderabad/india-emerges-as-quantum-powerhouse-with-91k-graduates-eyes-global-leadership/articleshow/125794805.cms;

NITI Aayog's Frontier Tech Hub, *Roadmap for Transforming India into a Leading Quantum-Powered Economy* (New Delhi: NITI Aayog, December 4, 2025), https://www.niti.gov.in/sites/default/files/2025-11/Roadmap_for_Transforming_India_into_a_Leading_Quantum_Powered_Economy.pdf, p. 29

[2] Tzula B. Propp, Brandy Todd, Sara A. Metwalli, Alina Helena S. Gallardo, Michael Dascal, Denise Ruffner, Klaus D. Jöns, Shaeema Zaman, Judith Kreukels, Marilù Chiofalo, and Lydia Sanmartí-Vila, *Meeting the Needs of the Global Quantum Science Community: A Call to Action*, arXiv:2601.14297 [physics.soc-ph] (2026), https://arxiv.org/abs/2601.14297

[3] Cecily Josten, Grace Lordan, and Karina Robinson, "The City Quantum Summit: A Briefing on Diversity and Inclusion in the Quantum Sector", *The Inclusion Initiative, London School of Economics and Political Science* (2023), https://www.lse.ac.uk/tii/assets/documents/The-City-Quantum-Summit-TII-Report.pdf

[4] Almut Beige, Ana Predojević, Anja Metelmann, Anna Sanpera, Chiara Macchiavello, Christiane P. Koch, Christine Silberhorn, Costanza Toninelli, Dagmar Bruß, Elisa Ercolessi, Elisabetta Paladino, Francesca Ferlaino, Giulia Ferrini, Gloria Platero, Ivette Fuentes, Kae Nemoto, Leticia Tarruell, Maria Bondani, Marilù Chiofalo, Marisa Pons, Milena D'Angelo, Mio Murao, Nicole Fabbri, Paola Verrucchi, Pascale Senellart-Mardon, Roberta Citro, Roberta Zambrini, Rosario González-Férez, Sabrina Maniscalco, Susana Huelga, Tanja Mehlstäubler, Valentina Parigi & Verònica Ahufinger, "Women for quantum — manifesto of values," *Communications Physics* 8, 422 (2025), https://doi.org/10.1038/s42005-025-02321-9;

Zhao Jing, Lassi Kotamäki, Genya Crossman, Veena Vijayakumar, Ben Castañon, and Amal Kasry, "The Quantum Moment: A Global Report; Outcomes of the International Year of Quantum Science and Technology", *United Nations Educational, Scientific and Cultural Organization (UNESCO),* Paris (2026), https://unesdoc.unesco.org/ark:/48223/pf0000398055.locale=en, p. 62;

UNESCO, *Status and Trends of Women in Science: New Insights and Sectoral Perspectives*, United Nations Educational, Scientific and Cultural Organization, Paris (2024), https://unesdoc.unesco.org/ark:/48223/pf0000393768/PDF/393768eng.pdf.multi.page=8;

Ankur Nandi, Tarini Halder, & Tapash Das, (2024). *Status of Scheduled Tribe students in science, technology, engineering and mathematics (STEM) at the level of higher education in India*. *Advanced Journal of STEM Education, 2*(2), 61–79. https://doi.org/10.31098/ajosed.v2i2.2668, p.3

[5] World Economic Forum, "Global gender gap report 2025", *World Economic Forum,* 11 June 2025, p. 38 https://reports.weforum.org/docs/WEF_GGGR_2025.pdf

IEEE Computer Society Team, "Tackling the Gendered Digital Divide in India," *IEEE Computer Society Tech News* (21 August 2023), https://www.computer.org/publications/tech-news/insider-membership-news/tackling-the-gendered-digital-divide;

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, CSIR-NIScPR (2022), https://www.niscpr.res.in/includes/images/eresources/women-in-STEM.pdf, p. 11

[6] Confederation of Indian Industry and Avtar, *Women in STEM: The India Story.* New Delhi: Confederation of Indian Industry, 2025. https://www.ciitechnology.in/pdf/CII%20-%20WOMEN%20in%20STEM%20Report%202025.pdf, pp. 5-21

Tanusri Saha-Dasgupta and Rupamanjari Ghosh, "The rise of women in quantum science in India and the legacy of Satyendra Nath Bose", *Physics World* (15 July 2025), https://physicsworld.com/a/the-rise-of-women-in-quantum-science-in-india-and-the-legacy-of-satyendra-nath-bose/;

Saquib Shamim and Tanusri Saha-Dasgupta, "A Report on the International Conference on Women in Quantum Science and Technologies," *AAPPS Bulletin vol.* 34, article 28 (2024), https://doi.org/10.1007/s43673-024-00133-7;

IEEE Computer Society Team, "Tackling the Gendered Digital Divide in India"

[7] Camille Georges and Kelly Richdale, "Why the quantum revolution risks leaving women behind — and what to do about it," *World Economic Forum* (8 March 2026), https://www.weforum.org/stories/2026/03/quantum-revolution-gender-divide/;

Jessica L. Rosenberg, Nancy Holincheck, and Michele Colandene, "Science, Technology, Engineering, and Mathematics Undergraduates' Knowledge and Interest in Quantum Careers: Barriers and Opportunities to Building a Diverse Quantum Workforce," *Phys. Rev. Phys. Educ. Res.* 20, 010138 (2024), https://doi.org/10.1103/PhysRevPhysEducRes.20.010138, p.9

[8] A. Dhanalakshmi (Ed.-in-Chief) and Rintu Nath (Ed.), *Dream 2047 Vol 26, Issue 9*, *Vigyan Prasar* (September 2023), Vigyan Prasar (Department of Science & Technology, Government of India). https://www.indiascienceandtechnology.gov.in/sites/all/themes/vigyan/pdf_file/newsletter_dreams_2047/2023/Dream-2047-September-2023.pdf, pp. 16-19.

[9] Saquib Shamim and Tanusri Saha-Dasgupta, "A Report on the International Conference on Women in Quantum Science and Technologies"

[10] Sandhya Wakdikar and Praveen Sharma, *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, CSIR-National Institute of Science Communication and Policy Research Project Report (2024), https://niscpr.res.in/includes/images/projectreports/Report-Initiatives-for-Empowrng-Women.pdf, pp. 43 and 37

[11] Cecily Josten, Grace Lordan, and Karina Robinson, "The City Quantum Summit: A Briefing on Diversity and Inclusion in the Quantum Sector"

[12] Almut Beige et al, "Women for quantum — manifesto of values"

[13] CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, p.2;

Sandhya Wakdikar and Praveen Sharma, *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, p. 36

[14] CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, pp. 36-37;

Almut Beige et al, "Women for quantum — manifesto of values"

[15] Almut Beige et al, "Women for quantum — manifesto of values";

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, pp. 43 and 37

[16] Sandhya Wakdikar and Praveen Sharma, *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, pp. 35 and 38

[17] Ritsuko Hidaka, "How women are shaping quantum research," *DigitalTerminal.in* (8 Apr 2025), https://digitalterminal.in/opinion/how-women-are-shaping-quantum-research

[18] Sandhya Wakdikar and Praveen Sharma, *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation,* p.2

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, p. 37

[19] Ministry of Education, Department of School Education and Literacy. (27 November 2024). *Starred question No. 23 answered on 27 November 2024* [Parliamentary question document]. Government of India. https://sansad.in/getFile/annex/266/AS23_Lq1p57.pdf?source=pqars

[20] Ministry of Education, Department of School Education and Literacy, *Starred question No. 23 answered on 27 November 2024*;

Ministry of Education, Department of Higher Education. (2025, December 10). *Annexures referred to in reply to part (A) of Rajya Sabha unstarred question No. 1131 answered on 10/12/2025 asked by Hon'ble MP Dr. Kanimozhi NVN Somu regarding "School dropout rates"* [Parliamentary question annexure]. Government of India. https://www.education.gov.in/sites/upload_files/mhrd/files/parliament_annexure_en/RSSQ_1131_en.pdf;

Devi, C. (n.d.). *Role of NEP 2020 in promoting gender inclusiveness*. Paschim Guwahati Mahavidyalaya, Department of Education. https://www.pgmdharapur.ac.in/journal/upload/journal/1741429236.pdf

[21] Ankur Paliwal, "How India's Caste System Limits Diversity in Science — in Six Charts." *Nature*, 11 January 2023. https://www.nature.com/immersive/d41586-023-00015-2/index.html;

Tanika Godbole, "Why India's top tech universities can't shake off caste bias." *Deutsche Welle (DW)*, 5 April 2025. https://www.dw.com/en/why-indias-top-tech-universities-cant-shake-off-caste-bias/a-72116876

[22] The Hindu Bureau. "Over 13.5k SC, ST, OBC Students Dropped Out of Central Universities, IITs, IIMs in Past 5 Years: Education Ministry." *The Hindu*, 4 December 2023. https://www.thehindu.com/news/national/over-135k-sc-st-obc-students-dropped-out-of-central-universities-iits-iims-in-past-5-years-education-ministry/article67605388.ece;

Ankur Paliwal, "How India's Caste System Limits Diversity in Science — in Six Charts";

Institute of Objective Studies. (n.d.). SC, ST, OBC and others: Dropouts and percentage from IITs since 2017 and year-wise dropouts and percentage change of IITians from 2012–13 to 2016–17 [Statistical report]. https://oldwebsite.iosworld.org/download/Dropouts_of_IITians_since_2012-13.pdf

[23] Priyanka Sahoo. "Isolated, Invisible: LGBTQ Scientists Talk About Their Experience at Workplace." *Hindustan Times*, 21 June 2021. https://www.hindustantimes.com/cities/others/isolated-invisible-lgbtq-scientists-talk-about-their-experience-at-workplace-101624216113486.html;

Government of India Ministry of Science and Technology, “Rajya Sabha Unstarred Question No. 2202 Answered on 07 August 2025.” *Government of India*, 07 August 2025. https://sansad.in/getFile/annex/268/AU2202_2HXgWq.pdf?source=pqars;

Sandeepa Sahay, “STEMming the Gender Divide in India,” *British Council*, 11 February 2022, https://opportunities-insight.britishcouncil.org/analysis/stemming-gender-divide-india

[24] Sayantan Datta. “How Indian STEM Can Be a Healthier, Safer Space for Queer, Trans People.” *The Wire Science*. Accessed May 24, 2026. https://science.thewire.in/society/gender/how-indian-stem-can-be-a-healthier-safer-space-for-queer-trans-people/;

Sayantan Datta. “A Constant Uneasy State: Trans People in STEM in India.” *The Life of Science*, 9 November 2020. https://thelifeofscience.com/2020/11/09/transgender-people-in-science/

[25] Ankur Paliwal, “How India’s Caste System Limits Diversity in Science — in Six Charts.” *Nature*, 11 January 2023. https://www.nature.com/immersive/d41586-023-00015-2/index.html

[26] The Hindu Bureau. “Over 13.5k SC, ST, OBC Students Dropped Out of Central Universities, IITs, IIMs in Past 5 Years: Education Ministry.” *The Hindu*, 4 December 2023. https://www.thehindu.com/news/national/over-135k-sc-st-obc-students-dropped-out-of-central-universities-iits-iims-in-past-5-years-education-ministry/article67605388.ece;

Sayantan Datta. “How Indian STEM Can Be a Healthier, Safer Space for Queer, Trans People”;

Stuti Agarwal, “NALSA Judgement of 2014 Was Pathbreaking, but Has It Really Made India More Trans Inclusive?” *News18*, 3 September 2020, https://www.news18.com/news/buzz/nalsa-judgement-of-2014-was-pathbreaking-but-has-it-really-made-india-more-trans-inclusive-2800541.html

[27] Indian Institute of Technology Hyderabad, ‘Provisionally Unstarred D. No. 10332 to be answered on 24 March 2025 regarding "SC/ST Cells in IITs"’ [Annexure submitted to the Ministry of Education], 24 March 2025, https://www.iith.ac.in/assets/files/pdf/rti/Loksabha_Rajya_Sabha_Q_A/Annexure_19_Data.pdf;

Indian Institute of Technology Dharwad. (2025). *Annual report 2024–25.* https://www.iitdh.ac.in/sites/default/files/2025-05/2024-25.pdf, pp. 40-43

[28] Indian Institute of Technology Dharwad. (2025). *Annual report 2024–25*, pp. 123-124

[29] Cecily Josten, Grace Lordan, and Karina Robinson, “The City Quantum Summit: A Briefing on Diversity and Inclusion in the Quantum Sector”

[30] QUAD Investors Network (July 2024), “Quantum Science & Technology in the QUAD Nations: Landscape and opportunities”, *QUIN Quantum Center of Excellence*. https://psa.gov.in/CMS/web/sites/default/files/psa_custom_files/QUIN_Quantum_CoE_Report_Final.pdf

[31] Tzula B. Proppet al., *Meeting the Needs of the Global Quantum Science Community: A Call to Action*, p.2

[32] Ritsuko Hidaka, “How women are shaping quantum research”

Tanusri Saha-Dasgupta and Rupamanjari Ghosh, “The rise of women in quantum science in India and the legacy of Satyendra Nath Bose”;

Almut Beigeet al., “Women for quantum — manifesto of values”

[33] Cecily Josten, Grace Lordan, and Karina Robinson, “The City Quantum Summit: A Briefing on Diversity and Inclusion in the Quantum Sector”

[34] Tzula B. Proppet al., *Meeting the Needs of the Global Quantum Science Community: A Call to Action*;

Cecily Josten, Grace Lordan, and Karina Robinson, “The City Quantum Summit: A Briefing on Diversity and Inclusion in the Quantum Sector”

[35] Sandeepa Sahay, “STEMming the Gender Divide in India”;

Ritsuko Hidaka, “How women are shaping quantum research”;
Camille Georges and Kelly Richdale, “Why the quantum revolution risks leaving women behind — and what to do about it”;

[36] Government of India, Ministry of Science & Technology. “Parliament Question: Support Mechanisms for Women Scientists Facing Career Breaks.” *Press Information Bureau*, 20 March 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2113278&reg=3&lang=2;

Government of India, Department of Science and Technology. “Women in Science and Engineering–KIRAN (WISE-KIRAN).” *Department of Science and Technology*. https://dst.gov.in/scientific-programmes/wise-kiran;

Government of India, Department of Science and Technology. “Scholarships for Women.” *India Science, Technology & Innovation (ISTI) Portal*. https://www.indiascienceandtechnology.gov.in/nurturing-minds/scholarships/women

[37] Government of India, Ministry of Women and Child Development. “Rajya Sabha Unstarred Question No. 3030 to Be Answered on 18.03.2026: Women in STEM Fellowships under Mission Shakti.” *Rajya Sabha*, 18 March 2026. https://sansad.in/getFile/annex/270/AU3030_ROwpBd.pdf?source=pqars ;

DD India, “Quantum Tech, ANRF, Women Scientists Rule Indian Science Sector in 2024: Centre,” *DD News*, 24 December 2024, https://ddnews.gov.in/en/quantum-tech-anrf-women-scientists-rule-indian-science-sector-in-2024-centre/;

Sandeepa Sahay, “STEMming the Gender Divide in India”;

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, p. 37;

Sandhya Wakdikar and Praveen Sharma, *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, pp. 27 and 45.

[38] Adapted from:
Sandeepa Sahay, “STEMming the Gender Divide in India”; and A. Dhanalakshmi (Ed.-in-Chief) and Rintu Nath (Ed.), *Dream 2047 Vol 26, Issue 9*, *Vigyan Prasar* .

[39] *Government of India, Ministry of Science and Technology.* “Number of Women Scientists Supported by Government Schemes Since 2014 Doubled During Over 11 Years After Shri Narendra Modi Took Over as PM, Says Minister Dr Jitendra Singh.” Press release, November 28, 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2196065&reg=3&lang=1;

“Number of Women Scientists Supported by Government Schemes Since 2014 Doubled During Over 11 Years After Shri Narendra Modi Took Over as PM, Says Minister Dr Jitendra Singh.”, *Government of India, Ministry of Science and Technology* [Press release], 28 November 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2196065&reg=3&lang=1

[40] Michael P. A. Murphy, “Digital Ethics, Gender-Based Analysis and Canada’s Quantum Strategy.” *Centre for International Governance Innovation (CIGI)*, 12 August 2024. https://www.cigionline.org/publications/digital-ethics-gender-based-analysis-and-canadas-quantum-strategy/;

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, p. 37;

Ritsuko Hidaka, “How women are shaping quantum research”

[41] Government of India, Department of Science and Technology. *Gender Advancement for Transforming Institutions (GATI): E-Brochure*. New Delhi: WISE-KIRAN Division, Department of Science and Technology, n.d. https://gati.dst.gov.in/resources/wspublic;jsessionid=A404AF5324B1AC02E172622C6BD03EE7/resource-material/e-Brochure_GATI.pdf;

Government of India, Department of Science and Technology, *GATI (Gender Advancement for Transforming Institutions): Detailed Advertisement* (New Delhi: Department of Science and Technology, Government of India, n.d.), https://dst.gov.in/sites/default/files/Gati%20detailed%20advertisement_0.pdf;

Sandeepa Sahay, “STEMming the Gender Divide in India”

[42] Saquib Shamim and Tanusri Saha-Dasgupta, “A Report on the International Conference on Women in Quantum Science and Technologies”

[43] Cecily Josten, Grace Lordan, and Karina Robinson, “The City Quantum Summit: A Briefing on Diversity and Inclusion in the Quantum Sector”

[44] Sribala Vadlapatla, "India Emerges as Quantum Powerhouse with 91K Graduates, Eyes Global Leadership"

[45] Ankur Paliwal, “How India’s Caste System Limits Diversity in Science — in Six Charts”

[46] CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*;

Sandhya Wakdikar and Praveen Sharma (CSIR-National Institute of Science Communication and Policy Research), *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, p. 45

[47] Cecily Josten, Grace Lordan, and Karina Robinson, “The City Quantum Summit: A Briefing on Diversity and Inclusion in the Quantum Sector”;

Karoline Irschara, “Connecting Women in Quantum Science: The atom*innen Platform,” *Europhysics News* 56, no. 2 (2025): 10–11, https://www.europhysicsnews.org/articles/epn/pdf/2025/02/epn2025562p10.pdf

[48] Nandita Jayaraj and Aashima Dogra, “Launched on International Day for Girls and Women in Science, Will SWATI Break Old Habits?” *The Indian Express*, 13 February 2024, https://indianexpress.com/article/opinion/launched-on-international-day-for-girls-and-women-in-science-will-swati-break-old-habits-9154415/ ;

Ministry of Science and Technology, Government of India. “‘SWATI’ (Science for Women–A Technology & Innovation) Portal Launched in New Delhi to Create a Single Online Portal Representing Indian Women and Girls in STEMM.” *Press Information Bureau*, February 11, 2024. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2004958

[49] National Institute of Plant Genome Research. “SWATI (Science for Women–A Technology & Innovation) Portal.” *SWATI Portal*, accessed 15 May 2026. https://swati.nipgr.ac.in/

[50] Dr. Manju Sharma, “Launch of SWATI Portal Developed and Hosted by NIPGR, New Delhi – Reg.” *Email from the Inter Academy Panel (IAP) on Women in STEMM,* 23 January 2024. [PDF file]. https://ramjas.du.ac.in/adminramjas/web/notices/Launch%20of%20SWATI%20PORTAL.pdf;

Ministry of Science and Technology, Government of India. “‘SWATI’ (Science for Women–A Technology & Innovation) Portal Launched in New Delhi to Create a Single Online Portal Representing Indian Women and Girls in STEMM”

[51] Karoline Irschara, “Connecting Women in Quantum Science: The atom*innen Platform”

[52] Indian Academy of Sciences’ Council. “About Us.” *Women in STEMM (WiSTEMM)*. Accessed 29 May 2026. https://wistemm.in/about-us/;

Indian Physics Association, “Gender in Physics Working Group (GIPWG),” *Indian Physics Association*, Accessed 29 May 2026. https://www.tifr.res.in/~ipa1970/gipwg/;

Sneha Mehta, “How the Indian Women Scientists’ Association Defined a Feminist Future Within STEM,” *Vogue India*, 7 January 2024, https://www.vogue.in/content/how-the-indian-women-scientists-association-defined-a-feminist-future-within-stem;

Indian Women Scientists’ Association, “About Us,” *Indian Women Scientists’ Association (IWSA)*, Accessed 29 May 2026. https://iwsa.net/

[53] Women Entrepreneurship Platform, "Knowledge Portal," accessed 8 June 2026, https://wep.gov.in/knowledge-portal

[54] Tzula B. Proppet al., *Meeting the Needs of the Global Quantum Science Community: A Call to Action*;

International Year of Quantum Science and Technology, “IYQ Global Fund,” *IYQ 2025*, Accessed 18 May 2026, https://quantum2025.org/iyqglobalfund/;

American Physical Society, Division of Laser Science. “Caregiver and Access Grant Program.” *APS Engage*. Accessed 18 May 2026. https://engage.aps.org/dls/honors/prizes-awards/caregiver-access.

[55] Michael P. A. Murphy, “Digital Ethics, Gender-Based Analysis and Canada’s Quantum Strategy”

[56] Zhao Jinget et al., *The Quantum Moment: A Global Report; Outcomes of the International Year of Quantum Science and Technology;*

Adrian Schmidt, Alexandre Artaud, Arsev Umur Aydinoglu, Astrid Bötticher, Rodrigo Araiza Bravo, Marilu Chiofalo, Rebecca Coates, Ilke Ercan, Alexei Grinbaum, Emily Haworth, Carolyn Ten Holter, Eline de Jong, Bart Karstens, Matthias C. Kettemann, Anna Knörr, Clarissa Ai Ling Lee, Fabienne Marco, Wenzel Mehnert, Josephine C. Meyer, Shantanu Sharma, Pieter Vermaas, Carrie Weidner, Barbara Wellmann, Mira L. Wolf-Bauwens, and Zeki C. Seskir. “Current and Future Directions for Responsible Quantum Technologies: A ResQT Community Perspective.” *arXiv* preprint arXiv:2509.19815, 2025. https://arxiv.org/abs/2509.19815.

[57] Nandita Jayaraj and Aashima Dogra, “Launched on International Day for Girls and Women in Science, Will SWATI Break Old Habits?”

[58] Quantum Girls. "About." Accessed 1 July 2026. https://www.quantumgirls.org/about

[59] *Press Information Bureau, Government of India,* "India's First Virtual Smart Grid Knowledge Center and Innovation Park at Manesar Inaugurated," 23 March 2022, https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1808712&reg=48&lang=2;

Rekha Balakrishnan, "How VigyanShaala Is Expanding STEM Access for Girls in Rural India," *YourStory*, 9 January 2026, https://yourstory.com/herstory/2026/01/vigyanshaala-expanding-stem-access-girls-rural-india-nikkei-award;

VigyanShaala, "Our Story". Accessed 1 July 2026, https://vigyanshaala.com/our-story/

[60] Sandhya Wakdikar and Praveen Sharma (CSIR-National Institute of Science Communication and Policy Research), *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, p. 40;

Ritsuko Hidaka, “How women are shaping quantum research”

[61] Nandita Jayaraj and Aashima Dogra, “Launched on International Day for Girls and Women in Science, Will SWATI Break Old Habits?”

[62] Ankur Paliwal, “How India’s Caste System Limits Diversity in Science — in Six Charts”;

Tzula B. Proppet al., *Meeting the Needs of the Global Quantum Science Community: A Call to Action*

[63] CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, p.38;

Sandhya Wakdikar and Praveen Sharma (CSIR-National Institute of Science Communication and Policy Research), *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, p.45;

Tzula B. Proppet al., *Meeting the Needs of the Global Quantum Science Community: A Call to Action*, p.7

[64] Tzula B. Proppet al., *Meeting the Needs of the Global Quantum Science Community: A Call to Action*, p.5

[65] Sayantan Datta. “A Constant Uneasy State: Trans People in STEM in India”;

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, pp. 29-31

[66] Sandhya Wakdikar and Praveen Sharma (CSIR-National Institute of Science Communication and Policy Research), *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, p.12;

Insight Editorial Team. "Pride Beyond Labels: A Chat with Saathi FacAd Prof. Abhijit Majumder." *Insight IIT Bombay*, July 22, 2024. https://insightiitb.org/pride-beyond-labels-a-chat-with-saathi-facad-prof-abhijit-majumder/

[67] BSP IIT Delhi. "What Does It Take to Build an Office That Has Never Existed Before?" Facebook post, 3 July 2026. https://www.facebook.com/bspiitd/posts/what-does-it-take-to-build-an-office-that-has-never-existed-beforeas-iit-delhi-c/1541196021351119/;

Team Avtar. "IIT-Delhi to Set Up an Office for Diversity and Inclusion." *Avtar Career Creators*. January 2021. https://www.avtarcc.com/iit-delhi-to-set-up-an-office-for-diversity-and-inclusion/;

Ashna Butani, "For the Queer Community at IIT-Delhi, New Gender-Neutral Restrooms Are a Big Win." *The Hindu*, 1 July 2024. https://www.thehindu.com/news/cities/Delhi/for-the-queer-community-at-iit-delhi-new-gender-neutral-restrooms-are-a-big-win/article68352540.ece;

Indian Institute of Technology Delhi, Office of Diversity and Inclusion, "Our Team," accessed 3 July 2026, https://odi.iitd.ac.in/ourTeam

[68] Sandhya Wakdikar and Praveen Sharma (CSIR-National Institute of Science Communication and Policy Research), *Initiatives for Empowering Women in Science & Technology: A Critical Evaluation*, pp.3 and 38;

Priyanka Sahoo. “Isolated, Invisible: LGBTQ Scientists Talk About Their Experience at Workplace”

[69] Priyanka Sahoo. “Isolated, Invisible: LGBTQ Scientists Talk About Their Experience at Workplace”;

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), *Women in STEM: A CSIR Survey Towards Gender Parity*, pp. 32-34

[70] Indian Institute of Technology Dharwad. (2025). *Annual report 2024–25,* pp. 63-68

[71] Standing Committee on Defence (2025-26). *Nineteenth Report (18th Lok Sabha): Demands for Grants (2026–27)—General Defence Budget, Border Roads Organisation, Indian Coast Guard, Defence Estates Organisation, Welfare of Ex-Servicemen and Defence Research and Development Organisation (Demand Nos. 19, 20 and 21)*. New Delhi: Lok Sabha Secretariat, March 2026. https://sansad.in/getFile/app/lsscommittee/Defence/18_Defence_19.pdf?source=app, p. 118.

[72] *Government of India, Ministry of Science and Technology.* “Number of Women Scientists Supported by Government Schemes Since 2014 Doubled During Over 11 Years After Shri Narendra Modi Took Over as PM, Says Minister Dr Jitendra Singh”

[73] Camille Georges and Kelly Richdale, “Why the quantum revolution risks leaving women behind — and what to do about it”