

Annual Quality Assurance Report (2017-18):

Tata Institute of Fundamental Research, (Deemed-to-be-University)

Two Best Practices by the Institute

Best Practice 1: [PAN-TIFR Subject Boards and promotion/evaluation committees](#)

1. Title of the Practice

[PAN-TIFR Subject Boards and promotion/evaluation committees](#)

2. Objectives of the Practice

[TIFR has its “main campus” in Colaba, Mumbai, and 6 Centres in Hyderabad, Bangalore, Pune, and Mumbai. While there is some overlap between the Centres, each Centre has a focus that is unique and has the expertise that is not found in other Centres. The objective for PAN-TIFR Boards and Committees is to run our procedures in a uniform and fair manner, and also to get wide input from expertise that may be available in one Centre and not in another.](#)

3. The Context or challenging issues

[With TIFR’s long-standing tradition of interaction and collaboration, there were no major challenges except to set up appropriate technology for the participation of people across different Centres. We use Video-Conferencing/ teleconferencing/ other online platforms extensively](#)

4. The Practice

[Subject Boards: the PAN-TIFR subject boards in each subject have shaped our graduate programme to world-class standards. A TIFR Ph.D. is among the most valued degrees within India and is well respected internationally.](#)

[Promotion committees: Few Institutions have the range of expertise available in the TIFR system. Our promotion committees have 2 stages: A local committee of faculty within the discipline who are 2 grades above the candidate being evaluated, and a pan-TIFR “Core Committee” that discusses each case taking into consideration other cases at the same stage/ discipline. The recommendation then goes to the Director. All new faculty appointments and promotions are done after examination and discussion of referee letters at each stage. At least 15 letters are solicited from a list that contains national and international experts, suggested by the candidate and also names suggested independently by the departmental Chairperson/ Dean/ subject experts. A dossier containing the candidate’s research proposal and past achievements is sent to each referee. When approximately 9-10 letters are obtained from a mix of international, national, candidate’s list, and independent-list experts, the local committee discusses the case extensively. Any positive comments are carefully weighed, any negative comments are carefully assessed. The report of the local committee contains a detailed assessment of the candidate after](#)

incorporating the comments of the referees. This report is presented by a Chair of the local committee or an in-field expert, to the Core Committee. Here, PAN-TIFR faculty discuss the case after hearing the report. Promotion is decided after normalizing with other similar cases in the recent past and incorporating changes in policies if any. The entire process is conducted with the utmost confidentiality.

5. Evidence of Success

The success of our Subject Boards is evidenced by the fact that our Ph.D. students get postdoctoral positions in top-notch Universities worldwide (Harvard, NIH, Stanford, to name a few) and our MSc students get admitted to top-notch Ph.D. Institutes worldwide (Caltech, Cornell, Yale, U. Chicago, to name a few).

The success of our promotion procedures is evidenced by the top-notch research TIFR produces, which is recognized by SS Bhatnagar Awards, Infosys Prizes, and memberships of Academies.

6. Problems Encountered and Resources Required

There are no problems in operating PAN-TIFR Subject Boards and promotion committees except occasional communication snafus which are addressed quickly. Resources: broadband internet connectivity and suitable computers and other electronic systems.

7. Notes (Optional)

None.

Best Practice 2: [Annual review of students for the research scholarship extension](#)**1. Title of the Practice**

Annual review of students for the research scholarship extension

2. Objectives of the Practice

The objective of this practice is threefold

(a) to have a detailed review of the students progress towards the Ph.D. and plans for future work to enable thesis work of the highest order,

(b) to train the students in presenting their work for an open review, discussing their work with a review committee, etc. which are critically important skills, and

(c) to have a rigorous process by which to determine whether to continue a student's research scholarship.

3. The Context or challenging issues:

Students who enter TIFR after having finished their B.Sc./M.Sc. are amongst the best students in the country. However, often although their knowledge of the subject is excellent, they lack the skills to effectively present the work done. This is a major handicap, since presenting research work is a critically important aspect of doing research. A major challenge that has to be faced is the lack of adequate background and preparation on the part of the students as to how to present one's work for a review. In the early years particularly, significant effort has to be put in (often by the Ph.D. guide) in training the student on how to present the work in an open seminar, as well as how to bring out the salient points of the work in face to face discussions with a review committee.

4. The Practice

The annual review of students is a detailed process. Each student has to give a write-up to the Thesis Monitoring Committee (TMC) describing the work done over the year, as well as plans for the following year. The student also makes an open presentation of the work done over the year. This presentation is evaluated by all the faculty members present for the talk, and not just the TMC. The evaluation includes critical remarks on the quality of the content, the clarity of the presentation, the handling of questions asked, etc. This feedback is provided to the student, which helps them identify what worked, as well as areas for improvement. The TMC then has a meeting with the student where the research work carried out as well as the plans for the next year are discussed in detail. The TMC often makes suggestions regarding possible directions for future research, the pacing of the work, etc. For senior students, the TMC also provides career counseling. The detailed minutes of this review are provided to the student. This kind of detailed review and feedback process is very uncommon in the Indian system. Faculty members regard these activities as important and are happy to sit through student talks as well as serve in the TMC. As such there are no major constraints/limitations.

5. Evidence of Success

TIFR students are generally regarded as being very well trained, not just in doing research, but also in giving presentations and talks. The evidence of success is primarily in the quality

of the research thesis done at TIFR, and the positive comments on these by the external reviewers. Additionally, TIFR students often get awards for their presentations at conferences, attesting to both the quality of the work as well as their training in making good presentations.

6. Problems Encountered and Resources Required

No significant problems have been encountered. The major resource required is time and effort on the part of faculty members, which they are generally happy to contribute.

7. Notes (Optional)

None