

INSTITUTE OF PHYSICS

Doctoral Programme

The faculty, post-doctoral fellows, scholars and staff of Institute of Physics congratulate you for being selected to the Doctoral Programme of the Institute and welcome you. Your first few weeks will be a very busy time, meeting new people, adjusting in the hostel, learning about the life at IOP, and about the city of Bhubaneswar. Below are some information which you may find useful.

1. Registration and HBNI

As soon as you have settled, you should go to the IOP Office for registration in the Doctoral Programme. You will be given a set of forms which you have to fill and submit. Requirements for the registration will be informed to you at the office. You will be registering with the Homi Bhabha National Institute (HBNI) which is a deemed university comprising of 10 Constituent Institutes (CI's), IOP being one of these.

At the time of registration, you will also be required to sign the anti-ragging affidavit and are required to abide by the anti-ragging guideline issued by UGC (to be found at <https://www.ugc.ac.in/oldpdf/ragging/gazetaug2010.pdf> along with later amendments.)

You should check the official website of HBNI at <https://www.hbni.ac.in> for detailed information about HBNI rules and regulations concerning doctoral students. For any HBNI related inquiry you should contact the Dean (Academic) of HBNI at IOP. At present, Prof. Pankaj Agrawal is the Dean Academic, HBNI.

2. Calendar for Academic year

The classes begin on 1st August and will be conducted in the B-block lecture hall. The time table for the courses and other information can be found on the Students' portal online.

3. Doctoral Course Work

The first year of the Doctoral Programme consists of three terms of four months each of Doctoral Course work. There are lecture courses, a laboratory course and a project that you have to attend and complete successfully. An Oral General Comprehensive viva voce examination (OGCE/Grand Viva) is conducted at the end of the course work. Term- wise break up and detailed syllabi for the courses is available at https://www.iopb.res.in/Final_Predoc.pdf.

Grading Structure:

Performance evaluation for the courses will be conducted during the term by the teachers in a manner best suited for the respective course. Typically, a written test is conducted at the end of the course for lecture courses. Core courses may have mid-

term examinations, and home works as well as regular sessions of tutorials. If the teacher feels necessary, he/she may conduct a repeat examination for some students. In order to pass the Doctoral Course work, you need to secure at least 50% of the marks in each course including the project and the Grand Viva and a minimum of 60% in the aggregate marks. It is mandatory to pass the Doctoral Course work in order to continue in the Ph. D. programme at the Institute. The results of the Doctoral Course will be declared after the Grand Viva. Please note that under no circumstances will there be any examination (including a repeat examination) conducted after Grand Viva and the declared results are final.

The candidate securing highest overall marks who continues in the Ph.D. programme is awarded the L. K. Panda memorial prize for the year.

4. Advanced Courses: Apart from the courses in the Doctoral Course work, efforts are made to offer a few advanced or specialized courses throughout the year by faculty members and visiting scientists. Usually, the courses are announced in the beginning of the academic year and care is taken to ensure that the courses are from different fields. After the first year, during your research career at the Institute, you are expected to attend several of these courses.

5. Doctoral Research:

After successfully completing the Doctoral Course results, you will commence your research work leading to a Ph.D. from the Homi Bhabha National Institute (HBNI). The decision on which program you will join is done after the successful completion of the doctoral course and it will depend upon the requirements of the Institute, availability of the faculty members and your performance in the Doctoral Course work. During the Ph.D. research, a Doctoral Committee is formed for each research scholar. This committee evaluates the progress of the scholar every year and submits a report to the HBNI. Scholars are required to give an open presentation of their research work every year which is reviewed by the Doctoral Committee. You are expected to complete your doctoral research work and submit the doctoral thesis to HBNI within five years of joining (i.e. within four years of completing the Doctoral course). Extension of this period beyond the stipulated period is done under special considerations as per norms set by the HBNI. Scholars are encouraged and financially supported to participate in relevant and useful academic meetings in India and abroad.

6. Fellowship:

Research scholars are paid a fellowship of Rs. 25,000/- per month during the first two years of joining the Institute (i.e. during the year of doing doctoral course work and the next year). Thereafter, the stipend is increased to Rs. 28,000/- per month for a period of three years. A contingency grant is provided every year for buying books and for other research related expenses. Scholars are allowed 30 days of paid leave every year.

7. Provost:

Provosts look after the welfare of the scholars and coordinate with the administration to sort of any impediments faced by them. Following faculty members are the provosts.

Prof. Suresh K. Patra,
Prof. Dinesh K. Topwal, phone: 0674-2306420 (O), 2306620 (R)

8. Academic Affairs Committee:

The academic activities of the Institute, including the doctoral course work, are monitored by the Academic Affairs Committee (AAC). Scholars can approach this committee for any issues regarding doctoral course work.

9. Grievance Redressal Committee, Women's Cell:

In case of any complaints not addressed in other forums, scholars can approach the Grievance Redressal Committee which can be found at <https://www.iopb.res.in/academic-committees>. This committee acts as the Anti-ragging committee as well. HBNI also has a students' grievance redressal committee, which can be approached in case of any HBNI related grievances.

Members of the Women's Cell at IOP are the following.

Prof. Shikha Varma, IOP (Chair)
Dr. Debasmita P. Alone, NISER (Member) Dr. Rooplekha Khuntia, NISER (Member)
Prof. B. R. Sekhar, Registrar, IOP (Member) Smt. Nageswari Majhi, SA/C, IOP (Member)

This committee may be contacted for any complaints of sexual harassment of women inside the campus.

10. Campus Facilities:

Hostel: Research Scholars are provided with on-campus hostel accommodation against a nominal monthly charge. If circumstances arise where they stay outside, a house rent allowance of 20% of their monthly fellowship is provided. Hostel residents are to abide by the rules of residence and will give an undertaking to that effect. In case a scholar is found to be in violation of these norms, the allotment of the hostel accommodation will be canceled. The hostel has facilities such as washing machines, TV, internet connection to each resident etc.

Dining: A student mess is attached to the hostel in which breakfast, lunch, dinner and snacks are served against payment. The scholars have direct involvement in running of this mess. In addition, there is an Institute canteen which is open during office hours during working days.

Library: The Institute library is accessible 24 hours. It subscribes to a large number of research journals and periodicals and has a large collections of books on all relevant areas. Most journals are also available online. It also has a large collection of online e-books. The library has 13 research cubicles in the first floor of the library for the users. The ground floor houses the Book Section, Current Journals and Circulation counter. The first floor houses the Back Volumes of Journals, Conference and Lecture Hall.

The library uses Koha Software for cataloguing, circulation, accounting and acquisition of books and journals. The library has services like, acquisition of books, journals and microdocuments, resource sharing among DAE units, publication assistance, reference and reprographic service for the Institute members. The database of the books and journals are available online for the users.

Computer Centre: The computer facilities at Institute of Physics broadly include that for numerical and algebraic computation, graphic applications, email, internet and automation of library and administration.

There are about two hundred PC's installed in the computer centre, library, laboratories, offices of faculties, scholars and administration which are connected by Local Area Network. User's data is stored in a fileserver with total storage capacity of 8 TB. Two computing clusters with a total of about 250 cores are available for computational needs. A large hybrid computing cluster of nearly 1500 cores (Samkhya) is also available for extensive computational needs. The computer center is accessible 24 hours.

Several softwares, such as Mathematica, Matlab, Maple are available for algebraic computation. For graphical analysis, gnuplot, xmgrace are being used and LaTeX is used for documentation. General scientific library softwares like Scilab, CERNLIB are available. Several laser printers with network printing facility are available for general use. Internet access is available in academic and administrative offices, laboratories, library, hostel, guest house and in residential quarters. Institute of Physics is a node in National Knowledge Network (NKN). In addition, Institute of Physics is also a node under ANUNET and is directly linked to other ANUNET nodes by VSAT link.

Stores: Office stationery needed for carrying out your work is available with the stores. Printing and xerox facilities are also available.

Medical: A dispensary with a nurse and a visiting doctor is located on campus. Scholars are entitled to medical facilities as per standard norms. The timings of the dispensary are as follows.

7:30 AM - 10:30 AM and 3:00 PM - 7:00 PM : All working days 7:30 AM - 12:30 PM : Saturdays

Closed : All Sundays and declared holidays.

Availability of Doctor.

5:00 PM - 7:00 PM : All working days 8:00 AM - 10:00 AM : Saturdays

Availability of Nurse Ms. Prativa Nayak:

7:30 AM - 10:30 AM and 3:00 PM - 7:00 PM : All working days 7:30 AM - 12:30 PM : Saturdays

Bank: A branch of Indian Overseas Bank is located adjacent to the campus. You are required to open an account in order to receive your fellowship from the Institute.

Sports and Recreation: A few indoor sports facilities and a small gym is available in the sports room adjacent to the hostel. Outdoor sports facilities include courts for lawn tennis, badminton, cricket, football and volleyball.

The Institute campus is a nice and beautiful campus full of flora and fauna. It boasts of large number of tree and bird species. We hope you will find your stay in the campus enjoyable. You will find other residents friendly and approachable. You are welcome to discuss with faculty members, fellow scholars or postdoctoral fellows any difficulties you may encounter during your stay. You may also approach the administrative staff for help. We shall make every effort to make your stay here comfortable, so that you can devote maximum time to your academic pursuits.

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