

GUIDELINES OF Ph.D. PROGRAM AT NCL, PUNE

The following guidelines will govern the admission to the Ph.D. program at NCL with effect from 1st January, 2005. The requirements and guidelines of the Ph.D. program at NCL, will take effect retrospectively with effect from 1st July, 2004.

1. Admission/Recruitment procedure of Junior Research Fellows(JRF) :

The JRF will be admitted to National chemical Laboratory, Pune (NCL) for working towards the Ph.D. degree through a centralized selection procedure. Advertisement for admission to Ph.D. program in different areas of research will appear in leading newspapers twice a year usually in the months of December and June. Selection will be made through an interview process. The candidates, who have qualified for NET examination under CSIR/UGC quota, shall be eligible to apply for the interviews, which will be held in the months of January and July. Interview will be conducted by a duly constituted selection committee consisting of subject experts from academia. The number of candidates to be selected in different areas of research will depend partly on the needs as well as vacancies in each Division. This number will be roughly equal to the number of Ph.D. students, who left NCL during the period before last advertisement and will be finalized in consultation with the HOD's and the recognized Ph.D. supervisors.

Selected candidates will have to give three or more options, in order of priority, of scientists at NCL under whom they would like to carry out their research. A brief profile of all active Ph.D. supervisors with their areas of interest and recent publications will be made available to all students at the time of the interview. More detailed personal biography of scientists will be available in the Academic web page of NCL to be launched soon. Depending on the vacancy available with these scientists (Ph.D. supervisors) and the order of priority of selected candidates, the choice of Ph.D. supervisor for each candidate will be made. The

selected candidates will have to join NCL within one month of issue of admission letter.

Selection of candidates will be made separately for each division /area, as is necessary. A merit list of candidates will be made for each division/ area. In case any selected candidate does not join for a specific division / area, the next candidate in the list in order of merit will be offered the admission.

2. Admission/Recruitment procedure of direct Senior Research Fellows (SRF):

2.1 Direct admission of SRF to NCL will continue as per the existing norms through the interviews conducted by CSIR. Those candidates, whose application forms are forwarded through Ph.D. supervisors of NCL and who qualify in the interview conducted by CSIR, will be eligible for admission to NCL as SRF (direct).

3. Requirements to be fulfilled during the Ph.D. Program

3.1 Every batch of students joining the Ph.D. program at NCL will undergo a three day orientation session, which will provide an introduction to the laboratory, its systems, procedures and functioning, safety, security, scientific ethics, scientific record keeping and access to scientific information. Participation in the orientation program is compulsory.

3.2 Course work: Each student (JRF as well as selected through direct SRF scheme) is required to complete at-least one credit course that is offered by NCL, appropriate to his/her research area, before his/her application for Ph.D. registration/Ph.D. synopsis, whichever is earlier, is forwarded to University of Pune or any other university, where the candidate wants to

register. This requirement can be waived in case the student is registered at one of the IITs or UICT and has completed their course requirements as part of the Ph.D. registration in that particular institute/university. Completion of a credit course includes attendance in lectures, appearing for the exams and receiving a qualifying grade. In case a student fails to receive a qualifying grade in the course, he/she will be offered an opportunity to reappear in the exams at the next possible opportunity. A second failure may result in the termination of admission to the Ph.D. program at NCL. This whole process has to be completed within two years of the candidate joining the Ph.D. program of NCL. Courses will be offered in various disciplines of relevance, for example, physical and materials chemistry, polymer science and engineering, organic chemistry, life sciences, catalysis etc. Course work is a compulsory requirement also for the existing students, who have joined NCL after July 1st, 2004 for Ph.D. Special modules of courses will be offered from time to time depending on the requirements to enable students joining inter-disciplinary field of research to advance their knowledge.

- 3.3 The research guide is required to constitute an Academic Committee (AC) approved by the Director or his designated nominee within a year of the student joining NCL. The AC will comprise of the guide, one internal (NCL) expert and one external expert. The constitution of the AC will not be changed during the tenure of the student's stay at NCL, except with the permission of Director, NCL. AC will evaluate and certify progress made by the student including JRF to SRF upgradation and periodic evaluations, right upto the pre-synopsis seminar.
- 3.4 Each student will be required to present at least two seminars (open to the NCL community) during their stay at NCL. These seminars will be organized and advertised by the research supervisor, and must be evaluated by the research supervisor and the internal expert on the AC. A

copy of the evaluation by the AC must be submitted to the Office of the Student Academic Committee within two weeks of each of the seminars.

- 3.5 The first of these two seminars should be completed before the student registers for Ph. D. degree. This can be on the general subject area of research emphasizing the proposed research for Ph.D. degree. Prior to the submission of the synopsis, the student is required to present the second open seminar on the topic of his/her thesis. In addition, the student is required to give a pre-synopsis talk, as per the regulations of the University.
- 3.6 The students, aspiring to do Ph.D. at NCL through direct SRF selection by CSIR, will also be subjected to all of the above requirements.
- 3.7 Approval to register for Ph. D. degree in any University is provisional until successful completion of
 - a) At least One credit course work, as specified in para. 3.2
 - b) One general open seminar, evaluated and approved by AC,
 - c) Any other requirements, specified by the University.
- 3.8 Approval to submit the doctoral thesis for evaluation by the university will be given by the HOD only upon completion of the following documents:
 - The successful course completion certificate, or a grade/report card from IIT or UICT certifying that all required courses have been completed.
 - Reports of the evaluations by the Academic Committee.
 - A letter from the research supervisor certifying that the student has completed two seminars and the pre-synopsis talk evaluated by the AC.
 - Any other requirements, specified by the University.

4. Incentives to students

4.1 Depending on the academic performance several incentives will be offered to meritorious students. These include cash/kind awards, travel grants to conferences within India or abroad, research grants etc. Students will be evaluated for their excellence at several stages, viz., academic performance, quality of thesis, overall performance etc.

5. Office of the Student Academic Committee

5.1 A separate Office of the Student Academic Committee is proposed to be created to monitor all aspects of the Ph.D. program of NCL. The Office will carry out its duties in liaison with the NCL's Administration Department.

5.2 The Office of the Student Academic Committee will be responsible for advertisement of the admission of students for Ph.D. program at NCL and constitution of selection committee with the necessary approval of the Director. The Office will maintain records of Ph.D. students roll Division wise and supervisor wise. The Office, in consultation with the Heads of Division and Ph.D. supervisors will decide on the total number of Ph.D. students to be admitted to each Division in a particular round of admission. A merit list of a larger number will be recommended by the selection committee for every Division, so that in case anyone selected does not join NCL, the next candidate in the merit list may be offered admission. The Office will also keep a record of the SRF (Direct) candidates selected through interview held at CSIR.

5.3 The Office will maintain the records of each Ph.D. student, including course work evaluations, records of seminars presented by the students, evaluations / reports of the AC, and verify the requirements fulfilled as

specified in point 3. The research guide should send the AC evaluations and reports within one week after these are completed. Only after the verification of documents and requirements by the Office, Director or his designated authority will approve the registration papers to the University for Ph.D. or submission of synopsis. A centralized web enabled data base will be maintained for every student, which will contain all information, personal, academic and right upto thesis submission.

- 5.4 The Office will also administer the incentives to students as specified in point 4.1.