

Guidelines for the Preparation of Research Proposal, Research Progress Reports, Presynopsis Reports, and Synopsis

1. Scope:

These guidelines cover all the progress presentations that are required of a candidate registered for the Ph.D. degree in the Department of Chemical Engineering and the Presynopsis seminar.

Research scholars of the Department should also consult the Guidelines for the Preparation and Presentation of Seminar and Project Reports, separately issued by the Department for useful information on referencing style tips for preparing OHPs, etc.

2. Schedule of Progress Seminars:

Each research scholar is required to present a report on his/her progress of Ph.D. research once every six months, viz., in January and July every year. The first progress report is to be submitted at the end of the semester in which the student registers for Ph.D. (i.e., one semester after completion of course work). This progress report is the "Research Proposal" guidelines for which are given in section 3. Copies of the written progress report, one for each member of the RPC must be submitted in the Departmental Office, latest by 31 December for the January meeting and by 30 June for the July meeting.

An oral presentation should be scheduled during the following month (i.e. January and July) is consultation with the RPC members and guide(s). The July presentation will be a formal, open seminar, advertised well in advance. The format of the January presentation may be decided upon in consultation with the RPC members. However, presentations given for the purpose of enhancement of scholarship shall be formal seminars, irrespective of when they are given.

External Ph.D. candidates are required to give at least one formal seminar in the department every year (in July). The second meeting may be held at the work place of the candidate with the internal supervisor(s) being present. The schedule for research progress presentation should be adhered to even if the presynopsis seminar is likely to be held around the same time. These two seminars have different purposes and one cannot substitute for the other. The written reports for these seminars should also be separately prepared. However, the research progress seminar may substitute for a scholarship enhancement seminar provided the above schedule is followed.

Each guide should maintain a progress file for every research scholar registered with him/her containing the following:

- a) Details of registration, scholarship renewals, extension, enhancement, etc.

- b) Copies of research progress reports
- c) Copies of RPC evaluation reports

Appropriate blank forms for these records, will be made available to the guides.

3. Format for Research Proposal:

Every Ph.D. student is required to write a research proposal after one semester of research work. The objective of the proposal is for the student to define the Ph.D. research problem based on a survey and critical analysis of the literature. In addition to a written report the student is required to present the proposed work in an open seminar and defend it.

3.1 Length:

The proposal should not be more than 30 typed pages (excluding figures, tables and references) typed with double spacing and should be bound.

3.2 Contents:

Introduction giving an overview of the area of study and its importance.

Literature review giving a comprehensive account of the state-of-the-art in the subject, and identifying the gaps in the knowledge.

Problem definition stating the scope and objectives of the work in detail.

Approach giving the proposed methodology for achieving the objectives of the project, with approximate time schedules. A detailed outline of the work plan for the following six months should be given.

4. Format for Progress Reports:

4.1 Length:

The progress report should not exceed 12 typed pages (excluding figures, tables and references) typed with double spacing and need not be bound. The report could be longer in special cases, for example, in the case of the enhancement seminar.

4.2 Contents:

The title page of the report should include the following information in addition to the title of the work, the name of the candidate, etc.

- a) Date of registration/joining the Ph.D. Programme
- b) Date of the previous progress seminar.

The report should begin with a brief Introduction which should include a general introduction to the problem, the major aims of the research, a pointwise summary of the work done to date and the detailed scope of the work described in the report.

The main text of the report can be organised as best suited for the work being reported.

The report should end with a Conclusions section which should include:

- a) the major conclusions of the work described in the report
- b) the extent to which the aims set out in the proposed plan of work for the previous six months have been fulfilled
- c) the proposed plan of work for the next six months.

4.3 References:

The referencing style given in Guidelines for the Preparation and Presentation of Seminar and Project Reports should be followed.

4.4 Figures and Tables:

These should appear on separate pages and should be inserted after the page with the first reference to the figure/table. Descriptive figure and table captions are recommended.

5. Format for Presynopsis Reports:

The Presynopsis Report is a detailed compilation of the entire work done during the course of the Ph.D. Its purpose is to help assess whether sufficient work in terms of quantity and quality has been done that a thesis can be submitted for examination.

The presynopsis report may be the entire thesis though this is not necessary.

5.1 Contents:

The report should contain

- a) a one-page Abstract summarising the work done and the major results
- b) an Introduction with a detailed definition of the problem, motivation for the study and the objectives and scope of the present research.
- c) a Literature Survey in which the current status and gaps in knowledge with particular reference to the work carried out in the thesis are highlighted.
- d) the main body of the report may be structured as best suits the work described.
- e) a Conclusions chapter in which a summary of the significant findings is given.

In case the thesis work is divided into sub-problems and a single chapter on literature review is considered inappropriate, the literature review may appear as sections in each of the relevant chapters in the main body of the report.

5.2 References:

The referencing style given in Guidelines for the Preparation and Presentation of Seminar and Project Reports or the Institute guidelines for the preparation of Ph.D. theses should be followed.

5.3 Figures and Tables:

These should appear on separate pages and should be inserted after the page which makes the first reference to the Figure/Table. Descriptive figure and table captions are recommended.

6. Format for Synopsis:

The objective of the synopsis is to enable the prospective examiner to decide whether or not he would examine the thesis.

6.1 Length:

The synopsis should be between 1000 and 4000 words in length and must be typed in double spacing. Figures and tables may be included if considered absolutely necessary.

6.2 Contents:

The synopsis should contain a brief account of the existing knowledge in the topic of research and the gaps in this knowledge which motivated the study. Only the key references needed to establish this must be cited. The objectives set out for the research should be listed and the methodology followed towards achieving these objectives must be described. Finally, the synopsis should clearly bring out the contributions of the research carried out and the salient conclusions arrived at.

The synopsis must be divided into subsections with titles.

6.3 References:

The referencing style given in “Guidelines for the Preparation and Presentation of Seminar and Project Reports” or the Institute guidelines for the preparation of Ph.D. these should be followed.

6.4 Figures and Tables:

These may appear along with the running text and should have descriptive captions.

June 4, 2003