



## Guidelines: Thesis Concept Paper

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### 1. Objective

The first step of conducting a PhD thesis work includes the preparation of a concept paper. This paper provides a clear summary of the research project and enables the reader to understand what the researcher is investigating, why it is important, and how the investigation will proceed. Since the research agenda for completing the PhD thesis is described, the concept paper is an important milestone for successfully completing a dissertation.

The concept paper has to meet certain content and format standards (2. and 3.). It should be prepared within the first three to six month of the project period in consultation with the primary supervisor. The thesis committee critically reviews the concept and proposes changes and improvements if necessary. A copy of the concept paper will be filed in the Office of the SFB/TRR 51.

### 2. Content

#### Title

The concept paper starts with a preliminary title of the thesis which is concise and informative.

#### Name

The name, postal address, telephone numbers, and e-mail address of the author and of the primary supervisor as well as the name and address of the institute where the work is/will be performed are mentioned.

#### Summary

A summary includes a brief overview on what is already known about that topic and a clear description of the problem to be investigated by the PhD student. The proposed design of the thesis research concerning the methodology and time frame are also described. This section should include less than 200 words.

#### Background and significance of problem

This chapter of the concept paper should introduce the problem to be addressed in the investigation. The statement might include trend data from different references to describe why the research is being undertaken and how it will help to work setting. Some information indicating the possible or probable cause of the problem and its impact also should be addressed. In addition, the purpose of the study has to be stated.

#### Literature review

The study of relevant literature is an essential element of any research work. All available library resources, including books, journal articles, dissertations, and conference proceedings, should be considered. The student identifies the major literature that generally supports and validates the proposed topic of his/her PhD thesis. The brief literature review sustains the connection between the current literature and the statement of the problem.

**Hypothesis**

A hypothesis is formulated to describe the particular question(s) that will be addressed in the research work. It reflects the problem that the PhD student wants to investigate in a certain period of time. Research questions are focused, clearly formulated and based on theories, previous research, professional experience, and practical need. They are important since they drive the research methodology that will be applied in the study.

**Expected outcomes**

This section includes expected results of the study. The importance and sense of conducting the research work as well as the possible impact on practice and theory should be outlined.

**Methodology**

Primary methods to be utilized for addressing the research question(s) and a brief explanation for their appropriateness are described. An overview of strategies for analyzing the data also should be mentioned.

**Time line**

The concept paper includes a time line for all planned activities and events to facilitate completing the PhD thesis within the program time frame. The schedule should demonstrate that the length of time for the implementation will be suited to the nature of the problem and that the research work is manageable to be successfully completed.

**References**

Please ensure that every reference cited in the text is also present in the reference list. Reference citations in the text follow the name and date system. All references are listed in the last section of the concept paper which is prepared according to the instruction for authors of *The Journal for Microbiology*. For web references, the full URL should be given and the date when the reference was last accessed.

**3. Format**

Type all of the manuscript is single spaced. The font size should not be bigger than 11.

Abbreviations should be avoided, but if necessary, they must be defined the first time they are used in the main text.

The concept paper is written in English, in British or American spelling of uniform use. Authors who are unsure of correct English usage should have their manuscripts checked by someone proficient in the language.