

## **Guidelines for the assignment as faculty opponent and the procedure of the dissertation defense**

The information below constitutes local guidelines for a dissertation defense for the doctoral programs “Biotechnology” and “Theoretical Chemistry and Biology” given at the School of Engineering Sciences in Chemistry, Biotechnology and Health (CBH), KTH Royal Institute of Technology.

### **Local guidelines regarding the responsibilities of the faculty opponent**

1. The opponent is expected to read the thesis carefully, and prepare a set of questions intended as a basis for his/her discussion with the respondent (PhD student) during the thesis defense.
2. The main supervisor may ask the opponent to give a brief introduction (10-15 min) where the research topic of the thesis and the respondent’s contribution is placed in a bigger context. Although this is not a strict requirement at KTH, it is always greatly appreciated by all parties involved since it adds extra weight and acknowledgement to the student’s work. It should be emphasized that the opponent is *not* supposed to present a summary of the thesis.
3. The questions should focus on the contents of the thesis, and not take the form of an interrogation on general knowledge, except when needed to clarify a specific issue.
4. There is no formal rule for the order in which the contents of the thesis should be addressed and discussed. The most common approach chosen by the opponent is to start with the summary and continue with the papers in the order that they appear in the thesis. However, the choice of approach is at the discretion of the opponent, according to his/her preferences.
5. To stimulate an intellectually productive discussion where both parties feel relaxed, it is recommended that the discussion is kept informal and constructive. The duration of the discussion is typically 1 to 1.5 hours.
6. After the closure of the public defense, the opponent will participate in a meeting with the examination committee, during which the opponent is asked to give his/her impression of the quality of the thesis and of the discussion. Opinions and criticism should be kept constructive.
7. The opponent receives a remuneration of 9000 SEK (as of June 2018) for the assignment, plus coverage for travel and accommodation costs.
8. There is no formal KTH guidelines regarding dress code, and this is normally agreed upon between the opponent, supervisor and respondent.

### **Local guidelines regarding the procedure for the dissertation defense**

The dissertation defense is open to the public. The parties at a dissertation defense include the opponent, the respondent, the members of the examination committee, the chair of the dissertation defense (hereafter referred to chair), and normally the supervisors, as well as the general public and colleagues in the audience. There are no strictly defined rules regarding the form of the act, but it typically follows the scheme below.

1. The chair welcomes everyone present and gives a brief introduction of the respondent, opponent and examination committee. This introduction varies in content and length.
2. The chair informs the auditorium of the procedure of the public dissertation defense.

3. The chair gives the respondent the opportunity to comment on possible errors in the thesis (errata list).
4. If previously agreed upon, the chair now invites the opponent to give a brief introduction to the field of the thesis.
5. After the introduction (if applicable), the respondent presents the thesis succinctly, including an introduction, the questions at issue, the results, and relevant conclusions (typically no more than 30 min).
6. Following the student's presentation, the opponent and respondent engage in a discussion about the thesis, which typically lasts for about 1-1.5 hours. The examination committee and audience are not allowed to ask questions during this part of the dissertation defense.
7. When the opponent has ended the discussion with the respondent, the chair invites the members of the examination committee to ask questions to the respondent. The examination committee is the decision-making authority, not the opponent. The task of the committee is to evaluate how well the respondent addresses the opponent's questions and engages in the discussion, and to ask additional questions on those parts that need further clarification.
8. When there are no more questions or comments from the examination committee, the audience is invited to ask questions and make comments. At this stage, everyone is free to participate in the discussion.
9. The chair closes the dissertation defense by thanking the opponent and respondent on behalf of KTH. The completed dissertation defense act normally lasts for 2-3 hours.
10. The examination committee convenes immediately after the defense act. The opponent and principal supervisor and co-supervisor (if relevant) should attend the meeting, but have no votes in the formal decision. The standard procedure for the committee meeting is as follows:
  - The chair asks the committee members to elect a coordinator among themselves, and then gives the word to this coordinator.
  - The coordinator first addresses the opponent who is asked to give his/her impressions of the thesis and the discussion.
  - The main supervisor is then given the opportunity to describe the development of the respondent towards becoming an independent researcher, and to clarify the respondent's scientific contribution to the papers/manuscripts of the thesis, including the writing process.
  - The coordinator addresses the other committee members to collect their impressions. Note that if, at any time and for any reason, the committee prefers to confer in private, the coordinator can ask the chair, opponent and supervisor(s) to leave the room.
  - At the end of the meeting, all committee members state individually their recommendation whether to pass or fail the thesis.
  - The decision of the examination committee is documented in a protocol, which is signed by all committee members, and directly handed to the chair. In case the committee is not unanimous in passing the thesis, or if the thesis is failed, the reasons should be entered in the protocol or documented elsewhere. By this, the meeting is closed.
11. After the meeting, the coordinator of the examination committee announces the decision in person to the respondent.