Guidelines for opponents of doctoral dissertations

Aalto University School Chemical Engineering
Doctoral Programme Committee

According to the Degree Regulations of the School of Chemical Engineering, a doctoral dissertation may consist either of a single monograph or of several publications or manuscripts accepted for publication, supplemented with a compendium of these publications summarizing the goals, techniques and findings of the research. The articles may include co-authored publications, provided that the doctoral candidate has created independent contributions to them. A publication here is taken to mean a refereed (peer reviewed) scientific article which has been published or accepted for publication in a scientific journal or other refereed printed work.

The school shall appoint one or two opponents to examine the dissertation.

Tasks of an opponent

The dissertation will be publicly defended. When examining the doctoral dissertation, the opponent will take into account the dissertation as well as merits shown by the candidate in the public defence, and on the basis of both of these will propose to the department that the dissertation be accepted (or rejected). The opponent's task is to establish whether the dissertation fulfills general quality requirements. Therefore, particular attention should be paid to the following aspects:

1. A dissertation must contain new scientific findings in its area of research.
2. Methods, experimental set-ups, measurements, and the data presented in a dissertation should withstand the scrutiny appropriate to scientific research.
3. The author is to present his/her achievements and assertions clearly and scientifically.

In his or her final statement on a dissertation, the opponent should estimate whether the candidate's contribution to the dissertation has been sufficient. The opponent should approach an article dissertation as a whole, regardless of the fact that separate articles have been accepted for publication in refereed series. It is required that an article dissertation, examined as a whole, fulfill the scientific requirements of a scientific dissertation. When examining a dissertation, the opponent should compare it against the standard of the dissertations accepted in his/her own university. The final statement should include this assessment statement of the scientific quality of pre-examined manuscript compared to other recent dissertations accepted by opponent's own university within this field of study. The scientific quality refers to knowledge of major theories and recent research within area, originality, contribution to the field and the quality of research presented by the manuscript.

The grade used for accepted dissertations at the School of Chemical Engineering is pass. Only the rejected dissertations are marked with fail.

The opponent(s) is (are) requested to give a written statement on official letterhead concerning the dissertation and its defence within two weeks of the public defence. Please include the evaluation table with your statement. On receipt of this statement, the Doctoral Programme Committee decides on the approval of the dissertation. Based on opponent’s statement and pre-examiners’ statements, the best scientific dissertations are possibly awarded with prize or award for excellence.
Evaluation table for pre-examiners and opponent(s)

Answer to these four points by selecting one of choices (Top 20%, Pass or Fail)

<table>
<thead>
<tr>
<th>General quality requirements for doctoral thesis manuscripts</th>
<th>Your evaluation of this thesis:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opponent__________________________</td>
<td>Mark only one box on each row</td>
</tr>
<tr>
<td>Doctoral candidate______________</td>
<td>Top20% (Excellent) Pass Fail</td>
</tr>
</tbody>
</table>

1. Does this dissertation contain new scientific findings in its area of research?  

2. Consider the methods, experimental setups, measurements, and the data presented in this dissertation and defence. Do they withstand the scrutiny appropriate for scientific research?  

3. Does the doctoral candidate present his/her achievements and assertions clearly and scientifically?  

Compared to other recent dissertations accepted by your university or within similar areas of research, is this manuscript in your opinion Top20% OR Pass OR Fail?