



Instructions of the doctoral committees for the preparation of dissertations

(for individual doctorates at the faculty, outside BayNAT)

Status: 01.03.2023

1. Dissertation format

The doctoral regulations only permit two formats: the monograph (A) and the cumulative dissertation (B). Mixed formats are not permitted. The doctoral candidate should declare at the front of the dissertation thesis which format it is (see sample).

The first chapter of every dissertation is the summary. It provides brief information about the problem and the findings and, in the case of cumulative dissertations, is to be understood in addition to the detailed synopsis. A German and an English summary are required, each containing no more than 800 words. Illustrations should only be included if they represent an informative added value (e.g. complex structural formulae in organic chemistry); the number should be limited to the absolute minimum necessary.

A Monograph:

The **monograph** is an independent scientific achievement of the doctoral candidate that contributes to the solution of scientific questions and leads to new scientific findings. If the contents of the dissertation have already been published, a statement to this effect with details of the publication must be included in the front of the dissertation. A list of publications may also be included.

B Cumulative dissertation:

The decision as to whether or not a submitted doctoral thesis meets the requirements for a cumulative dissertation is made by the respective doctoral committee.

The **cumulative dissertation** combines several individual scientific theses of a doctoral candidate. It should follow the following structure:

- a) Summary in German and English: See above
- b) Introduction: This usually describes the state of research and the problem/questions of the dissertation. The introduction may also include a subchapter describing any related, special, experimental or theoretical methods beyond what is noted in the experimental section of the individual papers.

- c) Synopsis: This is a detailed summary that puts the individual publications (manuscripts) into context and makes clear the "red thread" that runs through the individual papers. It is recommended that the introduction (b) and the synopsis together should be (at least) 20 pages, with the synopsis usually making up the larger part.
- d) Own contribution: Detailed description of the own contribution of the doctoral candidate and all co-authors to the manuscripts. All manuscripts should be listed together in a single list.
- e) The scientific manuscripts: On the part of the doctoral committees, it is recommended that at least three completed manuscripts be submitted at the time of submission, at least two manuscripts should have been submitted to recognised scientific journals that maintain a peer review process, and at least one manuscript of these should also have been accepted/accepted. Reports (research reports, work reports) are not individual papers in the sense of a cumulative dissertation. Manuscripts must meet all the requirements that are usual for peer-reviewed papers in every respect. The status of the manuscript, whether submitted, accepted or already published and in which journal, must be indicated. For submitted manuscripts, the manuscript number assigned by the journal should be indicated. The work can be presented as a manuscript or as a copy of the printed image, in which case the "copyright" must be observed. In addition, care must be taken to ensure good readability by using a high resolution. In the case of inserted journal versions, the dissertation's own consecutive page numbers must be inserted in addition to the page numbers of the original publication. In manuscripts, figures and tables should appear at the appropriate place in the text and not collected at the end of the manuscript. "Supporting information" that is submitted with the manuscript but does not appear in the printed version should be placed directly after the respective manuscripts.
- f) A list of all own publications should follow the manuscript section. Publications that were not included in the dissertation should be marked.

2. Illustrations/graphical representations

The font size of figures and tables must be chosen so that they are easy to read. For microscopic images, a size scale must be given. When using illustrations that have already been published, the "copyright" must be observed and indicated.

3. Citations/modes of citation

The cited literature must be listed completely and uniformly in a bibliography in the usual manner of citation, i.e. with all authors, title of the work, year of publication, name of the journal, year, beginning and possibly end pages.

4. Assessment and testing

The doctoral candidate may propose reviewers and examiners. The reviewer who is not the supervisor should not be significantly involved in the completion of the thesis (e.g. as a co-author in publications); he/she should be requested in advance. In the case of external reviewers and examiners, a justification for their selection must be submitted and it must be clarified in advance whether they are willing to travel to Bayreuth for the colloquium if necessary and who will cover the travel costs. When selecting

the examiners, care must be taken that they do not only come from the narrow subject area of the dissertation, so that the breadth of the entire subject area is represented. Ultimately, the doctoral committee makes the decision on the selection of the reviewers and examiners. It does not have to follow the doctoral candidate's proposal.

5. Print specifications

The dissertation is to be printed double-sided, paper size A4.

Please contact the Dean's Office personally if you have any additional questions and for individual advice on the formal requirements for submitting your dissertation.

Sample second page for the submitted version of the dissertation

This thesis was written in the period from *(month/year)* to *(month/year)* in Bayreuth at the research group *(Lehrstuhl)* under the supervision of Professor Dr. *(Vorname Nachname)*.

Form of the dissertation: Cumulative dissertation/monograph

Dissertation submitted on:

Admission by the doctoral committee:

Scientific Colloquium:

Acting Dean: Prof. Dr.

Committee:

Prof. Dr. (Reviewer)

Prof. Dr. (Reviewer)

Prof. Dr. (Chair)

Prof. Dr.

(Prof. Dr.)

(Further reviewer: Prof. Dr.)

Example: Third page for the submitted version of the dissertation (only necessary for monographs)

The presented dissertation is written as a monograph.

The following papers originated from this dissertation:

Morphology control of extruded polystyrene foams with benzene-trisamide-based nucleating agents

M. Aksit¹, **B. Klose**¹, C. Zhao, K. Kreger, H.-W. Schmidt, V. Altstädt, *J. Cell. Plast.*, **2019**, 55, 249–261 (1 contributed equally to this work)

DOI: 10.1177/0021955X19837508

Diese Publikation ist in der vorliegenden Arbeit mit der Literaturstelle [67] zitiert.

Extruded polystyrene foams with enhanced insulation and mechanical properties by a benzene-trisamide-based additive

M. Aksit¹, C. Zhao¹, **B. Klose**, K. Kreger, H.-W. Schmidt, V. Altstädt, *Polymers* **2019**, 11. (1 contributed equally to this work)

DOI: 10.3390/polym11020268

Diese Publikation ist in der vorliegenden Arbeit mit der Literaturstelle [68] zitiert.

Kinked Bisamides as Efficient Supramolecular Foam Cell Nucleating Agents for Low-Density Polystyrene Foams With Homogeneous Microcellular Morphology

B. Klose, D. Kremer, M. Aksit, K. P. van der Zwan, K. Kreger, J. Senker, V. Altstädt, H.-W. Schmidt, *Polymers*, **2021**, 13(7), 1094.

DOI: 10.3390/polym13071094

Diese Publikation ist in der vorliegenden Arbeit mit der Literaturstelle [191] zitiert.