

Instructions for authors (Bachelor, Master, Ph.D.)

There are many ways for writing scientific texts, but I think it makes sense just to follow the instructions for papers in international journals. They are meanwhile all quite similar and are structured as follows:

Title: Should reflect your main findings. “Molecular analysis of *Aspergillus nidulans* light regulation” or “Analysis of recombination in *Arabidopsis thaliana*” does not mean much and fits for all works of those groups. However, the title should still be easy and understandable.

Content: Should fit on one page (2 for Ph.D.s). Normally there are too many chapters in Material and Methods and this extends over more than a page. You almost miss the chapters of the results section. If on one page you describe growth Miniprep, DNA restriction and Agarose gels, then this can be one chapter and not three. Try to combine things in order not to have too many chapters.

Abbreviations: This is a scientific work and does not need to explain DNA, RNA, PCR, or H₂O to the reader. Species names also do not appear here. Neither abbreviations such as etc., e.g. In many journal there is the rule only to put expressions into this section, which appear more than 5 times in the document. Typical example. SDS. In many works it only appears once in the Mat. and Methods section. There is no need to put it into the abbreviations section, just spell it out in Mat. and Methods.

Abstract: Should fit on one page, for a Ph.D. perhaps two pages. Starts with a short introduction, then results with numbers and values etc. At the end a concluding sentence with the main finding. In all (most) journals the Abstract appears before the Introduction, not at the end.

Introduction: Should introduce the own work and not summarize all what is known. A work about phytochrome light regulation in *A. nidulans* should not summarize all aspects of polarized growth in fungi, everything about pathogenicity etc. Original references should be cited, in addition to some recent reviews.

Materials and Methods: This section can appear here, or like in many other journals, after the Discussion. It should contain all necessary information, but should not be too long.

Results: It should start with a short introductory paragraph with some introduction to the experiments. The first chapter should not be entitled: Determination of the protein concentration. Of what? What for? One needs to understand why and how the experiment was done. Also do not forget the *How*. The reader does not want to go for every detail to the Mat. and Methods section.

Only describe the experiments, which contribute to a story. Try to reduce the figures to the main ones, which tell the story. The reader should be able to follow the story almost without reading the main body text but just look at the figures and the legends.

Figure legends should be informative and not just contain a title. Of course many of the experimental details have been described in the Mat. and Methods section, but in the Figure legend the reader needs e.g. the exact amount of protein, which was loaded on the gel in this particular experiment. Figure legends are under the figure. Table legends above the table.

Discussion: This should not be a repetition of the Results section. In contrast, some important results should be repeated, but then discussed in the light of the whole work and other existing other results and the available literature. The discussion is the part of the thesis that particularly shows the scientific capabilities of the authors, since it is not a simple renarration like the results part. If it is too short and does not connect the own results with other maybe distantly related findings it might show that the other did not really think about what she/he was doing and that maybe somebody else thought for her/him. In other words, if the Discussion simply repeats the results and the Discussion is only about experiments that did not work, this is an indication that the Ph.D. qualifies for *gut*, but normally not for *sehr gut*.

References: There are very strict rules in every journal how to format the references. You can follow any, but a good starting point is the one from *Microbiology* (see below). There is the tendency today to just import citations from pubmed. These references need to be formatted all in the same way. Titles should not contain capital letters as many titles in the published papers do. Journal names should be abbreviated if they are more than one word. E.g. *Nature*, *Science* are not abbreviated. *The EMBO Journal* is abbreviated: *EMBO J*. Also abbreviate them with dot or without, but all the same.

Papers with one or two authors:

In text citation: (Zekert & Fischer, 2009)

Reference:

Zekert, N. & Fischer, R. (2009). The *Aspergillus nidulans* kinesin-3 UncA motor moves vesicles along a subpopulation of microtubules. *Mol Biol Cell* **20**, 673-684.

Paper with several authors:

In text citation: (Rodriguez-Romero *et al.*, 2010)

Rodriguez-Romero, J., Hedtke, M., Kastner, C., Müller, S. & Fischer, R. (2010). Fungi, hidden in soil or up in the air: light makes a difference. *Annu Rev Microbiol* **64**, 585-510.

Students often question the strict rules for citations. As a reviewer I say that a sloppy references section wakes the reviewers or professors attention that some other parts of the thesis might be as sloppy too. Hence, I recommend putting special attention on the style of the references and to make sure that everything is referenced that has to be.