



Professor Dr. Johann Plank

TU München
Chair of Construction Chemistry

Ethical Principles in Writing Papers and in Presentations

Nowadays, many papers are submitted for publication in scientific journals. Being a reviewer of such manuscripts for over 25 years I would like to share some experience and provide guidelines for authors on ethical standards which they should observe.

At first it will be discussed which experimental data are suited to be included into a paper and which do not qualify from the point of reliability and ethics. Furthermore, that authentic, non-modified spectra and printouts as received from the instrument should be shown. Also, the extent of disclosure of details of test protocols allowing reproduction of results will be addressed. Important results need to be verified by repeating them several times and showing error bars etc. to confirm accuracy.

Another important point is how to cite relevant literature and give credit to original works instead of to followers. Any form of nepotism has to be avoided and examples will be discussed.

In order to confirm the novelty of a work to be submitted, a comprehensive literature survey on the subject needs to be conducted before writing a paper. Any relevant works need to be cited honestly even when they are close to your own topic and therefore reduce the value of your paper. In case that other works have presented the same as is the subject of your paper, then publication of your paper is no longer possible.

An important question is authorship. Only the researchers who actually participated *with significant input* into a work should be cited, and listing of the entire team of an R&D group should be avoided, as it disguises the identity of the main researcher and contributor.

Also, affiliation needs to be stated with respect to where the author(s) actually have performed the work.

Finally, the ethical use of information gained from the work and ideas of others, and the topic of plagiarism will be discussed. Some typical examples of plagiarism will be introduced and the “Principles of Good scientific Practice” as required by DFG for example are explained.

Overall, this course is providing ethical guidelines for young researchers (esp. Ph.D. students) in their scientific research.