The Chemistry Department Faculty Council discussed how generative AI (conversational AI and translation AI) should or should not be used in writing doctoral dissertations or master's theses and developed a nine-point guideline. The English version here is an English translation of the Japanese version using DeepL, with content and terminology checked by several faculty members.

1. There are various opinions about the merits and demerits of using generative AI in education and research. Moreover, the performance and mechanisms of AI are changing rapidly. Be sure to consult with your supervisor about how you should/should not use generative AI when you are writing your dissertation. It is strongly recommended that you do this before you begin writing your dissertation, rather than before you submit it.

2. If you have used a generative AI in the preparation of your dissertation, indicate which AI and how you used it in a separate section at the end of the final chapter or between the final chapter and the acknowledgments, if there is an acknowledgments section.

3. The dissertation is primarily a written text, and the generating AI will produce the text according to your instructions. You are prohibited from submitting the text generated by the AI as if it were written by you.

4. It is not uncommon for an AI-generated document to contain errors that could be described as outright lies. You are responsible for any factual errors in your submitted dissertation or thesis if you fail to check the facts.

5. Even if there are no errors in the generated AI document, the text is a patchwork of words and phrases written by someone else. Even if you do not intend to plagiarize, your dissertation may be judged as plagiarism when it is checked for duplicates using a bibliographic database. While it is acceptable to use information collected by the generated AI, your dissertation is a document that should be written in your own words.

6. Do not cite generative AIs in reference sections because you will not get the same answer when you ask the same question to the same AI. In addition, do not cite references that you have not read. You are encouraged to search the literature database by keywords to find previous studies, but you should not cite based on the title or abstract of the literature you find.

7. It is possible to have an AI create the programs necessary for data processing and graphing. When using programs created by an AI, be sure to check the programs by yourself for correctness and bugs. Instead of processing real data, input test data that you have created for operation verification and check the correctness of the output before using the program. In the unlikely event that an erroneous program is used and leads to an incorrect conclusion, the responsibility for the error lies with you. In addition, state that you used a generative AI to create the program according to Item 2.

8. You may use a translation AI to translate a draft paper written in Japanese into English, to correct draft Japanese into more readable Japanese, or to correct a draft written in English. Check by yourself whether the words and expressions in the sentences translated or corrected by the AI are correct. You should also indicate that you used a generated AI to translate or correct the text according to Item 2, and the same applies if you used a human translation service rather than an AI.

9. There is an important note related to Item 8. Current AIs record the sentences entered by a user and may use them to answer another user. Hence, if sentences containing research results are submitted for language correction, there is a risk that the contents may be leaked to a third party. The extent to which leakage is or is not allowed depends on whether or not the results have already been published as a journal paper, the nature of the research, and the relationship with your collaborating parties. Consult with your supervisor and obtain his/her permission before submitting any text that contains your own research results for language correction.