

Proposal ver. 2024

1. Research Title (not longer than 100 letters in English)
2. Date of Submission to Advisor or Supervisor
3. Name of Student & Target Degree
Name:
Target Degree: Master or PhD
Advisor (Intermediate Supervisor):
 - Supervisor will suggest an advisor depending on the research scope.
4. Title of Review (-> Chapter 2 of the thesis)
5. Relevant Journal Articles ()
 - Choose and attach three papers to clarify the originality of this research
 - 1) Authors, year, title, journal, volume, page
 - 2) Authors, year, title, journal, volume, page
 - 3) Authors, year, title, journal, volume, page

6. Objective of Research and Hypothesis to be Tested

- What do you wish to find out or develop?
- What is your hypothesis to be tested in this research?
- How will your research question advance scientific knowledge and technology?
- Write it as sharp as possible.

7. Knowledge Gap that You are going to Fill (not more than 20 lines)

- Provide the relevant peer-reviewed references in the description.

8. Relevant State-of-the-Art (not more than 30 lines)

- What is the latest scientific knowledge in a focused scope?
- Provide the relevant peer-reviewed references in the description.
- Write it as sharp as possible without general knowledge that is written in books.

9. Flowchart of Your Research in the Thesis (-> A part of Chapter 1)

- Show a flowchart and connections of major components (chapters) in your thesis.
- Indicate the numbers of all the chapters.

10. Approach or Method (not more than 1 page)

- How will you achieve the objective or test the hypothesis?
- Approach can include lab/field experiments, field surveys, modeling, statistical analysis, etc.
- What data will you collect? Where will you do the research?
- What equipment or technical resources will you need?

11. Anticipated Results (not more than 1 page)

- How do anticipated results look like? Provide important graphs and tables with imaginary data.

12. Reference

- Provide a list of the literature you cited in this proposal.

- The **indent** of the reference list should be:

Boltz, J. P., Johnson, B. R., Daigger, G. T., and Sandino, J. 2009. Modeling integrated fixed-film activated sludge and moving-bed biofilm reactor systems I: Mathematical treatment and model development. *Water Environment Research* 81(6), 555–575.

Not like...

Boltz, J. P., Johnson, B. R., Daigger, G. T., & Sandino, J. 2009. Modeling integrated fixed-film activated sludge and moving-bed biofilm reactor systems I: Mathematical treatment and model development. *Water Environment Research* 81(6), 555–575.

That's it. Well done!

Appendix

The following sections need to be filled after qualification.

13. Schedule of Research Activities

- What is the effective monthly schedule of this research?
- A schedule should also include the steps of analyzing results and writing thesis/journal articles.
- Please include plans to present your outcomes in international and domestic conferences.

14. Required Equipment

- List material, equipment, software, and others to be used in this research.
- Clarify items which are not available in our lab at the moment.
- Among them, highlight items which equipment roughly cost more than JPY 100,000-.

15. Risk Management

- If you plan to conduct some laboratory experiment and/or field work, please implement risk management by answering the following questions.
- Otherwise, please state that there will be no laboratory experiment or field work.

(1) List poisonous chemical substances to be used in your experiment and field work.

- Specify steps of your approach in which you plan to use those chemicals.

(2) Have you checked MSDS for the poisonous chemical substances used in your work?

Yes or No (Please attach the printed MSDS of all the poisonous chemicals at the end of this proposal.)

(3) List equipment to be used in your experiment and field work.

- Specify steps of your approach in which you plan to use the equipment.

(4) Any risks present in your experiment and field work?

Yes or No (If yes, please conduct risk management below.)

(5) What are the potential risks? Describe the worst scenarios caused by those risks.

(6) How are you going to reduce each of those risks?

(7) Material Safety Data Sheets (MSDS)

- Attach the relevant Material Safety Data Sheets (MSDS) at the end of this proposal.

16. Curriculum Vitae (CV)

< This section is only for doctoral students. >

- The following format will be used for mid-term and final defenses for your evaluation, and thus please try to update time to time.

(1) Your name

(2) Current affiliation

(3) Email address

(4) Educational history

(5) List of publications

- Peer-reviewed journal papers (including review papers)
- Peer-reviewed international conference papers
(specify whether each of them was peer-reviewed or not)
- Domestic conference papers
- Others

(6) Award and scholarship