北陸先端科学技術大学院大学研究室教育指針
Laboratory Education Guideline

研究室教育指針は、学則第３０条の３に基づき、研究指導の方法及び内容並びに修了までの研究指導の計画をあらかじめ明示するものです。
Based on the Article 30-3 of the general academic rules, the Laboratory Education Guideline is intended to clearly outline the methods and content of research guidance, as well as the plan for research guidance until completion.

氏名 / name： MATSUMURA Kazuaki　　役職 / official position： Professor

1. 研究テーマ / Research Theme

Synthesis, evaluation, and biomaterial applications of functional polymer materials. Specifically, research aimed at applications such as cell and protein protection, scaffolds for regenerative medicine, drug delivery systems, artificial tissues, and organs.

2. 修得が期待される能力 / Competencies expected to be acquired

研究室教育は必修 A 科目（先端）又は研究支援科目（融合）の一部として単位化されており、この欄はそれら科目のシラバス上の達成目標の一部となります。
Laboratory Education is accredited as a part of the Required courses A (Division of Advanced Science and Technology) or Research Support Courses (Division of Transdisciplinary Sciences), and this section constitutes a part of the course goals stated in the syllabus for such subjects.

Basic knowledge of chemistry is necessary for chemistry-based development of biomaterials that will be used in living organisms. This also entails knowledge of biology and medical science. The multidisciplinary approach must include chemistry and polymer chemistry.

3. 研究指導方針 / Research Guiding Principle

Our laboratory aims to understand polymer chemistry from fundamentals to applications, with a focus on its use as biomaterials. This requires not only chemical knowledge but also expertise across diverse fields including biology, medicine, and mechanical engineering. Furthermore, biomaterials cover a diverse range of fields, including artificial organs, regenerative medicine, drug delivery, and biosensors. Our goal is to cultivate students who can enthusiastically acquire the knowledge necessary for research and development in these areas and possess the ability to solve problems from multiple perspectives.
Students develop presentation skills through conference presentations several times a year and cultivate fundamental abilities and discussion skills through weekly laboratory seminars.

4. 研究室活動の内容及び方法 / Content and Methods of Laboratory Activities

☐日次活動 / Daily Activities： Core hours: 10:00-18:00
☐週次活動 / Weekly Activities： Weekly lab meeting
☐月次活動 / Monthly Activities： Monthly individual meeting
☐不定期活動 / Occasional Activities：
Conference presentations (Master's students must present at least once before graduation; Doctoral students must present at an international conference)

5. 年間スケジュール / Annual Schedule

本学の全学共通の年間スケジュールは「履修案内」の「学位取得に至るスケジュール」を参照してください。（本学HP 参照：ホーム＞教育＞履修関係＞履修案内）
Please refer to the “Degree conferment schedule for the master’s program/doctoral program” in the “Degree Completion Guide” for university-wide common schedule (JAIST website: Home >Education>Taking Courses>Degree Completion Guide)

Attend the Polymer Society Conference (May or September)
Attend the Biomaterials Society Conference (around October)
Hokuriku-Shinetsu Biomaterials Society Training Session (around December)