

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 : Yukiko Yamada-Takamura 役職 / official position : Professor

1. 研究テーマ / Research Theme
In our group, we are working on novel nanomaterials called “two-dimensional materials” which are ultimately thin films or sheet-types materials with thicknesses of just a single or a few atoms. We use advanced microscopies and spectroscopies to characterize the crystal and electronic structures of the new materials we have developed.
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.
Master course students will acquire skills to handle complicated experimental apparatus and obtain data within a reasonable time. Through carrying out many experiments, the student will acquire competency to solve problems when the original experimental plan did not work out. Students will acquire skills not only to analyze the data, think, and understand, but also to logically explain to others. Doctor course students will acquire skills to autonomously carry out their own research. They will also acquire the ability to convince someone to collaborate with them based on scientific reasoning. Through presenting their research results at international conferences and in peer-reviewed journals, they will acquire competencies to discuss with researchers around the world.
3. 研究指導方針 / Research Guiding Principle
We encourage students to carry out experiments based on their own idea and make challenges to the new topic. Advisor and senior students are here to support you.
4. 研究室活動の内容及び方法 / Content and Methods of Laboratory Activities
<input type="checkbox"/> 日次活動 / Daily Activities : Carry out literature survey, experiments, calculations, data analysis, and writing. <input type="checkbox"/> 週次活動 / Weekly Activities : Weekly individual meeting with advisor upon request. <input type="checkbox"/> 月次活動 / Monthly Activities : Monthly individual meeting with advisor on research progress, etc. <input type="checkbox"/> 不定期活動 / Occasional Activities : Emergency Drill, Safety Guidance, Lecture on Clean Room, Research Ethics Education, Radiation Hazard Prevention Lectures, Collection of Waste Materials, Presentation at Domestic and International Academic Meetings
Students receive advice on their course works and/or research progress during weekly or monthly individual meeting with the advisor. Requests for irregular meetings when they obtained interesting or perplexing results are welcome. Depending on the research topic, student may have experiments outside our institute, such as synchrotron radiation facilities. Students who made significant achievements are encouraged to present their research results at domestic and/or international academic meetings.

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)

Before the research plan presentation (oral), mid-term presentation (poster), master's thesis defense (oral), preliminary defense (oral), final defense (oral), we ask every member to join the rehearsals and ask questions to the presenters.