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.

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1. 研究テーマ / Research Theme

・Formation of polycrystalline Si films for solar cells by flash lamp annealing
・Application of Cat-CVD to the fabrication of solar cells
・Long-term stability of crystalline Si photovoltaic modules

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.

Students can achieve skills for the operation of vacuum equipment, thin-film formation and characterization, device fabrication and characterization by performing their own research. They can also acquire basic academic skills for semiconductors and solar cells through data analysis, daily discussion, and weekly seminars. Furthermore, students can gain high problem-solving skills, owing to the policy of our group supporting individual initiatives. Presentation and communication skills can be strengthened through presentations at domestic and international conferences and a booth exhibition.

3. 研究指導方針 / Research Guiding Principle

Our group has a policy of supporting students' individual initiatives, and their own ideas can be included in their research. A morning meeting is held every weekday, and the activities of each student are shared. Students can also have simple research discussion in the meeting. In a weekly seminar, a duty student is required to explain the detail of a journal paper and to answer questions from other students and staffs, by which students can obtain high basic academic skills. Students can actively present their research achievements, and acquire ability to write their own research paper for themselves.

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： Morning meeting (every weekday)
□週次活動 / Weekly Activities： Seminar
□月次活動 / Monthly Activities： Research progress monthly meeting
□不定期活動 / Occasional Activities：
All students make presentations at the JSAP Spring and Autumn meetings. Students also actively make presentations at academic conferences related to solar cells. Our group runs a booth in an exhibition for photovoltaic and/or semiconductor technologies once a year to present research activities and introduce JAIST.

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)

- Formal laboratory assignment. Writing a report on vacuum technology, which is required to handle our equipment. Operation training on experimental apparatus under the guidance of supervisors. Deciding the theme for your major research project. (M1, June)
- Participating in a domestic exhibition on photovoltaics and/or semiconductors. (M1, December)
- Presentation at JSAP meeting (M1: March, M2, September)
- Presentation in an international conference, such as PVSEC. (M2, November)
- Presentation on the research at a domestic conference, such as JSAP spring meeting. (M2, March)