Materials Characterization Specialist / 物質評価スペシャリスト

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Job Information

Hiring Company
Okinawa Institute of Science and Technology Graduate University

Job ID
1567603

Industry
Education

Job Type
Contract

Location
Okinawa Prefecture, Kunigami-gun Onnason

Salary
Negotiable, based on experience

Work Hours
所定労働時間：9:00 - 17:30 休憩時間：12:00 - 13:00

Holidays
年次有給休暇、夏季休暇、傷病休暇、年末年始休暇、慶弔休暇、産休/育休完備、ボランティア休暇など

Refreshed
January 27th, 2026 12:00

General Requirements

Minimum Experience Level
Over 6 years

Career Level
Mid Career

Minimum English Level
Business Level

Minimum Japanese Level
None

Minimum Education Level
Post Grad Degree (PHD/MBA etc)

Visa Status
No permission to work in Japan required

Job Description

Position summary

The OIST Core Facilities contribute to research and education by providing excellent common research facilities and research support services for the researchers and students at OIST The Engineering Section is one of the eight technical sections within the core facilities. It provides support for mechanical engineering, electronics, nanofabrication, and materials characterization through three teams of technical staff.

The Engineering Section is currently looking for a highly motivated and team-oriented technical specialist to support X-ray Diffractometry and Magnetic and Physical properties measurements of materials within the university. The candidates'

principle duties will be to maintain multiple state-the-art X-Ray powder and thin film diffractometers, and to train and assist OIST researchers in their operation.

Responsibilities

1. Provide the following services related to X-ray diffractometry (focused on Thin Film and General purpose, on occasion Single Crystal):

・Training of researchers on the Bruker Thin Film and General-Purpose (powder) X-Ray diffractometers. Create training manuals and materials for researchers when necessary.

・Consult with researchers on sample preparation, measurement, and analysis of data.

・Collaborate with researchers by conducting:

a) Data acquisition from samples,

b) Analysis and refinement of data.

・Preventative maintenance, troubleshooting, consultation with vendors and repair of XRD machines when possible.

2. Provide services related to Quantum Designs systems: PPMS (Physical Property Measurement System) and MPMS (Magnetic Property Measurement System).

・Train users on sample mounting and loading, software use and data acquisition. Create training manuals and materials for researchers when necessary.

・Data acquisition and interpretation from samples.

・Preventative maintenance, troubleshooting, consultation with vendors and repair of PPMS/MPMS machines and associated cryogenic systems when possible.

3. Maintains and expands collaborative relationships with other domestic and international institutes.

4. Other duties as assigned by the Engineering Support Section Leader.

Required Skills

(Required)

- PhD in in-/organic chemistry, organo-metallic chemistry, material science, or a closely related field. At least five years' of experience working in related field.
- Experience with closed-loop cryogenics.
- Experience in operating and maintaining thin-film, multi-purpose XRD instruments (specifically Bruker).
- Ability to Interpret XRD patterns: qualitative analysis (phase identification), orientation, crystallinity, quantitative analysis (Rietveld refinement, lattice constant calculation), thin-film quality assessment. Usage of crystallographic databases.
- Knowledge and experience using MPMS and PPMS systems (specifically Quantum Designs).
- Ability to do Hall and magnetic measurements, analysis of resistivity and thermal property measurement using the TTO option for PPMS. Experience with temperature-dependent transport, magnetization and heat capacity measurements.
- Strong problem-solving skills. Have the ability to learn new skills and to stay at the cutting edge of technology.
- Excellent communication skills in English. The ability to communicate in Japanese is desirable, but not required.
- Demonstrated ability to collaborate effectively in a team environment.
- Ability to function well within a hybrid Japanese–international work environment, demonstrating cultural awareness and adaptability.

Company Description