



**Okinawa Institute of Science and Technology**  
**(Bio-Particles and Protein Structural Analysis with Holography Microscope and Cryo-TEM)**

The Okinawa Institute of Science and Technology Graduate University (OIST) is a model for change in education and research with the best international graduate students, working side by side with world-class faculty in modern well-equipped laboratories. Beautifully situated on the island of Okinawa, OIST relies on a cross-disciplinary approach, with an emphasis on creativity and exchange, to offer unique, individualized graduate training. OIST is a university with no departments, eliminating artificial barriers between people working in different fields, but many nationalities, with students and faculty being attracted from all over the world. Concentrating initially on Neuroscience, Molecular Sciences, Mathematical Sciences, Environmental, Energy Development and Ecological Sciences and Physical Sciences, OIST is bringing some of the best brains in the world to Okinawa to transform the way science and education is done in the global academic world.

**Position summary:**

The Quantum Wave Microscopy Unit is seeking a Post Doc who enjoys single-particle bio-molecule imaging with low-energy electron microscope. This microscope has recently been developed at OIST, based on holography using coherent electron beam, which provides higher contrast image with digital phase contrast in Angstrom resolution. Possible candidate will study 3D structure on viruses, flagella or secretion systems using this new electron microscope and also advanced TEMs in our university.

**Position:**

Staff Scientist or Postdoctoral Scholar  
Quantum Wave Microscopy Unit (Shintake Unit)

**Working Location:**

Onna-son, Okinawa, Japan

**Responsibilities:**

1. EM data analysis for single bio-particles analysis.
2. 3D bio-molecule structure reconstruction for virus, flagella and 2D protein crystals.
3. Ice-embedded sample treatment and operation of TEM.
4. Optimally, analysis on holographic data from OIST diffraction microscope.



**Qualifications:**

**(Required)**

1. At least two years of experience on single particle imaging or two-dimensional protein crystal analysis with cryo-TEM.
2. Or, at least two years of experience on lens-less imaging with phase retrieval technique using X-ray laser or other coherent sources.
3. At least one published paper on above researches(not necessary the first author).

**(Preferred)**

1. Well skilled with MATLAB, C++ or other computer languages.
2. Ability to work well and coordinate with others.
3. Basic proficiency in English.

**Term:**

Full-time, fixed term appointment for 2 years. Contract initially with 3-month probationary period (inclusive).

**Working hours:**

9:00-17:30 (Discretionary)

**Compensation:**

In accordance with the OIST Employee Compensation Regulations

**Benefits:**

- Relocation, housing and commuting allowances
- Annual paid leave and summer holidays
- Health insurance (Private School Mutual Aid <http://www.shigakukyosai.jp/>), welfare pension insurance (kousei-nenkin), worker's accident compensation insurance (roudousha-saigai-hoshou-hoken)

**Submission Documents:**

- Curriculum vita in English (and Japanese if available)
- Cover letter in English (and Japanese if available)
- \* Please be sure to indicate where you first saw the job advertisement.



**Starting Date:**

As early as possible

**Application Due Date:**

Applications deadline will continue until the position is filled.

**Application Address:**

Please submit all required application materials by email to:

shintake#oist.jp

(Please replace # with @ before using this email address)

Or send documents via post mail to:

Shintake Unit

Okinawa Institute of Science and Technology Graduate University

1919-1, Tancha, Onna-son, Okinawa 904-0495, Japan

- \* OIST Graduate University is an equal opportunity, affirmative action educator and employer and is committed to increasing the diversity of its faculty, students and staff. The University strongly encourages women and minority candidates to apply.
- \* Information provided by applicants or references will be kept confidential, documents will not be returned. All applicants will be notified regarding the status of their applications.
- \* Further details about the Institute can be viewed on our website ([www.oist.jp](http://www.oist.jp))