



Okinawa Institute of Science and Technology
Postdoctoral Scholar at the Nanoparticles by Design Unit

The Okinawa Institute of Science and Technology (OIST) is a new international research facility located in southern Japan, and seeks to recruit a qualified postdoctoral researcher for the Nanoparticles by Design research unit.

About OIST

The founding mission of OIST centers on creating a best-in-class international institute in Japan, by providing world class laboratory infrastructure, using English as daily operational language, and fostering interdisciplinary interaction across traditional boundaries in science. Further information can be found on our website [1]. Additionally, OIST has been profiled in numerous global publications such as Science, Nature and The Economist [2-5].

About the Nanoparticles by Design research unit

The Nanoparticles by Design research unit has been set up under the direction of Prof. Mukhles Sowwan [6-7]. Nanoparticles are an exciting class of materials, given their enhanced surface area, size-dependent properties, and potential for biomedical and healthcare applications. Research activities at our unit include design & modeling of nanoparticles, nanoparticle fabrication using gas-aggregated sputtering, and integration of these nanoparticles into innovative technologies. New, leading edge facilities are installed in-house for nanoparticle fabrication, characterization (TEM, XPS, XRD, AFM, etc.), as well as a fully equipped cleanroom facility including electron-beam lithography and Atomic Layer Deposition (ALD).

References

- [1] OIST official website, www.oist.jp.
- [2] Windfall for Tiny University With Outsized Ambitions, Science 342 no. 6155 p. 182 (2013).
- [3] Okinawa goes recruiting, Nature 474, 553 (2011).
- [4] Made in Japan, Nature 474, 541–542 (2011).
- [5] Where Rats and Robots Play, The Economist (26 Nov 2011).
- [6] Build-a-nanoparticle, OIST website:
<http://www.oist.jp/news-center/news/2013/11/6/build-nanoparticle>
- [7] The nanoparticles by Design unit website: <https://groups.oist.jp/nd>

Working Location:

Onna-son, Okinawa, Japan

**Responsibilities:**

The postdoctoral scholar is expected to work in close collaboration with other group members / academic partners on research projects in the field of optoelectronic devices and energy storage systems. The main task of the postdoctoral scholar is to study novel nanoparticle-based devices in terms of electrochemistry or photo-electrochemistry, which includes device fabrication, structural characterization, electrochemical impedance spectroscopy, cyclic voltametry, etc. and to contribute to publications of high scientific impact.

Qualifications:

- 1- Ph.D. in physics, materials science, or equivalent discipline.
- 2- Experience with electrochemistry/photo-electrochemistry, energy storage systems (e.g. Li-ion batteries), solar fuels, etc.
- 3- High English language competence.

Term:

Full-time, fixed term appointment for 1 year with possibility of extension for three 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 vitae in English (and Japanese, if available)
- Cover letter in English (and Japanese, if available)



Starting Date:

As early as possible

Application Due Date:

Consideration of applications will continue until the position is filled.

Application Address:

Please submit all required application materials by email to:

Mukhles#oist.jp

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

- * 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.
- * Please view our policy for rules on external professional activities
(<https://groups.oist.jp/acd/information-disclosure/>).
- * Further details about the University can be viewed on our website (www.oist.jp).