

Job Opening in the Field of Mesoscale Simulation for Metal Materials Processing, Institute for the Promotion of University Function Enhancement, Shimane University

1. Affiliation Institute for the Promotion of University Function Enhancement
2. Department Next Generation Tatara Co-Creation Centre (NEXTA), Graduate School of Natural Science and Technology (Master and Doctor courses)
3. Position and No. of Post Associate Professor, or Assistant Professor, one
4. Term of Employment Full-time (Tenured)
5. Research Field **【After employment】** Mesoscale simulation for metal materials processing
【Scope of change】 No change
6. Job Description **【After employment】** (1) The new position will be embedded into the Next Generation Tatara Co-Creation Centre at Shimane University (Director: Prof. Roger Reed at University of Oxford), a newly built core institute within a national project in Shimane Prefecture aiming for “Creation of a Global Base for Advanced Metals -Next Generation TATARA Project-”, awarded by the Japan Cabinet Office from 2018. The Centre aims to conduct world-class research in superalloys for aircraft applications and amorphous ribbon alloys for motor applications through in-depth collaborations and partnerships with industries as well as domestic and overseas universities. It endeavors positioning the Centre as an outstanding research base actively contributing to metallic-material industries and cultivating top young professional human capital.
(2) The Centre has four primary technical fields: computational modelling, processing and design, characterisation and mechanical and magnetic testing. The new researcher is required to conduct cutting-edge forefront research under the supervision of Prof. Junji Shinjo (<https://scholar.google.com/citations?user=DkxYyNMAAAAJ>), and also in collaboration with industries and with other domestic and overseas universities in the field of mesoscale simulation for metal materials processing based on materials science and technology. At NEXTA, collaborative research environment is well established for producing

high-impact papers on melting/solidification processes such as additive manufacturing, grain growth, defect control and process optimization. Physical or mathematical background on thermal engineering/ fluid mechanics/ metal materials/ applied mathematics/ programming/ optimization will be encouraged. Our team can exclusively use a parallel computer system with more than 2,000 cores for research.

(3) As a NEXTA academic, the new researcher conducts student education in Interdisciplinary Faculty of Science and Engineering, Faculty of Materials for Energy and Graduate School of Natural Science and Technology.

【Scope of change】 No change

7. Qualifications

Candidates are required to:

1) Hold a doctorate or prospectively hold a doctorate.

2) Approve the Shimane University Charter and actively participate in its realization.

(<https://www.shimane-u.ac.jp/en/about/shimane.html>).

3) Move to and live in Matsue city or neighboring area after the employment.

4) Promote original creative research on his/her own, have enthusiasm for the education of graduate students, and provide sufficient guidance in English (In the case of assistant professor, a person who has sufficient ability to assist the guidance)

5) Actively promote social implementation of education and research results in the field of materials science.

6) Positively collaborate interdisciplinary research with other professors in Shimane University and develop new research fields.

8. Starting Date

As early as possible after April 1st, 2025

9. Term of appointment

Non-fixed term

10. Place of Work

【After employment】 1060 Nishikawatsu-cho, Matsue, Shimane
Matsue Campus, National University Corporation Shimane University

【Scope of change】 No change

11. Work Hours/Work System

Discretionary labor system shall be applied after obtaining consent (Deemed working hours per day: 7 hours 45 minutes).

12. Overtime Work

Overtime work may be ordered when it is deemed necessary.

13. Holidays

Sundays, Saturdays, national holidays, dates between December 29 and January 3

14. Remuneration Annual salary system: The rules of remuneration of faculty member with annual salary system shall apply. Various allowances are provided including the retirement allowance at the time of retirement.
※The rules of remuneration of faculty member with annual salary system are subject to revision. Visit the university's website for the regulations.
https://www.kitei.jn.shimane-u.ac.jp/browse.php?action_treeList&rule=61
(in Japanese only)
15. Insurance The employee shall enroll in the National Public Service Personnel Mutual Aid Associations, Worker's Accident Compensation Insurance, and Employment Insurance.
16. Probation Period Six months from starting date of employment
17. Employer National University Corporation Shimane University
18. Application Documents 1) Curriculum Vitae
CV must include educational background since high school graduation, working history, academic societies, social activities, portrait photograph and signature or personal seal. (Free format)
※ If you have been disciplined or given a time limit in the past for sexual violence, including sexual harassment, against students and staff members etc, or other harassment in general, or for research misconduct or misconduct in research expenses, please be sure to indicate the nature of the disciplinary action and the specific reason(s) in the Award and Penalty column.
※ If it is found that the application has not been filled out or that false statements have been made, the applicant may be subject to disciplinary dismissal or other action for serious career misconduct.
- 2) Achievement list
Research achievements, H-index, original articles (with the number of citations), commentaries, books, patents, international conference presentations (invited talks only), press coverages, domestic conference presentations (invited talks only), list of acquired external funds, awards, educational achievements, academic society activities, and social contribution activities must be listed. (Free

format)

3) Reprints or copies of main papers (up to three in total)

4) Outline/summary of papers listed in 3)

5) Original research and education plan and statement (Free format, approximately 800 words)

6) List of two references with their name, phone number, and email address (Free format)

7) The documents must be written in Japanese or English. If the documents are in Japanese, the applicant will be requested to submit the English version after passing the first stage qualification.

※ Additional documents may be requested to verify your achievements during the selection process.

※ The personal information provided in the submitted documents will be used only for the purpose of applicant screening and employment procedures.

19. Where to Send

Next Generation Tatara Co-Creation Centre, Shimane University
1060 Nishikawatsu-cho, Matsue, Shimane 690-8504

(Write in red “Application for position of academic of the Institute for the Promotion of University Function Enhancement” on the front of the envelope. Applicants in Japan are required to send the application documents by simplified registered mail.)

Application documents can be submitted by email. They must be submitted to tatara@office.shimane-u.ac.jp

They must be password-protected for the protection of your personal information.

※ Application documents in the order of (1) to (7) must be in a single PDF file.

※ If possible, send (1) CV and (2) Achievement list in Word or Excel format in addition to the PDF.

20. Deadline

Application documents must arrive no later than January 31, 2025

21. Selection

The selection result will be notified to all applicants.

1st screening: Screening of application documents

2nd screening: Interview either face-to-face or online in English

A mini lecture or presentation may be required.

(Shortlisted candidates will be informed of the date and the details of the 2nd screening. Travel expenses including accommodation for the selection shall be borne by the applicants.)

22. Measures to Prevent Passive Smoking

No smoking on campus.

23. Additional

1) Aiming to realize a gender equality society, Shimane University is

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working on creating a comfortable workplace environment. In accordance with the purpose of the “Basic Law for Gender Equality Society,” female candidates are strongly encouraged.

For more details, visit the Shimane University Diversity Promotion Office website.

<https://diversity.shimane-u.ac.jp/for-english-speaker/>

2) In order to help faculty members engage in their research and educational activities at the university without worrying about Japanese language barriers, the Shimane University Concierge provides tailored support for English speaking faculty.

For more details, visit the website of International Center ,Shimane University .

<https://kokusai.shimane-u.ac.jp/english/concierge/index.html>

「Work, Marriage, Child Rearing, My Home: Your Future Life in Shimane」

The Shimane Prefectural Government provides materials that promote the benefits of working and living in Shimane Prefecture in terms of environment, time, and money, in order to encourage young people to find employment in the prefecture. For details, please refer to the Shimane Prefecture website “Life in Shimane, which you may not know about.” Shimane Prefecture’s website.

https://www.pref.shimane.lg.jp/industry/employ/koyo_syugyo/shien/shimane-kurashi.data/shimanegurashi2024.pdf

【Contact/Inquiry】

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