

**Faculty Position in the Graduate School of Information Science and Technology,
Osaka University**

Outline	We invite applications for a full-time specially appointed faculty position for our ALCA-Next project titled "Low-rank Computing Models and Efficient Optical Implementations of Spatial Photonic Ising Machines " (Research Director: Prof. Hideyuki Suzuki) in the JST ALCA-Next Technology Area "Green Computing and DX". We are seeking applications from candidates who are interested in conducting original and innovative research related to spatial photonic Ising machines, based on their expertise and experience.
1. Position	(i) Specially Appointed Associate Professor (Full-time) ,or (ii) Specially Appointed Assistant Professor (Full-time) *The position will be finalized based on the responsibilities assigned to the successful candidate, as well as their career and area of expertise. *Please refer to “6. Responsibilities” and “12.Salary and Benefits” etc. to decide which position you wish to apply for, and indicate your preferred position in your application document.
2. Number of Positions	1 (One)
3. Affiliation	Graduate School of Information Science and Technology (Division of Nonlinear Mathematical Science (Suzuki Laboratory), Department of Information and Physical Sciences)
4. Work Location	Suita Campus (1-5 Yamadaoka, SuitaCity, Osaka, Japan)
5. Specialized Field	Mathematical science, Information science, Theoretical physics, etc.
6. Responsibilities	Research on computing models of spatial photonic Ising machines and related education. The successful candidate is expected to conduct research related to computing models of spatial photonic Ising machines [H. Yamashita et al., Phys. Rev. Lett. 131, 063801 (2023)], leveraging their expertise in fields such as mathematical science, information science, and theoretical physics. Specifically, the research will likely involve topics related to one or more of the following keywords: Spin systems, Ising model, spin glasses, Markov chain Monte Carlo methods, Markov random fields, statistical machine learning, low-rank modeling, Boltzmann machines, simulated annealing, Ising machines, many-body dynamics, reservoir computing, black-box optimization, combinatorial optimization, discrete algorithms, optical information processing, practical applications of Ising machines. In addition, the successful candidate for (i) Specially Appointed Associate Professor (Full-time) will be expected to partially assist with project management to promote research and collaboration within the project.
7. Qualifications	[Essential] Applicants must have: (1) Ph.D. or equivalent by the date of employment. (2) Specialized knowledge in one of the aforementioned specialized fields. (3) Proficiency in English sufficient to perform job duties.
	[Preferred] Ability to communicate in Japanese at a daily conversational level.
8. Starting Date	April 1st, 2025 (negotiable)

9. Term of Employment	<p>From the starting date to March 31st, 2026</p> <p>*Following completion of the term, the contract may be extended subject to continuity of work and performance evaluation. (The extension limit is March 31st, 2027, due to the term of the research project).</p> <p>*The maximum cumulative contract term at Osaka University would be based on “Regulations Pertaining to Contract Period of National University Corporation Osaka University Fixed-term Staff, etc.”</p>
10. Probationary Period	6 months
11. Employment Form	<p>Based on “38. Regulations Pertaining to Working Hours, Holidays and Leave for National University Corporation Osaka University Limited Term Staff”</p> <p>https://www.osaka-u.ac.jp/en/guide/information/joho/kitei_shugyou.html</p> <p>*The Discretionary Labor System, Special Work Type will be applied with the applicant’s consent. (deemed working hours: 8 hours a day)</p>
12. Salary and Benefits	<p>Based on “48. Salary Regulations for National University Corporation Osaka University Limited Term Staff (Specially Appointed Staff, etc.) Subject to Annual Salary System”</p> <p>https://www.osaka-u.ac.jp/en/guide/information/joho/kitei_shugyou.html</p> <p>Remuneration:</p> <p>(i) Specially Appointed Associate Professor (Full-time) 7,713,600 JPY,</p> <p>(ii) Specially Appointed Assistant Professor (Full-time) 5,736,900-6,228,900 JPY per annum. (Monthly payments will be of one-twelfth of annual salary)</p> <p>*The remuneration will be determined based on the responsibilities assigned and the applicant’s qualifications.</p> <p>Commuting allowance</p> <p>*Bonuses, housing allowance, dependency allowance, and retirement benefits are included in the annual salary and will not be paid separately.</p>
13. Insurance	<p>Medical insurance and employee’s pension insurance of the Federation of National Public Service Personnel Mutual Aid Associations, Employment Insurance and Industrial Accident Compensation Insurance</p>
14. Application Documents	<p>Applications must be written in English or Japanese and include the following</p> <p>1.A Curriculum Vitae (photo attached)</p> <p>*You may use the university form titled, ‘Resume for educational/research position’, which is available at the following website.</p> <p>https://www.osaka-u.ac.jp/en/news/employ/links</p> <p>2.A publication list</p> <p>3.Major original papers (up to three)</p> <p>4.An outline of research experiences and research plans (up to two A4-size pages)</p> <p>*Please Indicate the name of the position you are applying for.</p> <p>5.A name and contact information of a reference person</p> <p>*Personal information in the application documents will only be used for the purpose of screening and hiring procedures and will not be disclosed to any third party.</p>
15. Sending Address and Contact Information	<p>The application documents should be submitted online via the JREC-IN Portal (No. D124091164)</p> <p>Contact Person: Professor Hideyuki Suzuki</p> <p>Department of Information and Physical Sciences, Graduate School of Information Science and Technology, Osaka University</p> <p>E-mail: hideyuki@ist.osaka-u.ac.jp</p>
16. Application Deadline	December 20th, 2024 (Japan Standard Time) or until the position is filled
17. Selection Process	<p>Document screening will be conducted at any time, followed by interviews. Selected applicants will be notified within two weeks after the application deadline at the latest.</p> <p>*Travel and accommodation fees necessary for interviews are to be covered by the applicant. The interviews may be conducted online.</p> <p>*Please note that unsuccessful applicants will not be contacted.</p> <p>*When we cannot find an appropriate candidate, we will not select the final candidate.</p>

<p>18. Additional Information</p>	<p>Concerning work conditions other than above-mentioned, please refer to “36.Work Regulations for National University Corporation Osaka University Limited Term Staff” and/or related regulations. https://www.osaka-u.ac.jp/en/guide/information/joho/kitei_shugyou.html Please note the above-mentioned work conditions are as of the day this employment offer is posted, and subject to change. In principle, there will be no changes to the affiliation, work location, or responsibilities after employment.</p> <p>“Deemed exports” related to security export control are based on “Regulations Pertaining to Security Export Control”.</p> <p>We also particularly encourage applications from female candidates. Osaka University is committed to promoting gender equality and providing various supports for female academic staff members. http://www.di.osaka-u.ac.jp/en_lp/</p> <p>*Osaka University campuses and related facilities are smoke-free, except for designated areas.</p>
<p>19. Recruiter</p>	<p>National University Corporation Osaka University</p>