

## Specially Appointed Researcher in the Institute of Laser Engineering, The University

of Osaka

Outline	This research division is engaged in the development of high-brightness soft X-ray sources, which are essential for future industrial applications, by leveraging expertise in laser science, plasma physics, and atomic and molecular science. We conduct detailed numerical simulations of atomic processes—such as radiation and absorption associated with ionization and recombination of atoms—occurring in plasmas generated by irradiating high-Z (high atomic number) materials with high-intensity lasers. These atomic process simulations are integrated with numerical simulations of plasma dynamics to understand soft X-ray emission phenomena from laser-produced plasmas comprehensively. Furthermore, we aim to enhance the accuracy of our numerical simulations by comparing them with high-precision experimental data. In addition, we are employing advanced techniques such as machine learning to clarify the optimal plasma generation conditions for achieving even higher soft X-ray brightness.
1. Position	Specially Appointed Researcher (Full-time)
2. Number of Positions	1 (One)
3. Affiliation	Institute of Laser Engineering, High Energy Density Physics Division
4. Work Location	Suita Campus (2-6 Yamadaoka, Suita City, Osaka)
5. Specialized Field	Plasma Physics, Atomic Physics
6. Responsibilities	Research on the development of high-brightness soft x-ray source plasma
7. Qualifications	[Essential]  Applicants must have: (1) Doctoral or Ph.D. degree in a field related to the job description in "6. Responsibilities". (2) Experience of numerical simulation at a level necessary to perform the research. (3) English proficiency at a level necessary to perform the research.  [Preferred]  Japanese proficiency at a level necessary for daily communications.
8. Starting Date	September 1 <sup>st</sup> 2025 (or as soon as possible thereafter)
9. Term of Employment	From the starting date to March 31, 2026 *Following completion of the term, the contract may be extended subject to continuity of work and performance evaluation. *The maximum cumulative contract term is 10 years from the starting date, based on "Regulations Pertaining to Contract Period of National University Corporation Osaka University Fixed-term Staff, etc."
10. Probationary Period	6 months
11. Employment Form	Based on "38. Regulations Pertaining to Working Hours, Holidays and Leave for National University Corporation Osaka University Limited Term Staff" <a href="https://www.osaka-u.ac.jp/en/guide/information/joho/kitei_shugyou.html">https://www.osaka-u.ac.jp/en/guide/information/joho/kitei_shugyou.html</a> *The Discretionary Labor System, Special Work Type will be applied with the applicant's consent. (deemed working hours: 8 hours a day)

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12. Salary and Benefits	Based on "48. Salary Regulations for National University Corporation Osaka University Limited Term Staff (Specially Appointed Staff, etc.) Subject to Annual Salary System" <a href="https://www.osaka-u.ac.jp/en/guide/information/joho/kitei_shugyou.html">https://www.osaka-u.ac.jp/en/guide/information/joho/kitei_shugyou.html</a>
	Remuneration: 5,003,400 JPY ~ per annum. (Monthly payments of one-twelfth of annual salary) **It will be decided according to the responsibilities assigned based on the applicant's qualifications.
	Commuting allowance *Bonuses and allowances for housing, dependents, and retirement are included in the abovementioned annual salary and will not be paid separately.
13. Insurance	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
14. Application Documents	Applications must be written in English or Japanese and include the following  1. A Curriculum Vitae  *Please use the university form for educational/research positions available at the following website.  https://www.osaka-u.ac.jp/en/news/employ/links  *Alternatively, Researchmap (https://researchmap.jp/?lang=en) is acceptable if it contains equivalent information. Please include the URL in your application.  2. A list of major research achievements (original papers, review papers, books, patents, presentations at international conferences, awards, and prizes)  *Alternatively You can select one of Researchmap, ORCID, ResearcherID, Google Scholar, etc. and include the URL in your application document.  3. A summary of your research activities, including a description of the relationship to the applying work (free format, approximately two A4 pages)  4. Name, affiliation, and contact information of two professional referees who are willing to be contacted about the applicant  *Personal information in the application documents will only be used for the purpose of
15. Sending Address and Contact Information	screening and hiring procedures, and will not be disclosed to any third party.  Please submit by e-mail:     ile-pr-hedp@ml.office.osaka-u.ac.jp  *Attach the application documents in PDF format.  Contact Persons: Professor Shinsuke FUJIOKA Tel: +81-6-6879-8749  E-mail: ile-pr-hedp (at) ml.office.osaka-u.ac.jp
16. Application Deadline	The deadline will be closed as soon as a suitable candidate is found.
17. Selection Process	After a screening of documents, an interview will be conducted.  Information about the interview screening will be provided only to those who pass the document screening within14 days after the arrival of application documents. In principle, interviews will be conducted online. However, based on the document screening, we may conduct face-to-face interviews.  *Travel and accommodation fees necessary for interviews are to be covered by the applicant. For applicants residing overseas, the applicant may request an online interview.  *Please note that unsuccessful applicants will not be contacted.
18. Additional Information	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.

	"Deemed exports" related to security export control are based on "Regulations Pertaining to Security Export Control".
	We also particularly encourage applications from female candidates.  The University of Osaka is committed to promoting gender equality and providing various supports for female academic staff members.  http://www.di.osaka-u.ac.jp/en_lp/
	*The University of Osaka campuses and related facilities are smoke-free, except for designated areas.
19. Recruiter	National University Corporation Osaka University