

Recruitment Information for Project Assistant Professor / Project Researcher (Fixed-Term Project Staff)

Job title and number of positions	Project Assistant Professor or Project Researcher: a few positions
Contract period	From November 1, 2026 or the earliest possible date thereafter to March 31, 2027.
Renewal	The contract may be renewed. Renewal, if any, will be made on a fiscal-year basis. The contract may be renewed a maximum of two times, and the total period of employment may not extend beyond March 31, 2029. No renewal will be made thereafter. Renewal will be determined after considering the budget situation, progress of the work in which the employee is engaged, workload at the end of the contract period, work performance, work attitude, health status, and other relevant factors.
Trial period	14 days from the date of appointment.
Work location	Institute for Future Initiatives, "Co-JUNKAN Platform towards Beyond Zero-Carbon Society" Research Unit and related research units, The University of Tokyo 7-3-1 Hongo, Bunkyo-ku, Tokyo, Japan <Scope of change> 【Project Researcher】 In principle, within the same institution. 【Project Assistant Professor】 Place designated by the University. In principle, reassignment or secondment will not be ordered against the employee's will. Details are in accordance with Article 4 of The University of Tokyo Regulations on Conditions of Employment of Academic Staff.
Job description	The successful applicants will engage in research activities based on life cycle thinking and systems approaches to address social challenges related to resource constraints, carbon neutrality, the circular economy, sustainable food production, and related areas. Each successful applicant will take primary responsibility for at least one of projects A-1 to A-3 below and, depending on the applicant's expertise, the division of roles among appointees, and the progress of each project, will also contribute to other projects listed under A or B. A. Priority projects A-1. Reskilling and human resource development related to life cycle thinking This project aims to develop human resources capable of applying life cycle thinking, life cycle assessment (LCA), material flow analysis (MFA), input-output analysis (IOA), and related approaches to corporate strategy, business design, and decision-making. Duties include: • Conducting needs assessments and interviews with companies, industry associations, and other stakeholders. • Designing educational programs for working professionals and developing teaching materials and case studies. • Planning and delivering lectures, practical exercises, workshops, study groups, and related activities. • Assessing participants' learning outcomes and the effectiveness of the educational programs. • Building networks among program graduates, participating companies, researchers, and other stakeholders. • Exploring pathways from the educational programs to joint research, study groups, and related collaborative activities. • Collaborating with relevant educational institutions, companies, industry associations, and other organizations in Japan and overseas. This project is not limited to the administration of training programs. It will be conducted as a research and practice activity encompassing educational program design, assessment of competencies and learning outcomes, case-study development, and industry-academia network building. The project materials envisage a four-stage program - basic, practical, applied, and advanced - that aims not only to develop analytical skills in LCA and related methods, but also to build the capacity to use assessment results in corporate strategy and business activities and to create networks across companies and industries. A-1 is positioned as a cross-cutting project. It is expected to work particularly closely with B-1, while research outcomes from A-2, A-3, and B-2 will be developed into educational content and case studies.

A-2. Research on agriculture, fisheries, and sustainable food production systems

Focusing on plant factories, land-based aquaculture, and other agricultural, fisheries, and food production systems, duties include:

- Organizing and analyzing material, energy, water, and nutrient flows in the target systems.
- Assessing environmental impacts, resource-use efficiency, food security, and resilience.
- Visualizing water treatment, nutrient circulation, and environmental management that have traditionally depended on natural environments such as farmland and marine areas.
- Conducting case studies on plant factories, land-based aquaculture, agrivoltaics, livestock production, alternative meat, cultivated meat, and related systems.
- Conducting scenario analyses that consider land use, water use, energy use, and regional conditions.
- Identifying challenges and enabling conditions for technology introduction and social implementation.

The project materials position plant factories and land-based aquaculture from the perspectives of food security and environmental management and indicate an assessment framework that also considers water treatment, unused nutrients, land use, and related issues.

A-3. Life cycle assessment and technology screening for CCU technologies

This project aims to develop assessment methods that support research and development and technology selection for carbon capture and utilization (CCU) technologies. Duties include:

- Defining assessment boundaries that cover CO₂ sources, capture, pretreatment, transport, conversion, use, and disposal/circulation.
- Constructing material and energy balance models for CCU routes.
- Organizing conditions and parameters for feedstocks, hydrogen, electricity, heat, product substitution, co-product treatment, and related factors.
- Conducting LCA, techno-economic assessment, sensitivity analysis, and uncertainty analysis.
- Conducting scenario analyses that account for regional and future conditions such as electricity and hydrogen emission factors, heat sources, and transport distances.
- Developing screening and assessment tools using Excel, Python, or other appropriate platforms.
- Linking assessment tools and datasets with chemical process simulators and related modeling environments.
- Conducting case studies and identifying priority issues for technology development.

The related joint research proposal envisages comparing approximately three to five CCU routes and developing a screening prototype based on LCA, scenario and sensitivity analysis, and material and energy balances.

B. Projects to be undertaken in collaboration

B-1. Rulemaking and domestic/international collaboration within the Co-JUNKAN project

- Research on institutions, standards, certification, and rulemaking based on life cycle thinking.
- Examining approaches for connecting technology assessment results with rulemaking and social implementation.
- Collaborating with universities, companies, government bodies, industry associations, certification bodies, and other organizations in Japan and overseas.
- Participating in meetings and workshops, preparing documents, and disseminating research outcomes in English.
- Linking these activities with the A-1 educational program and network-building activities.

B-2. Research on metal resource circulation and recycling systems

- Analyzing demand, supply, and circulation structures for metal resources, including rare earths and rare metals.
- Conducting systems assessments of recovery, separation, refining, and recycling technologies.
- Assessing the feasibility of recovering critical metals present at low concentrations in products and the conditions required for technology introduction.
- Conducting scenario analyses that consider technological change, changes in product composition, and future demand.
- Applying LCA, MFA, techno-economic assessment, and supply chain analysis.

Duties common to the projects

Depending on the project assignment, duties include:

- Defining research questions, assessment scopes, and research plans.
- Collecting and organizing literature, statistics, company-provided data, experimental data, demonstration data, and related information.
- Developing models, databases, assessment tools, and case studies.

	• Coordinating with researchers, companies, government bodies, industry associations, and other stakeholders in Japan and overseas. • Planning and operating study groups, workshops, lectures, symposia, and related events. • Preparing academic papers, reports, proposals, teaching materials, and presentation materials. • Developing research outcomes for education, rulemaking, technology development, and social implementation. • Undertaking other related duties deemed necessary by the principal investigator. The primary and secondary project assignments and the allocation of duties for each appointee will be determined through consultation at the time of appointment, taking into account the appointee's expertise and experience. <Scope of change> 【Project Researcher】 The University may order employees to be reassigned to different positions or order them to take up additional positions or to work on an external assignment. 【Project Assistant Professor】 Reassignment, dual appointment, and secondment may be ordered (in principle, not against the employee's will; see Article 4 of The University of Tokyo Regulations on Conditions of Employment of Academic Staff).
Working hours	The discretionary work system for professional work applies, and working hours will be deemed to be 7 hours and 45 minutes per day.
Days off	Saturdays, Sundays, national holidays, and year-end/New Year holidays (December 29 to January 3).
Leave	Annual paid leave, special leave, etc.
Wages, etc.	An annual salary system applies. The monthly salary, including performance and achievement allowances, will be approximately JPY 300,000 to JPY 500,000, determined according to qualifications, ability, experience, and other relevant factors. Commuting allowance: in principle, up to JPY 55,000 per month.
Insurance	In accordance with applicable laws and regulations, the successful applicant will be enrolled in the Mutual Aid Association of MEXT (Ministry of Education, Culture, Sports, Science and Technology), Employment Insurance, and Workers' Accident Compensation Insurance.
Qualifications required	Applicants must hold a master's or doctoral degree, or expect to obtain one by the date of appointment. (1) Degree The final appointment as Project Assistant Professor or Project Researcher will be determined comprehensively based on the applicant's degree, research achievements, research and practical experience, assigned duties, and the University's criteria. (2) Fit with the priority projects Applicants must have research experience, practical experience, or equivalent capability relevant to at least one of projects A-1 to A-3 and be capable of taking a leading role in that project. Applicants must clearly state the following in their application documents: • The A project for which they wish to take primary responsibility. • One or more A or B projects to which they can contribute as a secondary assignment. • Their expertise and experience that can be applied to the relevant project(s). • The research or other work they wish to undertake after appointment. Applicants are not required to have expertise in all projects, but should be willing to work across multiple projects rather than limiting themselves to a single disciplinary field. (3) Relevant fields and methodologies Applicants must have research experience, practical experience, or equivalent capabilities in at least one of the following areas. A. Systems assessment and life cycle thinking • Life cycle assessment (LCA) • Material flow analysis (MFA) • Input-output analysis (IOA) • Techno-economic assessment (TEA) • Scenario analysis • Uncertainty and sensitivity analysis • Systems optimization • Supply chain analysis

- Integrated assessment of environmental, economic, and social aspects

B. Chemical engineering, process systems, and CCU

- Chemical engineering
- Process systems engineering
- Material and energy balances
- Chemical process design
- Process simulation
- CCU, CCUS, and carbon management
- Manufacturing processes for hydrogen, fuels, chemicals, or materials

C. Agriculture, fisheries, and food production

- Agricultural science, fisheries science, or environmental engineering
- Plant factories or controlled-environment agriculture
- Land-based aquaculture or fisheries resource management
- Food production systems
- Circular use of water, nutrients, or biomass
- Land use and food security
- Integrated assessment of agriculture, forestry, and fisheries with energy and resource use

D. Metal resource circulation

- Rare earths, rare metals, and other metal resources
- Mineral processing, separation, refining, recovery, or recycling technologies
- Metal recycling
- Resource demand and supply risks
- Resource circulation analysis considering changes in products and technologies

E. Education and reskilling

- Adult education or higher education
- Curriculum and syllabus design
- Teaching material or case-study development
- Assessment of learning outcomes and competencies
- Evaluation of educational effectiveness
- Planning and management of training programs, workshops, or study groups
- Corporate human resource development or industry-academia collaborative education

F. Institutions, rulemaking, and social implementation

- Policy and institutional analysis
- Standardization, certification, or rulemaking
- Stakeholder analysis
- Social acceptance or risk communication
- Social implementation of technologies
- Industry-academia-government collaboration or international network building

G. Data analysis and tool development

- Analysis of statistical information and large-scale datasets
- Database development
- Analysis using Python, R, MATLAB, Excel, or related tools
- Development of models or assessment tools
- Data visualization
- Use of process simulators or optimization software

(4) Research and project implementation capabilities

Applicants should have the following capabilities:

- Ability to formulate research questions and develop research plans based on their own expertise.
- Ability to collect necessary literature, statistics, and other data and analyze them using appropriate methods.
- Ability to interpret analytical results and derive implications for both research and practice.
- Ability to prepare academic papers, reports, proposals, and presentation materials.
- Ability to manage deadlines, deliverables, and stakeholders while working across multiple projects.
- Ability to collaborate with other researchers, companies, government bodies, industry associations, and other stakeholders.

(5) Interdisciplinarity and collaboration

Applicants should be willing to undertake interdisciplinary research by incorporating knowledge and methodologies from fields beyond their own expertise, including engineering, agriculture, fisheries science, social sciences, policy and institutions, and education.

	Applicants should also be motivated not only to publish research outcomes as academic papers but also to develop them into teaching materials, assessment tools, guidelines, rules, institutional proposals, and social implementation. (6) Language proficiency Applicants must have the Japanese and English communication skills required for their assigned duties. The following points will be considered in particular: • Applicants taking primary responsibility for A-1 should preferably be able to coordinate with companies, develop teaching materials, deliver lectures, and manage training programs in Japanese. • Applicants contributing to B-1 must be able to conduct professional discussions, meetings, presentations, and document preparation in English. • Applicants taking primary responsibility for other projects should also be willing to prepare academic papers and give research presentations in English. (7) Desirable experience The following experience is welcomed, although applicants are not required to meet all items: • Authorship of peer-reviewed academic papers. • Presentations at domestic or international conferences or symposia. • Joint research with companies, government bodies, or industry associations. • International joint research or collaboration with overseas institutions. • Participation in projects funded by competitive research grants or joint research funding. • Participation in multidisciplinary research projects. • Planning or facilitation of workshops, study groups, or educational programs. • Development of research outcomes into assessment tools, teaching materials, institutions, or rules. • Management of project progress, deliverables, and stakeholders. (8) Selection approach This recruitment does not assume that a single applicant will be an expert in all target areas. Depending on the applicant pool, one to three individuals with complementary areas of expertise may be appointed. Selection will comprehensively consider the following: • Expertise that enables the applicant to take primary responsibility for at least one of A-1 to A-3. • Potential to contribute to other A or B projects. • The combination of expertise and project assignments among shortlisted candidates. • Ability to balance academic research with collaboration with companies and society. • Ability to produce concrete deliverables within the limited appointment period. Applicants therefore do not need to meet every field or experience item listed above.
Application documents	(1) Resume using The University of Tokyo Standard Resume Format. https://www.u-tokyo.ac.jp/en/about/jobs.html (2) List of research achievements (free format). Please categorize original research articles (state whether peer-reviewed; list accepted items only), review articles, books, presentations at domestic and international symposia/conferences (state whether invited), external research funding obtained, etc. Also include academic activities, teaching experience, social contributions, awards, and any other noteworthy activities or achievements. (3) PDF files of up to three major publications. (4) Summary of research to date. The summary should make clear how the applicant meets the qualifications described above. Within two A4 pages; figures and tables may be included. (5) Research and work plan after appointment. Select one project from A-1 to A-3 for which you wish to take primary responsibility and indicate at least one A or B project to which you can contribute as a secondary assignment. Within two A4 pages, describe: (i) your relevant expertise and experience; (ii) the research and work you would undertake after appointment; (iii) expected deliverables; and (iv) how you would link multiple projects. Figures and tables may be included. (6) Names and contact information of two referees who can provide information about the applicant.
Submission method	To: Yasunori Kikuchi, Institute for Future Initiatives, The University of Tokyo Email: ykikuchi_admin-group[at mark]g.ecc.u-tokyo.ac.jp Please replace [at mark] with @ in the email address above. Use the subject line "Application for Project Assistant Professor" or "Application for Project Researcher" and send the required application documents as email attachments to the address

	above. The attached files must be password-protected, and the password should be sent separately. Applications by post will not be accepted. If you do not receive an acknowledgement email within two to three days, please contact us.
Application deadline	Applications must arrive by Friday, August 28, 2026. After screening of the application documents, interviews will be conducted for shortlisted applicants.
Enquiries	Co-JUNKAN Unit, Institute for Future Initiatives, The University of Tokyo 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan Email: ykikuchi_admin-group[at mark]g.ecc.u-tokyo.ac.jp Please replace [at mark] with @ in the email address above.
Name of recruiter	The University of Tokyo
Measures to prevent passive smoking	Smoking is prohibited on the University premises. Smoking areas are available outdoors on campus.
Others	• Applicants will be notified individually of the selection result. • Please note that we are unable to answer inquiries regarding the reasons for the selection results. • Personal information obtained through this process will be used only for recruitment and selection. • Submitted application documents will not be returned. • Applications from women are encouraged in accordance with the University of Tokyo's "Declaration of Gender Equality Acceleration." • If, at the time of appointment, you are personally under contract with foreign governmental bodies, corporations, universities, or other foreign entities, or are receiving significant benefits (financial or otherwise) from foreign governmental bodies, the provisions of the Foreign Exchange and Foreign Trade Act (FEFTA) may prohibit or restrict the sharing of technology designated as controlled technology. This could make it difficult for you to fulfil your duties as an academic or administrative staff member of the University. In such cases, any such contracts or benefits must be kept within a scope that does not hinder the sharing of technologies necessary for the performance of your duties at the University.