

## **The University of Electro-Communications Job Openings: Associate Professor or Tenure Track Assistant Professor**

(Mathematical Science Field for Energy Mix)

The University of Electro-Communications (UEC) invites applications for Associate Professor or Tenure Track Assistant Professors in the areas including mathematical science, distributed energy systems, energy transformation devices, and mathematical optimization control.

The goal of i-Powered Energy System Research Center (i-PERC) is to establish "Fusion of information and communication technology and energy technology in distributed energy systems," and aim at a game changing role for a low-carbon society. In order to grow into a global research center, our core activities are to establish economic efficiency for various energies, and the best mix of management that can be flexibly applied to regions with various environments and characteristics based on mathematical science models. We are recruiting professionals who aim to contribute to these directions.

### **1. Title and number of position**

Associate Professor or Tenure Track Assistant Professor, one position

### **2. Affiliation after the employment**

Info-powered Energy System Research Center (i-PERC)

(serving concurrently in Department of Computer and Network Engineering)

### **3. Fields of specialty**

i-PERC is recruiting a wide range of researchers who will open up new fields of mathematical science in order to realize the best energy mix management with economic efficiency and flexible regional adaptability.

The researcher will be responsible for research and education for the realization of various forms of smart cities and sound material-cycle social systems in collaboration with us. Candidates are expected to specialize in mathematical science, distributed energy systems, energy transformation devices, and mathematical optimization control.

The fields of mathematical science to be recruited are mainly related to applied mathematics and statistical mathematics, mathematical informatics, and statistical science. In particular, we welcome young researchers (less than 8 years after obtaining a doctoral degree) who can participate in our research projects below.

- Research on an independent power supply system as an autonomous distributed system for the realization of the main power generation of renewable energy
- Research on Internet-type power systems using autonomous distributed systems
- Research on demand and device monitoring and optimal control in the microgrid
- Research on smart city resilience by combinatorial optimization of various power generation and storage distribution resources

Young researchers in the field of recruitment have achievements equivalent to any of the above four themes, or cross-sectional achievements related to information science, system engineering, environmental energy engineering, city planning, etc., will be actively considered as potential candidates for the Associate Professorship.

#### **4. Responsible subjects**

In addition to their own research, applicants are expected in on-campus and off-campus projects promoted by i-PERC in cooperation with other faculty members in the center. In addition, applicants are expected to be actively involved in a wide range of activities in industry-academia collaboration such as various on-campus projects related to energy, joint research with companies, and education for working adults.

In addition, the applicant will be in charge of the subjects of the Mathematical Information Science Program of the Cluster I (Informatics and Computer Engineering), School of Informatics and Engineering / Mathematical Information Science Program, Department of Computer and Network Engineering, Graduate School of Informatics and Engineering, and the research guidance of the students who belong to it. You may be in charge of the subjects of the Fundamental Program for Advanced Engineering (Night School Program).

#### **5. Eligibility for application**

- 1) Applicants must hold a doctorate degree or equivalent qualification.
- 2) Applicants must have a good track record in the above-mentioned fields of specialty and can contribute to the progress of the fields through activities in education and research.
- 3) Applicants are expected to have sufficient Japanese language ability to conduct university affairs.

#### **6. Start of employment**

October 1, 2022 (or later at the earliest possible date.)

#### **7. Term of employment and employment status**

- 1) Term of employment:

. Associate Professor position: permanent full-time (until the mandatory retirement age)

. Or Assistant Professor position: UEC Tenure Track

In case of Assistant Professor position, please Note<sup>\*1</sup>: The employment period (tenure-track period) is 5 years from the employment date. The successful applicant must be recognized for their outstanding academic capabilities after undergoing an interim evaluation in the third year and a tenure qualification review in the fifth year, to be granted tenure status (permanent employment) and promotion to Associate Professor.

Note<sup>\*2</sup>: Please refer to the following URL for general information on the tenure track program at UEC.

[https://www.uec.ac.jp/eng/research/activity/uec\\_tenure\\_track/index.html](https://www.uec.ac.jp/eng/research/activity/uec_tenure_track/index.html)

2) Employment status: Full-time research and education employee

3) Place of employment: The University of Electro-Communications (1-5-1 Chofugaoka, Chofu, Tokyo)

4) Work hours: Discretionary labor system

Based on standard work hours of 7 hours and 45 minutes during 8:30am-5:15pm, an individual employee may decide how his/her schedule will fit into workday.

5) Holidays: Saturday, Sunday, holidays prescribed by the National Holiday Act, New Year's holiday, and the days designated by UEC.

However, if an employee teaches a night course of the Fundamental Programs for Advanced Engineering that is offered on Saturday, the day off should be taken on one of the weekdays instead. For securing the number of credit hours, an employee may need to work on public holidays.

6) Paid holidays: Annual paid holidays, special leave, childcare leave, and nursing care leave

7) Insurances: Health insurance/pension (the Monbukagakusho Mutual-Aid Association insurance), employment insurance, and worker's compensation insurance

## **8. Salary**

1) Salary

Annual Salary System (Based on rules of the University of Electro-Communications)

2) Research fund

Research funding of Associate Professor or Assistant Professor level will be provided in accordance with the University's regulations.

## **9. Documents for submission**

1) Application form: (Photo, Resume, List of research achievements)

Please download and fill in the Application Form.

[http://www.uec.ac.jp/about/advertisement/pdf/oubo\\_sinseisyo\\_e.pdf](http://www.uec.ac.jp/about/advertisement/pdf/oubo_sinseisyo_e.pdf) (PDF file)

[http://www.uec.ac.jp/about/advertisement/date/oubo\\_sinseisyo\\_e.doc](http://www.uec.ac.jp/about/advertisement/date/oubo_sinseisyo_e.doc) (MS-word file)

- 2) Research papers (up to 5 papers: duplicates are acceptable)
- 3) Outline of research achievements: up to 2 pages on an A4 sheet
- 4) Outline of the research plan in i-PERC: up to 2 pages on an A4 sheet
- 5) Outline of aspirations regarding your contribution to i-PERC up to 1 page of A4 sheet
- 6) Teaching experience and your goals in education: up to 2 pages on an A4 sheet
- 7) The names, affiliations, contacts (including e-mail address), and relation of references.

The applicant for Assistant Professor position: two references, at least one from Japan, are required. The applicant for Associate Professor position: three references at least one from Japan and one from outside Japan.

Remark 1: If you are a young researcher with limited achievement in the energy field, please explain the relationship between your specialty and the energy technology of smart cities and the recycling society system in (4) and (5).

Remark 2: Regarding the educational aspirations of (6), please refer to the UEC website of the Cluster I, School of Informatics and Engineering/the Department of Computer and Network Engineering, Graduate School of Informatics and Engineering.

## **10. Instructions for submission**

Application documents (1) to (7) must be submitted through the following online site. When submitting online, the document (3), (4), (5) and (6) are required to be uploaded as one PDF file.

Online submission site (Please select “Mathematical science field for energy mix”):  
<https://www.inf.uec.ac.jp/kobo/>

## **11. Application deadline**

Application documents must arrive by 17:00 Jun 17th, 2022 (Japan Standard Time)

## **12. Selection procedure**

If an applicant passes the screening of application documents, the applicant will be requested to come to the UEC for an interview. Please note that transportation for the interview will be at applicant’s own expense.

If an applicant who passes the screening of application documents lives outside of Japan, the interview may be held by online and please directly contact us using the contact information below for further information. In addition, depending on the situation of COVID-19, the domestic candidate may also accept an online interview, too.

### **13. Contact**

Prof. Kenji Sawada,  
Info-Powered Energy System Research Center,  
The University of Electro-Communications  
E-Mail: knj.sawada@uec.ac.jp

### **14. Others**

- All faculty members of UEC belong to the Academic Institute, through which individual faculty members are assigned to specific departments or centers.
- Based on an aim to engage in the target value that is described in the 5th Science and Technology Basic Plan in fiscal year 2016–2020 (Cabinet office, Government of Japan, 2016), the government is acting to achieve a ten percent increase in the number of young researchers under 40 years of age and hopes to increase this number by over thirty percent in the overall higher educations for the future. UEC is recruiting well-qualified young researchers in order to foster them and accelerate their dynamic research activities. For more information, please refer to the following URL: <https://www8.cao.go.jp/cstp/kihonkeikaku/index5.html>
- Under the principle of The Basic Law for a Gender-Equal Society, UEC is aiming to increase the number of female faculty members through an effort to provide working environment that is friendly to female employees, such as Work-Life Balance Support and Support for Research Career Advancement. Female candidates are strongly encouraged to apply. For more information, please refer to the following URL: <http://www.ge.uec.ac.jp/>