

Researcher at the Institute for Space-Earth Environmental Research (ISEE), Nagoya University

### **Summary**

The Institute for Space-Earth Environmental Research (ISEE) of Nagoya University is conducting a research project entitled “Pan-Arctic Water-Carbon Cycles: PAWCs” (PI: Prof. Tetsuya Hiyama, Nagoya University), supported by a Grant-in-Aid for Scientific Research (S) of JSPS (Japan Society for the Promotion of Science) KAKENHI. PAWCs aims to integrate water and carbon cycles across atmosphere – biosphere – hydrosphere – cryosphere in the pan-Arctic region ( <https://enpawcs.home.blog/> ). A successful candidate will work with Prof. Hiyama at ISEE of Nagoya University, together with his collaborating researchers under PAWCs. The successful candidate is required to develop and distribute dataset on spatiotemporal variations of inundation (water-covered) area, vegetation condition, and fluxes of greenhouse gases in northern Eurasia, carrying out at least one of the following research topics.

- 1) Developing a water traceable integrated model (WTIM), which can calculate spatiotemporal variations in the atmospheric moisture transport, moisture flux convergence, precipitation, vegetation condition, permafrost degradation, and river discharge in northern Eurasia.
- 2) Analyzing WTIM products and/or reanalysis data to explore spatiotemporal variations of atmospheric – terrestrial water in northern Eurasia, with important boundary conditions of the Arctic sea ice extent.
- 3) Estimating spatiotemporal variations of inundation (water-covered) area, vegetation condition, and fluxes of greenhouse gases in northern Eurasia, using satellite remote sensing data and WTIM products with the help of spatiotemporal data fusion technics and a biogeochemical model.
- 4) Measuring and analyzing the fluxes of greenhouse gases in eastern Siberia and in northern Mongolia.

### **Job requirements and Qualifications**

1. Work location: Institute for Space-Earth Environmental Research (ISEE), Nagoya University
2. Appointment conditions: (1) Position: Researcher (In case research achievements of the successful candidate fulfill certain conditions, it is possible to promote to a Designated Assistant Professor of ISEE after employment.) (2) Salary: Between 320,000JPY/month and 420,000JPY/month (3) Work hours: 38.75 hours/week (4) Insurance enrollment: Health

- insurance, Welfare pension, Employment insurance, Workers compensation insurance
3. Research area: Hydrology, Climatology, Meteorology, Environmental Remote Sensing
  4. Number of persons: 1
  5. Qualifications: Applicants must satisfy all of the following conditions: (1) Holds a doctoral degree or is expected to earn a doctoral degree, and (2) does not have other primary occupation or is not a graduate student or a researcher at the time of start of the employment.
  6. Starting date: April 1, 2021 or later at the earliest possible time
  7. Term of employment: Renewable each fiscal year up to March 31, 2024
  8. Application deadline: 5:00pm on Monday, March 1, 2021 (Japan standard time) However, the application will be closed as soon as the appropriate person is found.
  9. Screening process: Document screening and, if necessary, interview
  10. Application materials: (1) Curriculum Vitae (2) Summary of research achievements (up to two A4 sheets) (3) List of publication and research activity (4) Copies of the three most important publications (5) Research plan (up to two A4 sheets) (6) Name and contact of two professional references (7) Possible starting date
  11. Method of application: Applicants should send application materials to the email address below with “Application to Researcher of PAWCs” in the subject heading.

#### **Submission email address**

After submission, applicants should make further inquiries if a confirmation email is not received within three days of their submission.

12. Inquiries: Prof. Tetsuya Hiyama, Institute for Space-Earth Environmental Research (ISEE), Nagoya University F3-3 (250), Furo-cho, Chikusa-ku, Nagoya, Aichi 464-8601, Japan  
e-mail: [hiyama@nagoya-u.jp](mailto:hiyama@nagoya-u.jp)

13. Remarks: Personal information provided in relation to the application will be used only for the purpose of screening. Upon completion of the screening, all personal information, except for information of those who passed the screening, will be discarded responsibly. In addition, Institute for Space– Earth Environmental Research is an active promotor of Gender Equality. Browse the web page below for more detail.

<http://www.kyodosankaku.provost.nagoya-u.ac.jp/en/>

The contents herein are originally created in Japanese. If any discrepancies do exist, the original Japanese version shall prevail.