

Environmental Radioactivity Research Network Center FY2022 Collaborative Research Application Guidelines

1. Background

The Tokyo Electric Power Company Holdings Fukushima Daiichi Nuclear Power Station accident (hereafter nuclear accident) occurred due to the 2011 Great East Japan Earthquake and Tsunami. Radioactive substances released from the nuclear reactors were dispersed and deposited widely over eastern Japan. More than 10 years have elapsed since the nuclear accident. Yet, as represented by concerns related to the circulation of radioactive substances in forests and concentrations in freshwater fish, scientific issues, such as the processes by which radioactive substances are transferred to forests, rivers, lakes, oceans, agricultural products, and fish, remain unresolved. In addition, given issues including the many residents who are still evacuated from areas near the nuclear accident site and the adverse impacts of rumors regarding agricultural, forestry, and fishery products; the need to continually communicate accurate information regarding Fukushima's environmental recovery has increased. In addition, it is Japan's duty to the international community to communicate knowledge regarding the nuclear accident.

In order to contribute to resolving various issues related to Fukushima's environmental recovery, a cross-organizational collaboration, the Environmental Radioactivity Research Network Center (hereafter ERAN), was authorized by the Minister of Education, Culture, Sports, Science and Technology on April 1, 2019. ERAN consists of University of Tsukuba Center for Research in Isotopes and Environmental Dynamics (CRiED), Fukushima University Institute of Environmental Radioactivity (IER), Hirosaki University Institute of Radiation Emergency Medicine (IREM), Japan Atomic Energy Agency Sector of Fukushima Research and Development Collaborative Laboratories for Advanced Decommissioning Science (JAEA CLADS), the National Institute for Environmental Studies Fukushima Branch (NIES Fukushima Branch), and Institute for Environmental Sciences (IES), which have been investigating the transfer processes of radioactive substances and assessing their impacts.

ERAN's objectives are to clarify the transfer mechanisms of radioactive substances and assess their impacts through the collaborative use of research facilities and collaborative research, as well as communicate findings domestically and to the international community. This announcement is for collaborative research that will contribute to solving various issues related to Fukushima's environmental recovery.

2. Types of Collaborative Research

(1) **Young**¹ (Upper Limit of Research Funding: ¥250,000²)

For collaborative research between a young researcher(s)/Ph. D student(s) (under 35 on April 1, 2022; master students are not included) out of ERAN institutions and an ERAN researcher(s). Funded researchers are expected to participate in ERAN activities including seminars (remote participation via Web meetings available).

(2) **Priority**¹ (Upper Limit of Research Funding: ¥200,000²)

For collaborative research between a researcher(s) out of ERAN institutions and an ERAN researcher(s).

(3) **International**¹ (Upper Limit of Research Funding: ¥200,000^{2·3})

For collaborative research by a researcher based in a country or region other than

Japan with an ERAN researchers. Collaborative research through online discussions is acceptable this year. However, only activity conducted in Japan will be financially supported.

(4) General

Collaborative research using ERAN equipment, databases, samples, etc. that does not fall within (1)–(3).

¹ Facilities at CRiED, IER, and IREM can be used by joint researchers accepted for (1)–(3). Please inquire separately to other host organizations.

² For all types of collaborative research, research funds cannot be used for purchase of consumables, etc., outside of Japan.

³ The funds can be used to cover the cost of travel to and stay in Japan (See "12. Other").

Types of Collaborative Research		Young	Priority	International	General
Application Period		January 6 to 28, 2022			At any time
Notification of Selection/Rejection		On or after February 21, 2022			At any time
Qualification	Applicant	Researchers or Ph. D students out of ERAN institutions, who are under 35 on April 1, 2022.	Researchers out of ERAN institutions		
	Co-researcher	Researchers out of ERAN institutions.			
	Host researcher(s)	Necessary Researchers in ERAN institutions (see list of host researchers)			Necessary*
Upper Limit of Research Funding		¥250,000	¥200,000	¥200,000	No research grants
Presentation in kick-off and annual-report meetings		Necessary	Necessary	Necessary	Not necessary
Submission of report on findings		Necessary	Necessary	Necessary	Not necessary

* Applicants in ERAN institutions may apply without specifying host researcher

List of host researchers*

University of Tsukuba CRiED	ONDA Yuichi, ASANUMA Jun, AOYAMA Michio, FURUKAWA Jun, KATO Hiroaki, SAKAGUCHI Aya, SEKIGUCHI Tomohiro, YAMASAKI Shingo, TAKAHASHI Junko, MUKAI Hiroki, NAKAMURA Yusuke, TSUJIMURA Maki, YAMAJI Keiko, HATANO Yuko, YAMANAKA Tsutomu, SASA Kimikazu
Fukushima University IER	NANBA Kenji, TSUKADA Hirofumi, TAKAHASHI Takayuki, Vasył YOSCHNKO, Aleksei KONOPLEV, TORII Tatsuo, Mofizur Md. RAHMAN, Ismail, WADA Toshihiro, HIRAO Shigekazu, WAKIYAMA Yoshifumi, TAKATA Hyoe, ISHINIWA Hiroko, IGARASHI Yasunori, SHIBASAKI Naoaki, YAMAGUCHI Katsuhiko, TAKAGAI Yoshitaka, KAWAGOE Seiki, YOKOO Yoniyuki, KANEKO Shingo
Hirosaki University IREM	TOKONAMI Shinji, MIURA Tomisato, AKATA Naofumi, HOSODA Masahiro, TAZOE Hirofumi, OMORI Yasutaka, Chutima KRANROD
JAEA CLADS	IJIMA Kazuki, FUJIWARA Kensou, DOI Terumi, NIIZATO Tadafumi, SASAKI Yoshito, KURIKAMI Hiroshi, SANADA Yukihisa, NAKANISHI Takahiro, YOSHIMURA Kazuya, TERASHIMA Motoki, FUNAKI Hironori, HAGIWARA Hiroki
NIES Fukushima Branch	HAYASHI Seiji, TAMAOKI Masanori, TSUJI Hideki, ISHII Yumiko, YOSHIOKA Akira, TAKAGI Mai, ENDO Kazuto
IES	SHIMADA Yoshiya, YOSHIDA Satoshi, KAKIUCHI Hideki, UEDA Shinji, TANI Takashi, OHTSUKA Yoshihito, IMADA Shogo, KAWABATA Hitoshi, HASEGAWA Hidenao, ABE Koichi, UNNO Yusuke, TAKEDA Akira, SATOH Yuhi, IMAI Shoko, TAKO Yasuhiro, MASUDA Tsuyoshi, YAMAGAMI Mutsumi, ISHIKAWA Yoshio, NAGAI Masaru, YAMAUCHI Kazumi, TAKAI Daisaku, YANAI MASUMI, VEERASAMY Nimelan, NAGASHIMA Haruki, KOMURA Jun-ichiro, TANAKA Satoshi, FUJIKAWA Katsuyoshi, NAKAHIRA Rei

*Presented in the order of Family Name, Given Name. Please refer to the following Web pages for information on the member research organizations and researchers.

University of Tsukuba CRiED	https://www.ied.tsukuba.ac.jp/en/
Fukushima University IER	http://www.ier.fukushima-u.ac.jp/index_e.html
Hirosaki University IREM	http://www.irem.hirosaki-u.ac.jp/en/
JAEA CLADS	https://clads.jaea.go.jp/en/env/
NIES Fukushima Branch	http://www.nies.go.jp/fukushima//index-e.html
IES	https://www.ies.or.jp/index_e.html

3. Qualifications for Application

Those eligible to apply include researchers with positions at universities and research

organizations, Ph. D students, and those with equivalent qualifications (including those who are scheduled to assume positions) in April 2022. If the applicant is a Ph. D student, approval by the student's research supervisor is necessary. For types of collaborative research that require a host researcher, applicants should make sure to consult with them in advance.

4. Research Period

From April 1, 2022 to March 31, 2023.

5. How to Apply

Please enter the required information in the webform following the instructions on the website (<http://www.ied.tsukuba.ac.jp/ernc/entry/>).

6. Period for submitting application and notification of acceptance/rejection (1) Young, (2) Priority, (3) International

Application Period: January 6 to 28, 2022.

Notification of acceptance/rejection: The applicant will be notified by email on or after February 21, 2022. Also, the accepted research topics will be posted on the ERAN website.

(4) General Joint Research

Acceptance/Rejection: Applications may be submitted at any time, and the applicant will be notified by email regarding acceptance or rejection.

7. Collaborative Research Funding

For (1) Young, (2) Priority, and (3) International collaborative research applications approved by the review committee, the collaborative research funds will be allocated within the upper limit for each category. There may be cases where the review committee allocates a lower amount than the funding applied for. Collaborative research funds can be used for travel, consumables, etc., in accordance with the regulations of the host institution.

8. Kickoff Meeting presentation, publication of results, etc.

The principal investigators for accepted (1) Young, (2) Priority, and (3) International collaborative research applications will present a summary of their research and implementation plans at the Online Kickoff Meeting (Planned for May 2022) (participation by Web Meeting or by a substitute are possible). Also, the findings of the research will be presented at the Online ERAN Annual Reporting Meeting (Planned for March 2023). (1) Young collaborative researchers will be expected to actively participate in the monthly seminars held at ERAN (Web meeting participation is possible).

We ask that principal investigators submit a report of their findings by March 31, 2023. These reports will be published on the ERAN website.

9. Intellectual Property Rights

Rights to intellectual property produced by collaborative research with ERAN will be determined through negotiations between the relevant institutions.

10. Applications and Inquiries

ERAN Center for Research in Isotopes and Environmental Dynamics, University of Tsukuba

Administrative Section

Environmental Dynamics & Prediction Section

Center for Research in Isotopes and Environmental Dynamics

University of Tsukuba

Address: 1-1-1 Tennodai, Tsukuba, Ibaragi 305-8577

Email: eran@ied.tsukuba.ac.jp

Phone: 029-853-2532

FAX: 029-853-2539

11. Privacy Policy

The handling of personal information by the ERAN Office is in accordance with "GDPR (EU General Data Protection Regulation)-Based Privacy Policy of the National University Corporation University of Tsukuba".

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<https://www.tsukuba.ac.jp/en/about/action-gdpr/>

12. Other

Collaborative research with ERAN and the use of research funds will be governed by the regulations, etc., of the host institution (signing a contract for collaborative research, etc.). For inquiries regarding regulations, etc., please contact each host institution.