# FY2021 Environmental Radioactivity Research Network Center

#### Collaborative Research Announcement

#### **Application Guidelines**

#### 1. Background

The Tokyo Electric Power Company Holdings Fukushima Daiichi Nuclear Power Station accident (hereafter nuclear accident) occurred due to the March 11, 2011 Great East Japan Earthquake and Tsunami. Radioactive substances released from the nuclear reactors were dispersed and deposited widely over eastern Japan. Ten 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.

The 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), National Institutes for Quantum and Radiological Science and Technology Center for Advanced Radiation Medicine Dept. of Radioecology and Fukushima Project (QST Dept. of Radioecology and Fukushima Project) and the National Institute for Environmental Studies Fukushima Branch (NIES Fukushima Branch) are investigating the transfer processes of radioactive substances and assessing their impacts. 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'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\* (Upper Limit of Research Funding: \(\pmax\)300,000\*\*)

For young researchers (35 or under on April 1, 2021) not affiliated with an ERAN institution to conduct collaborative research with a network member researcher. Funded researchers will participate in ERAN activities including seminars (remote participation via Web meetings permitted).

- (2) Priority\* (Upper Limit of Research Funding: \(\frac{\pmathbf{2}}{200,000\*\*}\)
  For collaborative research by an outside researcher with a network member researcher.
- (3) International\* (Upper Limit of Research Funding: \(\frac{4}{2}\)200,000\*\*)

  For collaborative research by a researcher based in a country or region other than Japan with a network member researcher. Collaborative research through online discussions is acceptable this year. However, only activity conducted in Japan will be financially supported.
- (4) General Joint Research
  Collaborative research using ERAN equipment, databases, samples, etc. that does not fall within (1)–(3) above.
- \* Facilities at CRiED, IER, and IREM can be used by joint researchers accepted for (1)—(3). Please inquire separately to other host organizations.
- \*\* For all types of collaborative research, research funds cannot be used for international travel expenses, or purchase of consumables, etc., outside of Japan.

Type of Collaborative		Young	Priority	International	General
Research					
Application Period		February 1, 2021 to February 22, 2021			At any time
Notification of		On or after March 16, 2021		At any time	
Selection/Rejection					
Qualification	Applicant	Not	Not affiliated	with network	Either not
		affiliated	member institu	ution	affiliated or
		with			affiliated with
		network			network
		member			
		institution			
		35 or			
		younger			
		(Ph. D			
		students			
		included)			
Joint		Either not affiliated or affiliated with network			
	researcher				
Host		Necessary (see separate table)			Necessary*
	researcher				
Upper Limit of Research		¥300,000	¥200,000	¥200,000	No research
Funding					grants
Submission of report on		Necessary	Necessary	Necessary	Not necessary
findings					

<sup>\*</sup> Applicants affiliated with a member institution may apply without specifying host researcher

### List of host researchers\*

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University of Tsukuba	Onda Yuichi, Sueki Keisuke, Asanuma Jun, Furukawa
CRiED	Jun, Kato Hiroaki, Sakaguchi Aya, Sekiguchi Tomohiro,
	Yamasaki Shinya, Takahashi Junko, Nakamura Yusuke,
	Tsujimura Maki, Yamaji Keiko, Hatano Yuko, Yamanaka
	Tsutomu, Sasa Kimikazu, Aoyama Michio
Fukushima University IER	Nanba Kenji, Konoplev Aleksei, Tsukuda Hirofumi,
	Yoshchenko Vasyl, Rahman Ismail Md. Mofizur, Wada
	Toshihiro, Hirao Shigekazu, Wakiyama Yoshifumi,
	Zheleznyak Mark, Torii Tatsuo, Takata Hyoe, Ishiniwa
	Hiroko, Igarashi Yasunori, Takahashi Takayuki, Shibasaki
	Naoaki, Yamaguchi Katsuhiko, Takagai Yoshitaka,
	Kawagoe Seiki, Kaneko Shingo, Yokoo Yoshiyuki
Hirosaki University IREM	Tokonami Shinji, Akata Naofumi, Miura Tomisato,
	Hosoda Masahiro, Tazoe Hirofumi, Takakuma Yuki,
	Kranrod Chutima, Fujisima Yoheiu
JAEA CLADS	Iijima Kazuki, Abe Hironobu, Fujiwara Kenso, Doi
	Terumi, Niizato Tadafumi, Sasaki Yoshito, Kurikami
	Hiroshi, Sanada Yukihisa, Nakanishi Takahiro, Yoshimura
	Kazuya, Terajima Motoki, Funaki Hironori, Hagiwara
	Hiroki
QST Dept. of Radioecology	Yamada Yutaka, Aono Tatsuo, Kumar Sahoo Sarata,
and Fukushima Project	Zheng Jian, Takahagi Masahiko, Tagami Keiko, Ishii
	Nobumasa, Fuma Shoichi, Maruyama Koichi, Watanabe
	Yoshito
NIES Fukushima Branch	Ohara Toshimasa, Hayashi Seiji, Tamaoki Masanori, Tsuji
	Hideki, Ishii Yumiko, Yoshioka Akira, Takagi Mai, Endo
	Kazuto

<sup>\*</sup>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	http://www.ied.tsukuba.ac.jp/
Fukushima University IER	http://www.ier.fukushima-u.ac.jp/
Hirosaki University IREM	http://www.irem.hirosaki-u.ac.jp/
JAEA CLADS	https://clads.jaea.go.jp/en/env/
QST Dept. of Radioecology and	https://www.qst.go.jp/site/qms/
Fukushima Project	
NIES Fukushima Branch	http://www.nies.go.jp/fukushima/

## 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 2021. 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

April 1, 2021 to March 31, 2022.

# 5. How to Apply

Please enter the required information in the webform following the instructions on the website (<a href="http://www.ied.tsukuba.ac.jp/ernc/entry/">http://www.ied.tsukuba.ac.jp/ernc/entry/</a>) and submit the application to the ERAN Secretariat.

### 6. Deadline for submitting application and notification of acceptance/rejection

(1) Young, (2) Priority, (3) International

Application materials: Please refer to ERAN website

(<a href="http://www.ied.tsukuba.ac.jp/ernc/entry/">http://www.ied.tsukuba.ac.jp/ernc/entry/</a>)

Application Period: February 1 to February 22, 2021.

Notification of acceptance/rejection: The applicant will be notified by email on or after March 16, 2021. Also, the accepted research topics will be posted on the ERAN website.

(4) General Joint Research

Application materials: Please refer to ERAN website

(<a href="http://www.ied.tsukuba.ac.jp/ernc/entry/">http://www.ied.tsukuba.ac.jp/ernc/entry/</a>

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 2021) (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 2022). (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, 2022. 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: <a href="mailto:eran@ied.tsukuba.ac.jp">eran@ied.tsukuba.ac.jp</a>

Phone: 029-853-2532 FAX: 029-853-2539

### 11. 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., we ask applicants to consult each host institution.