# F-REI International Symposium

# Collection and Dissemination of Data and Knowledge Related to Nuclear Disaster Resilience and Science

1-2 November, 2025 J-VILLAGE

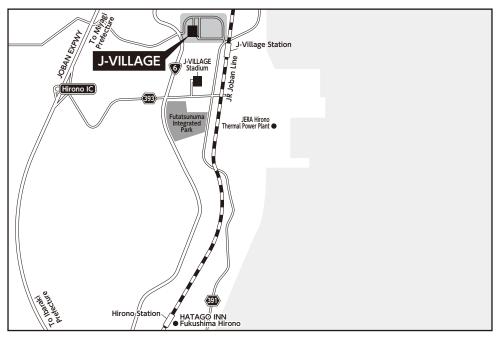
The Fukushima Institute for Research, Education and Innovation (F-REI)

Organized by: The Fukushima Institute for Research, Education and Innovation and Nagasaki University

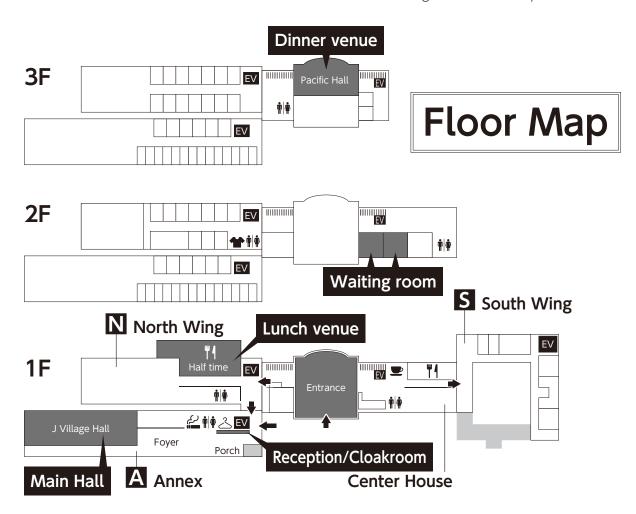
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# **Venue Information**

J-VILLAGE Utsukushimori-8, Yamadaoka, Naraha, Futaba, Fukushima 979-0513



It takes 5 minutes from J-Village Station to J-VILLAGE on foot. It takes 5 minutes from Hirono interchange to J-VILLAGE by car.



# ••••• Information Guide for Participants ····•

- Event Format: Hybrid (On-site/Online)
- Registration Hours: -

Time: Saturday, 1<sup>st</sup> November 12:00–13:00

Venue: J-Village 1F (Annex)

Dinner (Reception): ———

Time: Saturday, 1<sup>st</sup> November 17:30–19:30

Venue: J-Village 3F Pacific Hall (Center House)

• Lunch: —

Time: Sunday, 2<sup>nd</sup> November 11:50–13:00

Venue: J-Village 1F Half time (North Wing)

Cloakroom: -

A cloakroom will be available in the foyer (near the elevator) of J-Village Hall during the event.

\* Please note that we cannot store valuables, umbrellas, or laptops.

Internet Information -

# Free Wi-Fi is available throughout J-Village.

Wi-Fi Name: j-village

Password: jvillage

Secretariat Contact Information: ————

Research and Support Center for the Future of Fukushima, Nagasaki University

E-mail: rscff\_nu@ml.nagasaki-u.ac.jp

1-12-4 Sakamoto, Nagasaki City, 852-8102

# **Program**

## **—** 1 November 2025

13:00-13:05

#### **Opening Remarks**

Professor Noboru Takamura, Unit Leader, Nuclear Disaster Medical Science Unit, Fukushima Institute for Research, Education and Innovation

13:05-13:35

**Overview of F-REI** 

Moderator: Professor Fumihiko Imamura

Professor Koetsu Yamazaki, President, Fukushima Institute for Research, Education and Innovation

13:35-15:05

Session 1: Accumulation of findings from Fukushima in the field of nuclear disaster science

Moderator: Professor Noboru Takamura

- Mission of Nuclear Disaster Medical Science Unit: Beyond the Dose
   Professor Noboru Takamura, Nagasaki University, The Great East Japan Earthquake and Nuclear Disaster Memorial Museum
- Phased Analysis of Post-Accident Radiation Protection Measures after the Fukushima Daiichi Nuclear Accident

Professor Nakahiro Yasuda, University of Fukui, The Great East Japan Earthquake and Nuclear Disaster Memorial Museum

To be confirmed

Professor Kenji Nanba, Fukushima University

15:05-15:30

Coffee break

15:30-17:00

Session 2: Invited speakers' session on the field of nuclear disaster resilience and science Moderator: Professor Kenji Nanba

Educational Dialogue as a Tool for Low-Dose Radiation Risk Communication and Preparedness

Professor Prakash Hande, National University of Singapore

Two Nations, One Challenge: Managing and Communicating Radiological and CBRNe Risks in Japan and Italy

Professor Andrea Malizia, University of Rome Tor Vergata

Mitate lab, a multidisciplinary approach for a better understanding of Post-Fukushima issues

Dr. Cécile Asanuma-Brice, Centre national de la recherche scientifique (CNRS)

# **Program**

## **2** November 2025

09:00-10:30

**Session 3: Proposals to F-REI** 

Moderator: Professor Yuji Owada

- Lessons from the Fukushima Daiichi NPP accident: challenges for the recommendations
  of the International Commission on Radiological Protection
  - Professor Thierry Schneider, International Commission on Radiological Protection (ICRP), Nagasaki University
- Aligning National Research with Global Goals: ASNR and the F-REI Initiative Deputy Director Jean-Christophe Gariel, Autorité de Sûreté Nucléaire et de Radioprotection (ASNR)
- Teaching Radiation Science through Hands-on Experiments
   Professor Eric Benton, Oklahoma State University

10:30-11:30

Session 4: Reports from the Director and Unit Leader

Moderator: Professor Toshimasa Ohara

- Collection and Dissemination of Data and Knowledge on Nuclear Disasters

  Professor Fumihiko Imamura, Director, Collection and Dissemination of Data and
  Knowledge on Nuclear Disasters, Fukushima Institute for Research, Education and
  Innovation
- Research on radioactive environmental dynamics at F-REI Professor Seiji Hayashi, Unit Leader, Regional Environmental Co-Creation Unit, Fukushima Institute for Research, Education and Innovation
- Mega-Disaster Resilience Science Unit at F-REI Professor Naoya Sekiya, Unit Leader, Mega-Disaster Resilience Science Unit, Fukushima Institute for Research, Education and Innovation (Pre-recorded video)

11:30-11:50

Group photo

11:50-13:00

**Lunch (1F Half time)** 

13:00-14:00

**Session 5: Young researchers' session** 

Moderator: Professor Nakahiro Yasuda

Linking Knowledge, Health, and Resilience: Building a Global Platform for Nuclear Disaster Data Integration and Dissemination

Dr. Varsha Hande, Research Officer, City Cancer Challenge Foundation, India

- Building a Shared Vision between Chornobyl and Fukushima: Long-Term Collaboration for Nuclear Disaster Resilience
  - Dr. Olena Pareniuk, Senior Researcher, Institute for Safety Problems of Nuclear Power Plants of National Academy of Sciences of Ukraine
- Risk communication in nuclear emergencies: embracing the complexities
   Dr. Yevgeniya Tomkiv, Researcher, Norwegian University of Life Sciences

14:00-15:00

#### Session 6: Discussion by young researchers with Professor Koetsu Yamazaki

- Dr. Varsha Hande, Research Officer, City Cancer Challenge Foundation, India
- Dr. Olena Pareniuk, Senior Researcher, Institute for Safety Problems of Nuclear Power Plants of National Academy of Sciences of Ukraine
- Dr. Yevgeniya Tomkiv, Researcher, Norwegian University of Life Sciences
- Ms. Nina VanderVeen, Undergraduate Student, Nagasaki University School of Medicine
- Dr. Masatoshi Suzuki, Senior Researcher, Regional Environmental Co-Creation Unit, Fukushima Institute for Research, Education and Innovation
- Dr. Yasuhito Jibiki, Project Associate Professor, Center for Integrated Disaster Information Research (CIDIR), The University of Tokyo
- Ms. Chandula Pinnawala, Research Administrator, Fukushima Institute for Research, Education and Innovation

15:00

#### **Closing Remarks**

Professor Fumihiko Imamura, Director, Collection and Dissemination of Data and Knowledge on Nuclear Disasters, Fukushima Institute for Research, Education and Innovation

# **Speaker Profiles**



### Dr. Koetsu Yamazaki

President, Fukushima Institute for Research, Education and Innovation

Dr. Koetsu Yamazaki became Professor of Engineering at Kanazawa University in 1994. In 2014, he was appointed President of Kanazawa University, and in 2022, he took on the role of Special Advisor. Since 2023, he has been serving as the President of F-REI.

#### Overview of F-REI

The Fukushima Institute for Research, Education and Innovation (F-REI) was established in 2023 to lead the creative reconstruction of Fukushima and the Tohoku region after the 2011 disaster. It integrates four key functions research and development, industrialization, human capital development, and a control tower to address regional challenges. Through innovation, F-REI aims to enhance Japan's global industrial competitiveness and generate benefits that extend beyond the region.

## **Session 1**



## Dr. Noboru Takamura

Unit Leader, Nuclear Disaster Medical Science Unit, Fukushima Institute for Research, Education and Innovation (F-REI)

Professor, Department of Disaster Resilience and Science, Atomic Bomb Disease Institute, Nagasaki University

Director, The Great East Japan Earthquake and Nuclear Disaster Memorial Museum

Just after the Fukushima accident, Professor Takamura implemented crisis communication, and he has contributed to the recovery of affected communities through the evaluation of internal and external exposure doses of residents as well as through risk communication with them.

#### Mission of Nuclear Disaster Medical Science Unit: Beyond the Dose

We have conducted research projects in Fukushima which is available for the recovery of affected community after a nuclear disaster. In this presentation I am going to introduce the research direction of Nuclear Disaster Medical Science Unit, based on our previous activities.



### Dr. Nakahiro Yasuda

Professor, The research institute of nuclear engineering, University of Fukui /

Professor Yasuda was a Former Senior Researcher at the National Institute of Radiological Sciences, specializing in radiation visualization and low-dose effects. Since 2012, Professor Yasuda has been with the University of Fukui's International Research Institute for Nuclear Decommissioning, heading the Division of Nuclear Disaster and Crisis Management, and serving as a Nuclear Disaster Prevention Advisor for Tsuruga City.

#### Phased Analysis of Post-Accident Radiation Protection Measures after the Fukushima Daiichi Nuclear Accident

Since the Fukushima Daiichi Nuclear Power Plant accident, long-term radiation protection measures have been implemented, though most reports focus only on the immediate aftermath. Measures were categorized into three phases—unknown dose, environmental dose, and individual dose—with key actions including evacuation, contamination monitoring, and internal/external dose measurements. Our group reviews these measures to inform existing disaster response frameworks and advance research on monitoring, training, and risk communication using both domestic and international experience.



# Dr. Kenji Nanba

Director of Institute of Environmental Radioactivity at Fukushima University

Born in Okayama Prefecture in 1964. He joined the newly established Faculty of Science and Engineering at Fukushima University in 2005. He served as Deputy Director or Director of the Institute of Environmental Radioactivity since its establishment in 2013.

IER have disseminated scientific information to communities to promote safe living environments. Collaborative research to share or exchange lessons learned in post-nuclear accident, both domestically and internationally, is also of treat importance from Fukushima University.

## **Session 2**



### Dr. Manoor Prakash Hande

Associate Professor and Assistant Dean, Department of Physiology, Yong Loo Lin School of Medicine National University of Singapore

Dr. M. Prakash Hande is a researcher and educator specialising in radiation biology, telomere biology, and genomic instability. He has authored over 180 peer-reviewed articles in leading journals such as *Nature Genetics*, *Cell, Science, Genes and Development*, and *PNAS*, achieving a Scopus H-index of 57 with about 15,000 citations. At the National University of Singapore – School of Medicine, he teaches Cancer Biology and Ageing, has led interdisciplinary seminars at Tembusu College, and serves on Committee 1 of the International Commission on Radiological Protection (ICRP), cochairing Task Group 121 and contributing to Task Group 118. He is the recipient of the AARR Senior Level Scientist Award 2025 from the Asian Association for Radiation Research.

#### Educational Dialogue as a Tool for Low-Dose Radiation Risk Communication and Preparedness

Public understanding of low-dose nuclear radiation risks influences trust in emergency response systems, public compliance with safety measures, and community resilience. Incidents involving nuclear accidents or radiation leaks often generate misinformation and fear, highlighting the need to incorporate science–technology–society (STS) perspectives into preparedness strategies. Educational dialogue, supported by effective communication, can bridge the gap between scientific knowledge and public perception.

To address this, an interdisciplinary seminar-style module, Radiation and Society, was developed for undergraduates at Tembusu College, National University of Singapore. Over 13 weeks, weekly three-hour interactive sessions introduced students from varied academic backgrounds to nuclear fallout, historical roots of nuclear fear, STS frameworks, science communication, and biomedical applications of radiation. Experiential learning included visits to a research reactor and a hospital radiation oncology department, as well as guest lectures from domain experts. In the 5 iterations of the course, more than 125 students completed the course, developing skills to critically evaluate evidence and engage in informed discussions on radiation issues.

Organisations (including F-REI) involved in nuclear safety, public health, and emergency management should consider adapting this model for broader audiences, including policymakers, journalists, educators, and community groups, and delivering it through blended or fully online formats to maximise reach. Embedding scientifically grounded, dialogue-based education into preparedness frameworks is essential for fostering informed decision-making, building public trust, and enhancing societal resilience in the face of nuclear-related emergencies.



## Dr. Andrea Malizia

Department of Biomedicine and Prevention and Department of Industrial Engineering, University of Rome Tor Vergata (Italy)
Associate Professor in Nuclear Measurements and Instrumentations
Director of the two International Master Courses in Protection Against CBRNe events

Prof. Andrea Malizia graduated cum laude with a Master's Degree in Environmental Engineering in 2005 and earned his first Ph.D. in Quantum Electronics and Plasma Physics in 2010. In 2011, he completed his Second Level Master's degree in CBRNe, and in 2017, he obtained his second Ph.D. in Industrial Engineering. He is the author of more than 200 papers indexed in SCOPUS, five books, and two national patents. His fields of research include the study of radiological and nuclear contamination through numerical simulation, data analysis and processing, CBRNe safety and security, and risk analysis. Prof. Malizia has been collaborating for 20 years with major national and international institutions involved in unconventional safety and security. Since 2019, he has worked in cooperation with Prof. Yasuda from the University of Fukui.

# Two Nations, One Challenge: Managing and Communicating Radiological and CBRNe Risks in Japan and Italy

Introduction: Radiological and CBRNe (Chemical, Biological, Radiological, Nuclear, and Explosive) risks present complex challenges for both Japan and Italy, two nations that share vulnerabilities to both natural disasters and technological hazards. Japan's experience with the Fukushima Daiichi nuclear accident and Italy's history of severe earthquakes and non-conventional emergencies highlight the urgent need for integrated strategies in risk management and communication. These events can cause casualties, long-term health effects, environmental contamination, and economic instability, making preparedness a key priority. This study compares the approaches of Japan and Italy to managing and communicating risks in radiological and broader CBRNe contexts, identifying lessons learned and opportunities for improvement.

*Materials and Methods:* The research applies a comparative case study method, examining: 1. Fukushima nuclear accident and major Italian earthquake emergencies, focusing on shared vulnerabilities and systemic responses. 2. Italian data collection systems for conventional and non-conventional emergencies, compared with Japanese frameworks. 3. Risk management methodologies, with emphasis on the Building Risk Assessment Methodology (BRAM) developed at the University of Rome Tor Vergata. 4. Analysis of emergency communication flows across four key levels.

**Results:** The comparative analysis reveals common challenges: gaps in preparedness, the complexity of coordinating multi-agency responses, and the risk amplification caused by inadequate communication. BRAM demonstrates potential in structuring risk assessments for diverse scenarios, from radiological accidents to CBRNe events. Both countries show progress in technical capabilities but still face limitations in integrating communication strategies with operational decision-making.

**Conclusions:** Japan and Italy face parallel challenges in managing radiological and CBRNe risks, where the quality of communication can be as critical as the operational response. Lessons from Fukushima and Italian emergencies demonstrate that resilience depends on coordinated data collection, adaptive risk assessment tools, and clear, timely communication across all levels.



## Dr. Cécile Asanuma-Brice

CNRS Researcher (French National Research Center), Director Mitate lab. Post Fukushima studies

Dr. Cécile Asanuma-Brice: CNRS researcher based in Japan for 25 years. She is director of Mitate Lab. Post-Fukushima Studies (CNRS), a multidisciplinary and international laboratory on the consequences of the Fukushima nuclear accident. With a double training in urban planning (DESS) and a thesis in human geography from the Ecole des Hautes Etudes en Sciences Sociales, she is the author of numerous articles and two monography: A century of Japanese suburbs, at the paroxysm of consumer society, published by Métispresses, 2019. Fukushima, 10 years later. Sociology of a nuclear disaster, Ed° Maison des Sciences de l'homme, 2021.

#### Mitate lab, a multidisciplinary approach for a better understanding of Post-Fukushima issues

The Mitate Lab team is made up of researchers who have been following the evolution of the situation in Fukushima from a multidisciplinary approach since the accident in 2011 through the participation and/or direction of multiple research programs.

## **Session 3**



# **Dr. Thierry Schneider**

Professer, Nagasaki University/CEP N/ICRP

Dr. Thierry Schneider is the Director of Nuclear Protection Evaluation Centre (CEPN), France and Professor at Nagasaki University (Japan). He has a PhD in economics in the field of health and insurance. He is currently the Chair of Committee 4 of the International Commission on Radiological Protection (ICRP). He has been involved in a number of research projects related to the assessment and management of radiological risk, including social and ethical issues. He has been involved in post-accident management projects since 1990 at the national, European and international levels, dealing with the Chernobyl and Fukushima Daiichi accidents.

# Lessons from the Fukushima Daiichi NPP accident : challenges for the recommendations of the International Commission on Radiological Protection

In 2020, ICRP publised recommendations for the radiological protection of people and the environment in the event of a large nuclear accident, drawing from the lessons from Chernobyl and Fukushima. Currently, ICRP is in the process of reviewing and revising its general recommendations. In this context, the follow up of the Fukushima accident highlihts key challenges related to the recovery process. This presentation will describe the main issues under developments.



# Dr. Jean-Christophe Gariel

Deputy director general

Autorité de Sûreté Nucléaire et Radioprotection (ASNR) – French Nuclear safety and radiation protection authority

After obtaining a PhD in physics from the University of Grenoble (France), Dr. Jean-Christophe Gariel worked as a researcher in the field of seismic risk assessment, successively at the Lamont-Doherty Geological Observatory of Columbia University (New York, USA), and at the Disaster Prevention Research Institute of Kyoto University (Japan).

In 1990, he joined IRSN, where he successively held positions in seismic risk assessment and environmental radioactivity. More recently, he was successively Director of Environment and Director of Health at IRSN. His area of expertise is focused on radiation protection, covering both environmental and human protection.

#### Aligning National Research with Global Goals: ASNR and the F-REI Initiative

The ASNR is the French authority responsible for nuclear safety and radiation protection. In this role, it conducts regulatory, inspection, assessment, monitoring, and research activities in the field of nuclear and radiological risk. Many of the research programs carried out by ASNR align closely with those envisioned under the F-REI initiative, particularly in the areas of medical applications, post-accident management, and the transfer of radioactivity in the environment. This presentation will provide a detailed overview of these research activities and their relevance to international collaborative efforts.



## **Dr. Eric Benton**

Professor, Oklahoma State University Dept. of Physics

Dr. Eric Benton is a professor of physics at Oklahoma State University and has over four decades of experience working in space radiation dosimetry. He has carried out experiences aboard the NASA Space Shuttles, the Russian Mir Space Station and the International Space Station. Dr. Benton also has a long-term interest in hands-on science education and has developed numerous experiments and apparatus for university level teaching laboratories.

#### **Teaching Radiation Science through Hands-on Experiments**

Hands-on experiments and demonstrations have long been shown to be one of the most effective ways to teach students about ionizing radiation. At the OSU Radiation Physics Laboratory, we are developing radiation detection instrumentation and experiments aimed at high school and university students. Emphasis is placed on low-cost and ease of construction and use, in order to make the instrumentation affordable for use by large numbers of students, e.g. in introductory physics courses. We have developed a low-cost spectrometer for use in gamma-ray and x-ray fluorescence spectroscopy and a battery-powered Si diode-based dosimeter for flight aboard stratospheric balloons. The development of education-oriented radiation detection equipment, together with suitable student experiments and demonstrations, is likely to be a rewarding area for collaboration with F-REI.

## **Session 4**



## Dr. Fumihiko Imamura

Fukushima Institute for Research, Education and Innovation

Professor Fumihiko Imamura was appointed Professor at Tohoku University in 2000 and later became Director of the Disaster Control Research Center. Since 2012, he has served as Professor at the International Research Institute of Disaster Science (IRIDeS), including as Director until 2023. From 2025, he serves as Vice President of Tohoku University and Director of F-REI.

#### Collection and Dissemination of Data and Knowledge on Nuclear Disasters

Collection and Dissemination of Data and Knowledge on Nuclear Disasters is one of five research fields of F-REI. This field conducts natural and social science research to support the creative reconstruction of Fukushima's Hamadori region, which experienced a complex disaster. By analyzing the natural environment and regional communities, it shares scientific knowledge to enhance safety and promote resilient, harmonious towns through regional revitalization and consensus-building.



# Dr. Seiji Hayashi

Fukushima Institute for Research, Education and Innovation (F-REI) Regional Environmental Co-Creation unit

Since 2011, Dr. Seiji Hayashi (PhD, Eng.) has been conducting research on the environmental dynamics of radioactive materials emanating from the Fukushima nuclear accident, in his capacity as a research head and research group leader at the National Institute for Environmental Studies. In April of this year, he was appointed the unit leader of F-REI.

#### Research on radioactive environmental dynamics at F-REI

The Regional Environment Co-creation Unit's research focuses on two main objectives: supporting the recovery of Fukushima and preparing for a nuclear disaster. This presentation will introduce an overview of main initiatives, including the migration of radiocesium and how to counter it, and how to utilise natural resources with the help of the local community. We will also outline the development of environmental scenarios to control the movement and dispersion of radioactive substances, using a review of the response to the Fukushima nuclear accident.



# Dr. Naoya Sekiya

Fukushima Institute for Research, Education and Innovation (F-REI) Mega-Disaster Resilience Science Unit

Professor Naoya Sekiya is a leading expert in disaster social science, specializing in public understanding of disaster response, the social psychology of mega disasters, risk communication, and recovery, particularly in relation to the Fukushima Daiichi nuclear accident. He has been serving as a professor at the Center for Integrated Disaster Information Research (CIDIR), Interfaculty Initiative in Information Studies, The University of Tokyo since 2023, and in 2025, he became the unit leader at F-REI

#### Mega-Disaster Resilience Science Unit at F-REI

The Mega-Disaster Resilience Science Unit conducts research to support the development of a resilient society capable of overcoming large-scale and compound disasters. This research explores how individuals and communities psychologically respond to such disasters over time. It aims to understand long-term mental health impacts and social challenges in order to develop effective strategies for resilience and recovery.

### **Session 5**



### Dr. Varsha Hande

Research Officer, City Cancer Challenge

Dr. Varsha Hande (M.B.B.S, MSc Public Health, PhD) is a public health researcher with expertise in clinical and implementation cancer research, dedicated to improving and sustaining access to equitable health services. She also has experience in radiation disaster research, including Fukushima's post-disaster recovery and radiation risk perception. Her work focuses on developing resilient health solutions for disaster-affected and resource-limited settings.

# Linking Knowledge, Health, and Resilience: Building a Global Platform for Nuclear Disaster Data Integration and Dissemination

#### Abstract:

In post-disaster settings, community perceptions of health, safety, and well-being are key in decision-making regarding returning, building trust in recovery measures, and achieving sustainable rehabilitation of affected cities. Research conducted in municipalities impacted by the Fukushima Daiichi Nuclear Power Plant accident, including Futaba, Tomioka, and Okuma, utilised surveys to assess expectations for reconstruction as well as temporal trends in radiation-related health risk perception. The findings demonstrate clear links between perceptions of radiation risks, mental health status, and residents' intentions to return, while also identifying key factors shaping acceptance of recovery policies.

These insights directly support the objectives of F-REI's Nuclear Disaster Medical Science Unit by providing evidence to guide long-term health monitoring, targeted risk communication, and policy development for safe resettlement and regional revitalization. Consistent with research focusing on developing resilient health solutions, meaningful involvement of local stakeholders is essential to guide priorities, build trust, and ensure that interventions are sustainable through local ownership

#### **Suggestions for F-REI:**

Establish the Fukushima Knowledge Integration and Dissemination Platform (F-KID) as a unified system to collect, standardize, and share nuclear disaster and health impact data. By connecting research, community knowledge hubs, and global training, F-REI can strengthen health systems, foster resilient cities in Hamadori, and position itself as a global leader in nuclear disaster medicine and sustainable reconstruction.



## Dr. Olena Pareniuk

Senior researcher at the Institute for Safety Problems of Nuclear Power Plants (ISP NPP) the National Academy of Sciences of Ukraine

Dr. Olena Pareniuk is a Ukrainian radiobiologist and senior researcher at the Institute for Safety Problems of Nuclear Power Plants, NAS of Ukraine, and Project Coordinator for Territory Prioritization Information Management at the Ministry of Economy. Her research focuses on radiation biology, ecology, and nuclear safety, and she is a member of several international and national radiological organizations. She co-authored The Terrible, the Beautiful and the Ugly in Chornobyl, exploring the development of radiation science in Ukraine and rethinking nuclear safety after war.

# Building a Shared Vision between Chornobyl and Fukushima: Long-Term Collaboration for Nuclear Disaster Resilience

Chornobyl and Fukushima represent two distinct yet interconnected experiences of large-scale nuclear accidents. While the geographical, political, and socio-economic contexts differ, both regions face similar long-term challenges: environmental contamination, ecological transformation, public health concerns, and the need for sustained societal engagement. This presentation will outline the importance of building a shared vision between Ukrainian and Japanese research institutions, focusing on data exchange, joint field studies, and comparative analysis of long-term impacts. Such collaboration not only advances nuclear disaster science but also strengthens the global capacity for resilience, knowledge transfer, and informed decision-making for future generations.



# Dr. Yevgeniya Tomkiv

Researcher, Norwegian University of Life Sciences

Dr. Yevgeniya Tomkiv has a PhD in Environmental Sciences and has spent over 10 years researching risk communication about ionising radiation, societal aspects of radiological emergencies, and stakeholder involvement in environmental remediation and natural resource management. She is president of the European Platform for Social Sciences and Humanities in Ionizing Radiation Research (SHARE).

### Risk communication in nuclear emergencies: embracing the complexities

Past nuclear accidents have highlighted that risk communication is one of the most critical challenges in emergency management and subsequent recovery. Effective communication requires careful attention to how messages are framed, the inclusion of public participation in decision-making, and a nuanced understanding of public concerns. This presentation will build on lessons learned from Chornobyl and Fukushima as well as theoretical developments in the field to argue for communication practices that acknowledge the complexity of nuclear emergencies and reimagine the relationship between the public and institutions.