

## Visit and Field Research Collaboration with UCL IRDR and IRIDeS (2022/5/31 - 2022/6/5)

Themes: disaster area survey, international exchange, energy, 2011 Great East Japan Earthquake, economic recovery and local communities

Location: Fukushima, Miyagi and Iwate Prefectures

From 31 May to 5 June 2022, Professor David Alexander and Dr. Gianluca Pescaroli from the Institute for Risk and Disaster Reduction (IRDR) University College London (UCL), United Kingdom visited Tohoku University, and conducted a joint field survey with IRIDeS faculty as part of collaborative research on international disaster management, and discussed current and future collaboration with IRIDeS and Tohoku University. To deepen knowledge of the situation at nuclear power plants in the areas affected by the Great East Japan Earthquake, as well as the current situation and challenges of local economic reconstruction after the disaster, and memorialization of the tragedy, UCL and IRIDeS faculty visited various sites in Fukushima, Miyagi and Iwate Prefectures.

Coordinated by Researcher (Specially Appointed) Miwako Kitamura (International Research Collaboration Office), the field visit of UCL faculty was joined by Assoc. Prof. Elizabeth Maly (International Research Collaboration Office) and Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) of IRIDeS. At the Daiichi Nuclear Power Plant in Fukushima, participants were briefed on the situation at the time of the Great East Japan Earthquake and the accident at the TEPCO Decommissioning Archive Center, toured the power plant buildings undergoing decommissioning, and discussed the disaster preparedness of nuclear power plant facilities and the BCP in an emergency. At the Onagawa Nuclear Power Station, Tohoku Electric Power Company staff provided detailed explanations of the complicated situation at the time of the earthquake and the importance of working with the local community as part of the power plant's role. Based on a simulation, the participants inspected the seawall, emergency power supply, and disaster command facilities and discussed disaster prevention and mitigation plans.

Study of local economic recovery after the disaster included visits to Kawauchi Winery in Kawauchi Village, Fukushima Prefecture, where the local economy has become more self-reliant since the disaster. They were briefed on winemaking for regional economic revitalisation and grape cultivation suited to the Kawauchi region. In City of Rikuzentakata, Iwate Prefecture, they visited Shimin Energy, which is working to revitalize the local economy through the regeneration of sustainable energy, and Watami Farm, which operates a local public transportation system using electric vehicles and hosts sightseeing at a pesticide-free vegetable farm. Through discussion with local government staff and local business owners, participants grasped the current situation in Okuma Town, including what happened in the 11 years since the GEJE, as well as current nuclear emergency planning.

Regarding the theme of earthquake disaster and memory, participants deepened their knowledge of disaster records and disaster museums by visiting the earthquake remains of school memorial museums, including the former Ukedo Elementary School in Namie Town, Fukushima Prefecture, former Nakahama Elementary School in Yamamoto Town and former Arahama Elementary School in Sendai City in Miyagi Prefecture, as well as the Iwate Tsunami Memorial Museum in City of Rikuzentakata, Iwate Prefecture, and The Great East Japan Earthquake and Nuclear Disaster Memorial Museum in Futaba Town, Fukushima Prefecture.

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Discussion of future collaboration was held in a meeting between visiting UCL faculty and IRIDeS faculty: Prof. Kenjiro Terada (Computational Safety Engineering Lab), Prof. Shinichi Egawa (International Cooperation for Disaster Medicine Lab), Prof. Yuchi Ono (2030 Global DRR Agenda Office), Assoc. Prof. Takako Izumi (International Strategy for Disaster Mitigation Lab), Dr. Suppasri, Dr. Maly, Assoc. Prof. Sebastien Boret (International Research Collaboration Office) and Dr. Kitamura. In addition, Prof. Alexander and Dr. Pescaroli also had a lively discussion about future full-fledged joint research and international collaboration with Tohoku University Executive Vice-President Toshiya Ueki, Vice-President Masahiro Yamaguchi and others, joined also by IRIDeS Director Fumihiko Imamura (Tsunami Engineering Lab), Prof. Shunichi Koshimura (Deputy Director of the Center of Co-creation Center for Disaster Resilience, Disaster Geo-informatics Lab), Assoc. Prof. Yo Fukushima (Inland Earthquake and Volcano Lab) and Prof. Michio Ubaura (Spatial Design Strategies Lab).

The participants expressed their ambition to develop inclusive disaster prevention research to realise the social contributions to diversified international challenges, such as global warming and disasters, through research collaboration between UCL IRDR and IRIDeS.



Observing sea wall in Futaba area



Visiting TEPCO  
Decommissioning Archive center



Fukushima Kawauchi winery



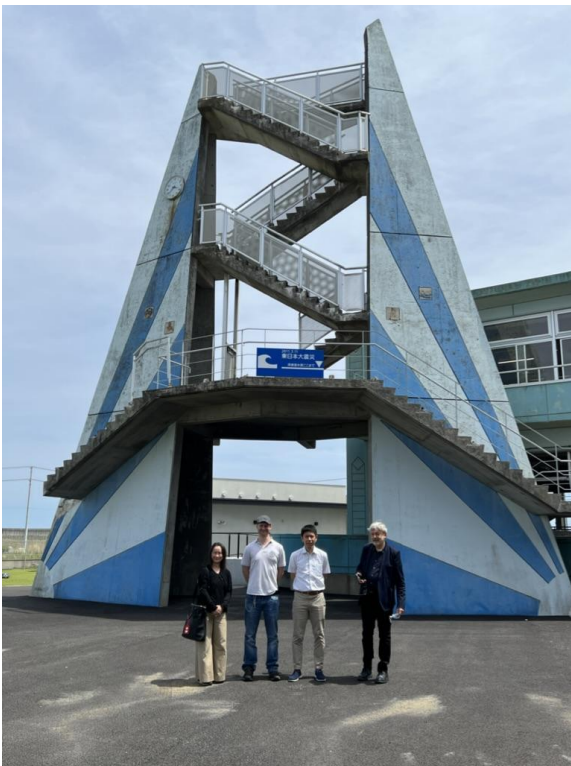
Meeting with Tohoku university



Meeting with IRIDeS member



Visiting at The Great East Japan Earthquake and Nuclear Disaster Memorial Museum



Ukedo Elementary School Earthquake Memorial Ruins



Former Onagawa Police box

Text and Photos: Miwako Kitamura, Elizabeth Maly, Boret Penmellen Sebastien  
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