

東北大学 TOHOKU UNIVERSITY

IRIDES International Research Institute of Glastate Science 災害科学国際研究所

災害科学国際研究所 International Research Institute of Disaster Science Aoba 6-6-11, Sendai 980-8579, Japan



Personal information

Name Anawat Suppasri Position Associate Professor

Affiliation International Research Institute of

Disaster Science, Tohoku University

Nationality Thai

Language Thai, English and Japanese Email address suppasri@irides.tohoku.ac.jp

Publications 115 (Scopus)
Citations 2,236 (Scopus)
h-index 24 (Scopus)

Dr. Anawat Suppasri was born in 1983 in Bangkok, Thailand. He completed his Bachelor degree in Civil Engineering from Chulalongkorn University in 2005 and Master degree in Water Resource Engineering from Asian Institute of Technology in 2007. He came to Japan and obtained PhD in Tsunami Engineering from Tohoku University in 2010. After that, he received research grant under the Willis Research Network to continue his research of tsunami risk assessment in Tohoku University. After the 2011 Tohoku tsunami, Tohoku University established the International Research Institute of Disaster Science (IRIDeS) in April 2012. He became Associate Professor at Hazard and Risk Evaluation Research Division. After the 2011 Tohoku tsunami, he took many of visitors and professors from both Japan and overseas to tsunami affected areas as well as contributing his knowledge to public via activities together with UNDRR, UNDP as well as several embassies in Japan. At present, his research focuses on tsunami numerical simulation, tsunami fragility analysis, tsunami evacuation and disaster mitigation education. He is one of the leading experts on these topics and some of his publications are selected as highlight article in Natural Hazards and Earth System Sciences. His publications are highly cited and received citation awards from Coastal Engineering Journal in 2017 and 2019. His research publications also received awards from Japan Society of Civil Engineers in 2011 and 2014, Japan Foundation of Ocean Engineering in 2011 and Japan Society for Natural Disaster Science in 2013. He is an editorial board member of Geoscience Letters, Coastal Engineering Journal and International Journal of Disaster Risk Reduction. His supervised students also received awards from international conferences such as poster awards from the World Bosai Forum 2019 and AOGS 2022. His international contribution to UN related agencies such as UNDP and UNDRR was highly recognized and awarded by the former Japanese prime minister Yasuhiro Nakasone in 2018 and the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology (MEXT) The Young Scientists' Award in 2022.

Research Interests

Tsunami numerical modeling, tsunami field survey, tsunami vulnerability, tsunami hazard and risk evaluation, tsunami evacuation, disaster prevention education

Education

- 2005 B. Eng. Civil Engineering, Chulalongkorn University, Thailand
- 2007 M. Eng. Water Engineering and Management, Asian Institute of Technology, Thailand
- 2010 Ph. D. Tsunami Engineering, Tohoku University, Japan

Working history

- 2011 Postdoctoral research, Disaster Control Research Center, Tohoku University, Japan
- 2012 Assoc. Prof., International Research Institute of Disaster Science, Tohoku University, Japan

Recent publications

- 1. Pakoksung, K., **Suppasri**, **A.** and Imamura, F. (2022) The near-field tsunami generated by the 15 January 2022 eruption of the Hunga Tonga-Hunga Ha'apai volcano and its impact on Tongatapu, Tonga, Scientific Reports, 12, 15187.
- 2. Kamata, H., Seto, S., **Suppasri, A.**, Sasaki, H., Egawa, S. and Imamura, F. (2022) A study of hypothermia and associated countermeasures in tsunami disasters: A case study of Miyagi Prefecture during the 2011 Great East Japan Earthquake, International Journal of Disaster Risk Reduction, 84 (15), 103253.
- 3. **Suppasri, A.**, Nishida, T., Pakoksung, K. Cheng, A.C., Chua, C.T., Iwasaki, T., Pescaroli, G. and Imamura, F. (2022) Quantifying tsunami impact on industrial facilities and production capacity in ports: An application to Sendai Port, Japan, International Journal of Disaster Risk Reduction, 78, 103141.
- 4. Imamura, F., **Suppasri, A.**, Arikawa, T., Koshimura, S., Satake, K. and Tanioka, Y. (2022) Preliminary observations and impact in Japan of the tsunami caused by the Tonga volcanic eruption on January 15, 2022, Pure and Applied Geophysics, 179, 1549-1560.
- 5. Somphong, C. **Suppasri, A.**, Pakoksung, K., Nagasawa, T., Narita, Y., Tawatari, R., Iwai, S., Mabuchi, Y., Fujita, S., Moriguchi, S., Terada, K., Athanasius, C. and Imamura, F. (2022) Submarine landslide source modeling using the 3D slope stability analysis method for the 2018 Palu-Sulawesi tsunami, Natural Hazards and Earth System Sciences, 22, 891-907.
- 6. **Suppasri, A.**, Maly, L., Kitamura, M., Syamsidik, Pescaroli, G., Alexander, D. and Imamura, F. (2021) Cascading disasters triggered by tsunami hazards: A perspective for critical infrastructure resilience and disaster risk reduction, International Journal of Disaster Risk Reduction, 66, 102597.
- 7. Lahcene, E., Ioannou, I., **Suppasri, A.**, Pakoksung, K., Paulik, R., Syamsidik, Bouchette, F. and Imamura, F. (2021) Characteristics of building fragility curves for seismic and non-seismic tsunamis: case studies of the 2018 Sunda Strait, 2018 Sulawesi-Palu and 2004 Indian Ocean tsunamis, Natural Hazards and Earth System Sciences Discussion, 21, 2313-2344.
- 8. Chua, C.T., Switzer, A., **Suppasri, A.**, Li, L., Pakoksung, K., Lallemant, D., Jenkins, S. F., Charvet, I., Chua, T., Cheong, A. and Winspear, N. (2021) Tsunami damage to ports: Cataloguing damage to create fragility functions from the 2011 Tohoku event, Natural Hazards and Earth System Sciences, 21, 1887-1908.
- 9. Pakoksung, K., **Suppasri, A.**, Muhari, A., Syamsidik and Imamura, F. (2020) Global obtimization of a numerical two-layer model using observed data: A case study of the 2018 Sunda Strait tsunami, Geoscience letters, 7, 15.
- 10. Masaya, R., **Suppasri, A.**, Yamashita, K., Imamura, F., Gouramanis, C. and Leelawat, N. (2020) Investigating beach erosion related with tsunami sediment transport at Phra Thong Island, Thailand caused by the 2004 Indian Ocean tsunami, Natural Hazards and Earth System Sciences, 20, 2823-2841.