## An Area Study on Sediment Disasters and Sand Mining Activities in Mt. Merapi Region, Indonesia

## Thursday, 26 October 13:30-15:00

3<sup>rd</sup> Floor, Mid-sized Meeting Room, Inamori Bldg, CSEAS



Mt. Merapi, located in Central Java, ranks among Indonesia's most active volcanoes, frequently erupting every few years. A devastating series of eruptions in 2010 ejected a total sediment volume of 140 million m³, resulting in the tragic loss of approximately 400 lives. This colloquium presents comprehensive research on the sediment-related disasters stemming from these eruptions. It highlights the establishment of warning zones for pyroclastic flows, the areas impacted by such flows, and the characteristic sediment disasters within these regions. Attention is also drawn to the incidence of debris flows in areas accumulating volcanic ash and the damage sustained by erosion control infrastructures.

In collaboration with the STREPS project led by Professor Masato Iguchi of Kyoto University's Disaster Prevention Research Institute, we ventured into an integrated approach to mitigate the multimodal disasters caused by volcanic ejections. This project focused on creating a robust warning and evacuation support system and incorporating consortium partnerships with local governments, NGOs, and other stakeholders. The colloquium will explore the effective use of the information furnished by this system. Finally, it will also shed light on the burgeoning sand mining industry propelled by the eruptions. This rise has ushered in significant challenges, with excessive sand mining emerging as a safety and environmental concern. Ultimately this seminar will present these field studies and introduce our expansive area research.



Fujita Masaharu

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Fujita Masaharu, a graduate of Kyoto University, received his M.A and PhD from the Department of Civil Engineering, Faculty of Engineering, Kyoto University. He has worked as a professor at the Faculty of Engineering, Tottori University and the Disaster Prevention Research Institute, Kyoto University. He is currently an affiliated Professor at the Center for Southeast Asian Area Studies (CSEAS) and research advisor at the Sabo and Landslide Technical Center.