GLOBAL WEBINAR
ON
SUSTAINABLE & EARTHQUAKE RESILIENT STRUCTURES

15 researchers are presenting their research from Japan and worldwide.

Date: Sept, 29th 2022

16:00~19:30 JST

Language: English

Objective :

The seminar provides a platform to build new networks between researchers in Japan and worldwide, introduce their research and promote future collaborations.

Research Topics:

Sustainable timber structures

Earthquake-resistant structures

Repairability and Health monitoring

New directions for sustainable buildings

Participation and registration are free and anyone is welcome to join.

Online registration link:

https://forms.gle/AX6BhMzk1xrshLsDA

However, it is limited to 250 participants based on registration.

Organizer and contact:

Dr. Hamood Alwashali,

Green Innovation Center

Okayama University, Japan

E-mail: hamood@okayama-u.ac.jp

岡山大学
OKAYAMA UNIVERSITY

Seminar Program

(1st session)

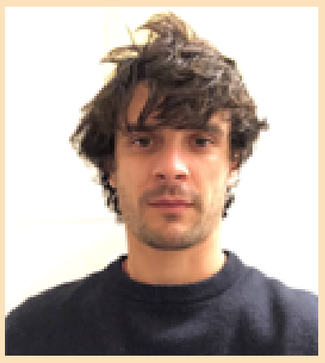
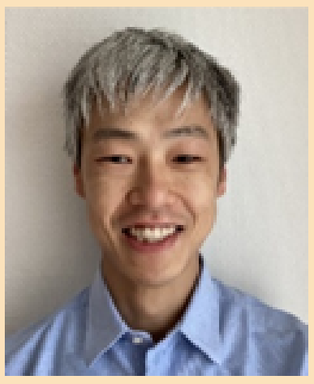
Japan standard time (JST)

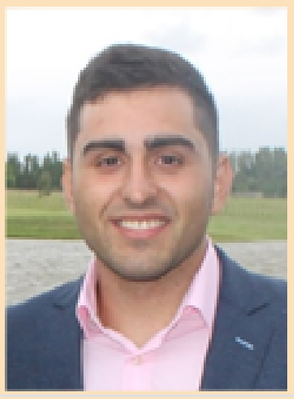
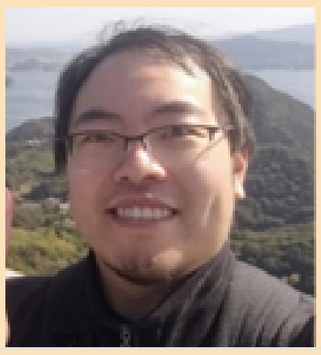
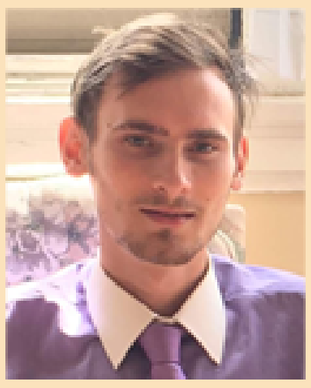
Time (JST)	Title
16:00-16:05	Opening session Dr. Hamood Alwashali (Green innovation center, Okayama University JP)
16:05-16:10	Welcome message : Fostering Sustainability in Green and Resilient Buildings through the integration of Education, Research, and Community. Prof. Makino Hirofumi (President of Okayama University, JP)
1st Session	Timber and Hybrid sustainable structures Chair: Alex Shegay
16:10-16:23	New lightweight timber houses, based on traditional architecture Dr. Adreea Dutu (Technical University of Civil Engineering, Romania)
16:24-16:37	Structural design of hybrid structure with CLT seismic panels and steel frame Dr. Kouji Fukumoto (Okayama University, Jp)
16:38-16:41	Strength and stiffness assessment of secondary timber for cross-laminated secondary timber (CLST) Dr. Wenchen Dong (University College London, UK)
16:42-16:55	Structural Performance of Traditional Wooden Buildings in Japan -Topics on Materials and Walls Dr. Naoyuki Matsumoto (Tohoku University, Jp)
16:56-17:09	WikiHouse Skylark: Open source digitally fabricated timber houses Dr. Gabriele Granello (Open Systems Lab, UK.)
17:10-17:23	Overview of glulam and CLT industry in Japan and Okayama Mr. Yoh Nakashima (Meiken Lamood Corp. JP)
17:24-17:37	Investigation of failure modes and seismic capacity evaluation of RC frame with CLT infill panels. Dr. Hamood Alwashali (Okayama University, JP)
17:37-17:45	Break

Seminar Program

(2nd session)

Time (JST)	Earthquake resilience and repairability of structures Chair: Hamood Alwashali
17:45-17:58	Development of a novel self-centering coupling beam incorporating superelastic SMA bolts Dr. Bin Wang (Sichuan University, CN)
17:59-18:12	Self-centering energy dissipation devices for earthquake-resilient structures Dr. Asad Naeem (University of Tokyo, JP)
18:13-18:26	Reparability of Earthquake Damaged Ductile Reinforced Concrete Frame Structures Dr. Mehdi Zadeh (Aurecon & University of Auckland, NZ)
18:27-18:40	Seismic drift demands of non-ductile structures and cost-effective retrofitting methods Dr. Jonathan Monical (Tohoku University, JP)
18:41-18:54	Improving practice-oriented methods for P-delta analysis of structures Dr. Giovanni De Francesco (University of Canterbury, NZ)
18:55-19:08	Development of a rapid building damage evaluation system using floor acceleration data for reducing post-earthquake recovery time Dr. Trevor Zhiqing Yeow (University of Tokyo, JP)
19:09-19:12	Seismic drift demands in concrete structures reinforced with high-strength steel Dr. Aishwarya Puranam (Taiwan National University)
19:13-19:26	Shake table testing of a repaired 1/4 scale, 4-storey RC structure Dr. Alex Shegay (Tokyo Institute of Technology, JP)
19:26-19:30	Closure

Speakers	
	Andreea Dutu (Technical University of Civil Engineering Bucharest)
	Dr. Andrea is a lecturer in Romania, and her research is related to the seismic resistance of traditional timber houses. As a PhD student or as a postdoc she joined several research stages in Portugal, Turkey, Japan, China and France. She have conducted several reserach projects funded by the Romanian national funding agency (UEFISCDI) consisted of analysis and experiments on timber walls, connections and materials.
	Kouji Fukumoto (Okayama University)
	Dr. Fukumoto has worked for 24 years as structural engineer and specialized in timber structures. He has worked in strcutrual designs of several well-known buildings in japan and had several patents for innovative structural timber systems within his team in Takenaka Co. He has recenlty joined Okayama Univ. as an Associate Professor since April 2022.
	Wenchen Dong (University College London)
	Dr. Wenchen Dong is currently working as a Research Fellow at University College London, the UK on a circular economy project to develop more environment-friendly engineered wood products. His research background is in timber, earthquake, and structural engineering.
	Naoyuki Matsumoto (Tohoku University)
	Dr. Mastumoto graduated and worked in Tokyo University and recenlty joinedTohoku University as Assistant professor. He has worked on several projects regarding structural performance and construction system of traditional buildings in Japan and worldwide, focusing on the changing process of those timber structures through the modern age.
	Gabriele Granello (Open Systems Lab)
	Dr. Gabriele works as engineering lead at Open Systems Lab with focus on the WikiHouse project. Prior to this position, he worked as a researcher in several universities such as Canterbury (NZ), Tokyo (JP), EPFL (CH) and Edinburgh (UK).
	Yoh Nakashima (Meiken Lamwood Corp.)
	Mr. Nakashima is the manager of Genearl Affairs Dept of Meiken Lamwood which is one of the main manufactures of Timber and CLT in Japan. He has previously worked in several wood organizations and as researcher in Building Research Institute and a senior executive manager in Japan CLT Association .
	Hamood Alwashali (Okayama University)
	Dr. Hamood obtained his PhD from Tohoku University and worked in Tohoku University regarding seimsic capacity evaluation of Reinforced structures and masonry structures. He recenlty joined Okayama University involved research projects regarding strengthing of reinforced concrete walls and Hybrid structures of CLT walls and reinforced conctete structuess.

Speakers	Session 2
	**Bin Wang (Sichuan University)** Dr. Bin is a Professor of Structural Engineering in the Department of Civil Engineering at Sichuan University. Before joining SCU, he was a Postdoctoral Fellow at the Hong Kong Polytechnic University and a JSPS Research Fellow at Kyoto University. His research interests are resilient low-damage seismic-resistant structures and high-performance energy dissipation devices.
	**Asad Naeem (Earthquake Research Institute, University of Tokyo)** Dr. Asad Naeem is a multidisciplinary professional in structural engineering and seismic design with experience of over 8 years. Currently, working as a Research Professor at the University of Tokyo in Japan. Previously, Dr. Asad was working as an Assistant Professor at the Balochistan University of Information Technology, Pakistan and is also a licensed Professional Engineer (PE) in the field of structures.
	**Mehdi Sarrafzadeh (Aurecon) & (University of Auckland)** Dr. Mehdi is currently a practicing Civil Engineer at Aurecon, based in the transportation and civil structures sector. Primarily working on the design and construction of bridge structures here in New Zealand. He recently completed my doctoral studies at the University of Auckland on the reparability of RC structures following earthquake damage.
	**Yeow, Zhiqing Trevor (Earthquake Research Institute, University of Tokyo)** Dr. Trevor obtained his PhD from the University of Canterbury on seismic risk analyses and worked as a researcher with Quake Center and QuakeCoRE before taking up a position at the Earthquake Research Institute. His current research focuses on structural dynamics and structural health monitoring.
	**Jonathan Monical (Tohoku University)** Dr. Jonathan obtained his PhD from Purdue University, USA. He is now in Japan for the JSPS Postdoctoral Fellowship at Tohoku University. He is working on a structural health monitoring project for special structures such as the damaged Fukushima Nuclear Power Plants. My research topics are earthquake engineering, repair and retrofit of existing structures, and shear response of non-ductile reinforced concrete.
	**Giovanni De Francesco (University of Canterbury)** Dr. Giovanni is a Research Specialist (Structural Engineering Laboratory) in the University of Canterbury in Christchurch, New Zealand. He received his master's in structural engineering (2009) and Ph.D. in structural and geotechnical engineering (2013) degrees from the University of Catania in Italy, being also largely affiliated at the Department of Structural Engineering of the University of California in San Diego.
	**Aishwarya Y. Puranam (Taiwan National University)** Dr. Aishwarya Y. Puranam is an Assistant Professor in the Department of Civil Engineering at National Taiwan University. She received her BSCE (2013), MSCE (2016) and Ph.D. (2018) from Purdue University in the United States. Her research interests include behavior of reinforced concrete structures subjected to seismic demands, large-scale experiments, and data preservation.
	**Alex Shegay (Tokyo Institute of Technology)** Dr. Alex obtained his PhD in 2019 from University of Auckland and has been working as an Assistant Professor at Tokyo Institute of Technology since 2021. Alex's research is predominantly focused on Reinforced concrete structures, with a recent focus on repair.