

# OHOW 2022

*The 1<sup>st</sup> International Symposium on One Health One World*

[IIS UTokyo Symposium No.112]

8-10 December 2022

at Amari Pattaya hotel, Thailand

Organized by

Asian Institute of Technology, Thailand (AIT)

One Health One World Collaboration Research Organization (OHOW), Institute of Industrial Science, The University of Tokyo, Japan

## Welcome address by the chair to the OHOW 2022

1. Pennung Warnitchai (Professor, Asian Institute of Technology (AIT), Thailand)
2. Wataru Takeuchi (Professor, Director-General, OHOW, Institute of Industrial Science (IIS), The University of Tokyo (UTokyo), Japan)

## ◆ Committees

### General Co-Chairs

Pennung Warnitchai (Professor, Asian Institute of Technology (AIT), Thailand)

Wataru Takeuchi (Professor, Director-General, OHOW, Institute of Industrial Science (IIS), The University of Tokyo (UTokyo), Japan)

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Kimiro Meguro (Professor, IIS, UTokyo, Japan)

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Raktipong Sahamitmongkol (Associate Professor, King Mongkut's University of Technology Thonburi, Thailand)

Chaitanya Krishna (Assistant Professor, AIT, Thailand)

Wataru Takeuchi (Professor, IIS, UTokyo, Japan)

Tsukasa Mizutani (Associate Professor, IIS, UTokyo, Japan)

## ◆ Supporters



## GENERAL INFORMATION

### ◆ Symposium Venue

Amari Pattaya: 240 Beach Rd, Pattaya City, Bang Lamung District, Chon Buri 20150  
<https://www.amari.com/pattaya>

1	Opening, Closing Sessions-1,3,5 and 7	Grand Ball Room
2	Sessions 2, 4, 6, and 8	Meeting-1
3	Registration and Coffee Breaks	Grand Ball Room Foyer
4	Lunch	Restaurant Amaya
5	Day 1 Dinner Banquet	Beach Lawn

MAP:



### ◆ Registration Desk

The registration desk will be located in the entrance of the Grand Ball Room for all participants and accompanying guests during the following times:

December 8, 08:30-09:30

December 9, 08:30-09:00

The registration fee for participants and students includes symposium proceedings, 2 lunches, 4 tea breaks, and 1 Buffet banquet

### Registration Fee:

All accepted paper registration and payment should be made by 15 November 2022 to be retained in the final program. All accepted papers must be registered and presented at the symposium. Your registration is not refundable. No refunds are given for no-shows.

International delegates	250USD		Walk-in Registration	Amount (THB)
International students	150USD		Day-1	1000
Local delegates	150USD		Day-2	1000
Local students	50USD		Gala Dinner	1000

#### Method of Payment

Visa, Master, and JCB are available for online registration. Payment by credit card is available through the following online registration procedure. All service charges on a credit card are to be paid by registrants. The actual debit amount is subject to change according to the exchange rate.

Direct transfer to AIT account:

### ◆ Instructions for speakers

Keynote Speech: 30 minutes presentation

Presentation in Special Session: 15 minutes presentation

Common Speaker: 10 minutes (7 Minutes presentation and 3 minutes discussion)

Due to security reasons, we would appreciate it if speakers prepare their own computer.

A common computer will be available if necessary.

The symposium and its activities will be conducted in English

### ◆ Banquet

The Symposium Banquet dinner will be hosted at the Beach Lawn of Amari Pattaya Hotel at 18:00 on 8<sup>th</sup> December 2022. All delegates are requested to assemble at the venue by 17:45. The coupon will be included in your symposium tag.

### ◆ Farewell dinner

An informal farewell dinner will be held at a popular restaurant in Pattaya. The details will be announced later.

All Symposium attendees are welcome to join, but the cost is not included in the registration. Transportation will be provided from the symposium venue (approximate cost is 1200 THB/person, not including alcoholic beverages)

## TECHNICAL TOUR

The host will organise a one-day visit to Noong Nooch Gardens, Khao Chee Chan, and Sanctuary of Truth, on 10<sup>th</sup> December 2022.

The cost is included the registration fee.

### ◆ Itinerary

Time	Place
8:15 AM	Leaving from Ozo North Pattaya
8:50 AM	Arriving at Nong Nuch Garden
9:00 AM	Reduce Global Warming Program
10:30 AM	Elephant Show
11:30 AM	Sightseeing car tour
12:30 PM	Lunch
13:30 PM	Leaving from Nongnuch Garden
13:50 PM	Arriving at Khao Chi Chan
14:00 PM	Attend lecture about construction of Khao Chi Chan
15:00 PM	Leaving from Khao Chi Chan
15:30 PM	Arriving at Sanctuary of Truth
17:30 PM	Leaving from Sanctuary of Truth
18:00 PM	Arriving at Ozo North Pattaya

### ◆ Overview of the tour

A techno-cultural tour in the beautiful city of Pattaya has been planned. The purpose of this tour is to get a glimpse of global challenges and get inspired to solve them.

First, we will take the delegates to a botanical garden developed as a wildlife conservation project. This place houses a research centre and a global warming reduction centre. The delegates belonging to various fields shall spend time experiencing several efforts made globally to make the world a better place to live.

Next, the delegates will be taken to a site named Khao Chee Chan, a Buddhist monument on a mountain built with geotechnical engineering challenges, which shall be accompanied by a short seminar by the field expert who was involved in the design and construction of the monument.

Finally, the delegates will visit an under construction since 1981 museum, “The Sanctuary of Truth”. The structure is predominantly made of wood. The idols are entirely hand-carved. The oldest wood used is takien wood, to build the main post and is expected to last for 600 years. The delegates can visit the adjoining wood factory where wood treatment, cutting and carving are undertaken.

### ◆ Student Paper Award<sup>※</sup>

There will be four awards to young participating presenters younger than 35 and students. This award is to recognize upcoming researchers in the domain of One Health and One World.

### Covid information:

#### Entering Thailand:

From 1 October 2022, Thailand is fully open to visitors with no entry restrictions i.e.:

- No need to show proof of COVID-19 vaccination
- No COVID-19 tests
- No Thailand Pass
- No compulsory insurance (but all visitors are still advised to have travel insurance)
- On arrival in Thailand, visitors are free to travel anywhere in the country

Suppose you are not flying directly to Thailand and transiting via another country. In that case, you should check the COVID-19 policies of your airline and the regulations of the country you are travelling in.

Since 23 June 2022, wearing face masks has been endorsed as voluntary. However, it is advisable to carry a facemask with you because there are still some situations where the public may be asked to wear one, e.g., on public transport such as the BTS.

#### **RTPCR center in Pattaya**

<b>S.No.</b>	<b>Name</b>	<b>Contact Details</b>
<b>1</b>	MedEx	+66-02544001
<b>2</b>	Lab Network	+66-090-931-4683

In case of any kind of emergency, kindly contact Ms. Apple or any of the organizers for help

#### **Contact of Organizers:**

1	Dr. Chaitanya Krishna	0842689542	<a href="mailto:chaitugk@ait.ac.th">chaitugk@ait.ac.th</a>
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# PROGRAM OVERVIEW

**Wednesday 7 December 2022**

18:00-20:00 Welcome Dinner at TBD

Keynote speaker:30 minutes, Special lecture:15minutes, Common speaker: 7minutes presentation+3minutes Q&A

Presenters with red numbers are eligible for the YOUNG AWARD.

**Thursday, 8 December 2022**

08:30-09:30 Registration in front of Ball Room 1

09:30-10:00 **◆ Opening Ceremony at Ball Room 1**  
**Moderator: Dr. Chaitanya Krishna Gadagamma**  
**1. Address by Chairs**

10:00-10:30 **◆ Group photo / Coffee Break at Foyer Ball Room 1**

10:30-12:00 **◆ Keynote Speech at Ball Room 1**  
**Moderator: Dr. Chaitanya Krishna Gadagamma**  
**1. Prof. Kimiro Meguro:** Lessons learned from recent disasters in Japan and future disaster countermeasures  
**2. Prof. Nakhorn Poovarodom:** Engineering Documentation of Thai Heritage Sites  
**3. Prof. Chieko Kai:** One Health, One World -Toward the formation of the first hub of One Health, One world

12:00-13:30 **Lunch at EAT@OZO Summit MTG**

13:30-14:55 **Session 1: Grand Ball Room**  
**Climate Change and Green Recovery**  
**Session chairs: Dr. Manzul Hazarika**  
 Special Session [67417] Prof. Yoshifumi Yasuoka  
 [65784] Thitimar Chongtaku  
 [66551] Shuai Shao  
 [66559] Tatsaneewan Poesri  
 [67152] Xi-Lillian Pang  
 [67625] Koki Nishioka  
 [67838] Pragya Pradhan  
 [67494] Kyaw Zaya Htun

**Session 2: Meeting 1**  
**Urban Safety and Disaster Mitigation**  
**Session chairs: Dr. Panon Latcharote**  
 Special Session [67180] Prof. Tetsuro Ito  
 [67217] Koki Horinouchi  
 [67377] Nussarin Sudrohman  
 [67221] Khin Myat Kyaw  
 [67210] Nattapon Trumikaborworn  
 [67535] Tomoko Matsushita  
 [67712] Samard Buddee  
 [67239] Kodchakorn Krutphong

14:55-15:25 **Coffee Break at Foyer**

15:25-17:10 **Session 3: Grand Ball Room**  
**Infrastructure Management and Sustainable Built Environment**  
**Session chairs: Assoc. Prof. Tsukasa Mizutani**  
 Special Session [68209] Prof. Sutat Leelataviwat  
 [66784] Taiki Suwa  
 [67492] Srikulnath Nilnoree  
 [66687] Takanori Imai  
 [67850] Thant Paing Htun  
 [67663] Kishor Timsina  
 [67785] Sneha Shrestha  
 [67259] Shunsuke Iwai  
 [67841] Rajitha Sachinthaka Subhasinghe  
 [66573] Shinji Konishi

**Session 4: Meeting 1**  
**Urban Safety and Disaster Mitigation**  
**Session chairs: Dr. Chitrini Mozumder**  
 Special Session [67448] Prof. Pradeep Kumar Ramancharla  
 [68217] Tin Panthong  
 [67245] Zamzam Multazam  
 [65841] Danh Pham  
 [67485] Tanyaporn Chouydamrong  
 [67243] Yuta Arakawa  
 [67854] Abhishek Regmi  
 [68092] Kanokrat Khansanthia  
 [66327] Teraphan Ornthammarath

18:00-20:00 **Banquet at Beach Lawn**

**Friday, 9 December 2022**

09:00-10:35 **Session 5: Grand Ball Room**  
**International Public Health Research in Asia**  
**Climate Change and Green Recovery**

**Session 6: Meeting 1**  
**Urban Safety and Disaster Mitigation**  
**Session chairs: Prof. Wataru Takeuchi**

	<b>Session chairs: Assoc. Makoto Fujii</b> Special Session [67253] Prof. Norie Kawahara [67842] Piyanuch Nontikansak [66709] Muhammad Haidar [67627] Yoshifumi Yamaya [67633] Yuta BaBa [66794] Aoto Sasaki [67209] Shamima Ferdousi Sifa [66171] Kazuma Mawatari [67277] Shamsuddin Shahid	Special Session [66747] Prof. Akira Kodaka [65875] Hillson Ghimire [66590] Shoki Shimada [67486] Chayanon Hansapinyo [67823] Adisak Parapan [67237] Yukitsugu Kojiya [66194] Anish Ratna Shakya [66882] Osamu Murao
10:35-11:00	<b>Coffee Break Foyer</b>	
11:00-12:45	<b>Session 7: Grand Ball Room</b> <b>Infrastructure Management and Sustainable Built Environment</b> <b>Session chairs: Dr. Chaitanya Krishna</b> Special Session [65833] Prof. Tsuyoshi Shiga [67722] Ting Su [66681] Shuto Yotsumoto [67847] Arkar Min [67216] Hara Yutaro [67811] Binay Karna [66723] Makoto Kuno [67762] Taweephong Suksawat [67225] Md. Shakhawat Hossain [66748] Tomotaka Fukuoka	<b>Session 8: Meeting 1</b> <b>Urban Safety and Disaster Mitigation</b> <b>Session chairs: Prof. Kazuyuki Takada</b>  Special Session [67456] Prof. Suched Likitlersuang [67281] Shuhei Kaneko [67094] Jirat Tepraksa [66561] Nguonly Ung [68125] Nartmongkhol Songserm [67829] Terdkiad Nontapot [66787] Yuta Moriwaki [66688] Soheil Dashti
12:45-14:00	<b>Lunch at EAT@OZO Summit MTG</b>	
14:00-15:30	◆ <b>Keynote Speech at Ball Room</b> <b>Moderator: Dr. Chaitanya Krishna Gadagamma</b>  <b>4. Prof. Masahiro Hashizume:</b> Seasonality, diarrhoea and climate change <b>5. Prof. Pennung Warnitchai:</b> Major Challenges in Earthquake Risk Reduction in Asia <b>6. Prof. A S M Maksud Kamal:</b> Changes in Wet Bulb Globe Temperature and Health Risk to Heat-related Hazards: An overview of Bangladesh	
15:30-15:45	<b>Coffee Break at Foyer</b>	
15:30-16:30	◆ <b>Closing Ceremony at Ball Room</b> <b>Moderator:</b>  <b>1. Review of OHOW2022</b> <b>2. Young Award Ceremony</b> <b>3. Announcement of OHOW2023</b> <b>4. Closing Speech</b> <b>5. Closing Speech Closing Remarks</b>	
18:00-	Farewell Party TBD	
<b>Saturday, 10 December 2022</b>		
<b>Technical Tour</b>		
08:15-17:00	<b>Visit to Khao Chee Chan, Noong Nooch Gardens and Sanctuary of Truth</b>	

## Technical Sessions

8 December (Thursday) 2022

### Grand Ball Room

## **S.1** Climate Change and Green recovery **13:30-14:55**

*Chair:* Dr. Manzul Hazarika (Asian Institute of Technology, Thailand)

**13:30-13:45** [67417] Transdisciplinary Research for a Sustainable World – From SATREPS, Future Earth to one-Health-one-World  
Prof. Emeritus Yoshifumi Yasuoka, *The University of Tokyo, Japan*

**13:45-13:55** [65784] Detecting spatiotemporal heatwave in urban, peri-urban, and rural areas of Thailand using satellite-based thermal anomalies  
Thitimar Chongtaku, *School of Engineering and Technology, Asian Institute of Technology, Thailand*  
Co-Authors Salvatore G.P. Virdis, Sangam Shrestha, Thi Phuoc Lai Nguyen, Hiroyuki Miyazaki

**13:55-14:05** [66551] Reflectance Simulations of Voxel-Based Virtual Chinese Cabbage Farms  
Shuai Shao, *The University of Tokyo, Japan*  
Co-Authors Takumi Fujiwara, Wataru Takeuchi

**14:05-14:15** [66559] Long-term spatiotemporal analysis of lake surface water area changes in Southeast Asia  
Tatsaneewan Phoesri, *Remote Sensing and Geographic Information System (RS&GIS), Department of Information & Communication Technologies (ICT,) School of Engineering and Technology (SET), Asian Institute of Technology (AIT), Thailand*  
Co-Authors Salvatore G.P. Virdis

**14:15-14:25** [67152] Using remote sensing data to predict distribution of red-listed forest species  
Xi-Lillian Pang, *KTH Royal Institute of Technology, Stockholm, Sweden*  
Co-Authors Stefanos Georganos

**14:25-14:35** [67625] Analysis of the relationship between ecosystem distribution and land use patterns using natural environment survey  
Koki Nishioka, *Kanazawa University, Japan*

**14:35-14:45** [67838] Assessment of changes in flow regime under climate change in different physiographic regions of Koshi River Basin, Nepal  
Pragya Pradhan, *Asian Institute of Technology (AIT), Thailand*  
Co-Authors Sangam Shrestha

**14:45-14:55** [67494] Rapid Flood Inundated Mapping for Community Planning (Case Study: Mandalay City)  
Kyaw Zaya Htun, *Yangon Technological University (Former Researcher, Myanmar)*

### Meeting Room 1

## **S.2** Urban Safety and Disaster Mitigation **13.30-14.55**

*Chair:* Dr. Panon Latcharote (Mahidol University, Thailand)

**13:30-13:45** [67180] The crowd control and the making safe space for pedestrian



at the time of big event

Prof. Tetsuro Ito, *Institute of Industrial Science, The University of Tokyo, Japan*

- 13:45-13:55 [67217] Fabrication of in-situ test apparatus and Application to volcanic soils**  
Koki Horinouchi *The University of Tokyo, Japan*  
Co-Authors Reiko Kuwano , Makoto Kuno
- 13:55-14:05 [67377] Evaluation of DFLOWZ and Debris-2D Models Using Road No. 1081 Km. 90 Data in Northern, Thailand**  
Nussarin Sudrohman *Department of Civil and Infrastructure Engineering, Asian Institute of Technology, Thailand*  
Co-Authors Kuo-Chieh Chao, Suree Teerarungsigul
- 14:05-14:15 [67221] Analysis of SSI Effect on Separation Gap Requirement for RC Mid-rise Buildings in Yangon**  
Khin Myat Kyaw *Institute of Industrial Science, The University of Tokyo, Japan*  
Co-Authors Kimiro Meguro
- 14:15-14:25 [67210] Tsunami evacuation simulation and the effect of population distribution: a case study of Patong, Phuket, Thailand**  
Nattapon Trumikaborworn, *Dept. of Development and Sustainability, Asian Institute of Technology, Thailand*  
Co-Authors Panon Latcharote, Pennung Warnitchai
- 14:25-14:35 [67535] The public nature of Back Drainage Space in the former colonial city of Yangon, Myanmar: "By-product space of planning&rdquo; and its various communalization**  
Tomoko Matsushita, *Urban Disaster Research Institute, Japan*
- 14:35-14:45 [67712] Concrete-filled Steel Tube Installation for Additional Load Transfer to Retrofit an Existing Building**  
Samard Buddee, *FSE Consultant Co. Ltd., Thailand*
- 14:45-14:55 [67239] Raising the Community&rsquo;s Awareness of Disaster through the Board Games: A Review**  
Kodchakorn Krutphong, *Research Assistant, Disaster and Risk Management Information Systems (DRMIS) Research Unit, Chulalongkorn University, Thailand*  
Co-Authors Wanit Treeranurat, Ampan Laosunthara, Natt Leelawat \*, Jing Tang, Nattapon Trumikaborworn, Panon Latcharote

## Grand Ball Room

### **S.3 Infrastructure Management & Sustainable Built Environment 15:25-17:10**

*Chair:* Assoc. Prof. Tsukasa Mizutani (The University of Tokyo)

- 15:25-15:40 [68209] Seismic vulnerability assessment of low-rise infilled RC frame structures by numerical analysis**  
Prof. Sutat Leelataviwat, *Thailand*  
Co-Authors J. SRECHAI<sup>1</sup>, W. WARARUKSAJJA, V. BOONYAPINYO
- 15:40-15:50 [66784] Basic Study on Urgency Classification Model for Sewage Pipe Using Machine Learning**  
Taiki Suwa, *Kanazawa University, Japan*  
Co-Authors Makoto Fujii \*, Yuma Morisaki, Tomotaka Fukuoka, Mai Yoshikura
- 15:50-16:00 [ 67492 ] Output-only modal identification using unsupervised**

machine learning approach: A case study of free vibration

Srikulnath Nilnoree, *Asian Institute of Technology, Thailand*

Co-Authors Attaphongse Taparugssanagorn, Chaitanya Krishna GADAGAMMA

**16:00-16:10** **[66687]** **Reproduction of Rebar Mesh Arrangement Inside Concrete Bridge Deck from Ground Penetrating Radar Volume Images by 3D Filtering**

Takanori Imai, *Institute of Industrial Science, The University of Tokyo, Japan*

Co-Authors Tsukasa Mizutani

**16:10-16:20** **[67850]** **Effect of waste construction aggregates on the mechanical properties of steel fiber reinforced concrete**

Thant Paing Htun, *Thammasat University, Thailand*

Co-Authors KRISADA CHAIYASARN \*, PANUWAT JOYKLAD, QUDEER HUSSAIN

**16:20-16:30** **[67663]** **Sensitivity based structural model updating of idealized shear frames using operational modal data**

Kishor Timsina, *The University of Tokyo, Japan*

Co-Authors Chaitanya Krishna Gadagamma, Kimiro Meguro

**16:30-16:40** **[67785]** **Development of a mechanistic model to evaluate soft storey phenomenon in reinforced concrete (RC) 2D frame with infill masonry walls**

Sneha Shrestha, *Asian Institute of Technology, Thailand*

Co-Authors Kishor Timsina, Chaitanya Krishna Gadagamma

**16:40-16:50** **[67259]** **Highly accurate real-time estimation of void thickness inside concrete by spectral analysis pattern matching of GPR signal**

Shunsuke Iwai, *The University of Tokyo, Japan*

**16:50-17:00** **[67841]** **A review of a FRP concrete strengthening: A modern approach**

Rajitha Sachinthaka Subhasinghe, *Thammasat University, Thailand*

Co-Authors Krisada Chaiyasarn , Panuwat Joyklad, Qudeer Hussain

**17:00-17:10** **[66573]** **Development of inspection methods for interior finish in stations**

Shinji Konishi, *Asano Taiseikiso Engineering Co.,Ltd, Japan*

Co-Authors Saburou YOSHIDA, Kazuya HAYAKAWA, Mikiya SATO, Fumihiko SATO, Toshiyuki HORIGUCHI

## Meeting Room 1

### **S.4 Urban Safety and Disaster Mitigation**

**15.25-17.10**

*Chair:* Dr. Chitrini Mozumder (Asian Institute of Technology, Thailand)

**15:25-15:40** **[67448]** **Factors influencing the development of safe housing in india:: lessons for neighboring Asian countries**

Prof. Pradeep Kumar Ramancharla, *Director, CSIR-Central Building Research Institute (CBRI), Roorkee, Uttarkhand, India*

Co-Authors Murty C V R

**15:40-15:50** **[67855]** **IoT-Based Bluetooth Low energy broadcasting advertising packets Queuing system for Clients**

Tin Panthong, *Asian Institute of Technology, Thailand*

Co-Authors Chanphot Wongtaweessup

- 15:50-16:00 [67245] Diagonal tension (shear) test of full-scale concrete hollow blocks masonry assemblages retrofitted by fiber-reinforced paint**  
Zamzam Multazam, *The University of Tokyo, Japan*  
Co-Authors Kenjiro Yamamoto, Kimiro Meguro
- 16:00-16:10 [65841] Impact of residue open burning on air quality in Bangkok using sentinel 2 data**  
Danh Pham, *Remote Sensing and Geographic Information System (RS&GIS), Department of Information & Communication Technologies (ICT,) School of Engineering and Technology (SET), Asian Institute of Technology (AIT), Thailand*  
Co-Authors Chitrini Mozumder, Sarawut Ninsawat
- 16:10-16:20 [67485] Comparing the damage Brick and reinforced concrete walls exposed to blast loading by using the applied element method (AEM)**  
Tanyaporn Chouydamrong, *Asian Institute of Technology, Thailand*  
Co-Authors Chaitanya Krishna
- 16:20-16:30 [67243] Detection of abnormal driving applying recurrence plots**  
Yuta Arakawa, *Tokyo Denki University, Japan*  
Co-Authors Kazuyuki Takada
- 16:30-16:40 [67854] A study on seismic response estimation using measured acceleration data**  
Abhishek Regmi, *Asian Institute of Technology, Thailand*  
Co-Authors Pennung Warnitchai
- 16:40-16:50 [68092] An Impact Map of Phuket Earthquake Based on Building Intensity and Subsoil Properties**  
Kanokrat Khansanthia, *Asian Institute of Technology, Thailand*
- 16:50-17:00 [66327] Development of Dynamic Properties Database of Buildings and Long-term Structural Health Monitoring System by using low-cost sensors**  
Teraphan Ornthammarath, *Mahidol University, Thailand*  
Co-Authors Nakhorn Poovarodom, Pennung Warnitchai

**9 December (Friday) 2022**

**Grand Ball Room**

## **S.5 International Public Health Research in Asia Climate Change and Green**

**Recovery**

**09:00-10:35**

*Chair: Assoc. Makoto Fujiu (Kanazawa University, Japan)*

**09:00-09:15 [67253] Believe in the power of beauty: Bringing education and understanding to you: seeking an approach that reaches people's hearts and minds, based on the divergence from the rational human image assumed by public health experts**

*Prof. Norie Kawahara, , The University of Tokyo, Japan*

*Co-Authors Tomoko Matsushita*

**09:15-09:25 [67842] Rainfall extremes under climate change in the Pasak River Basin, Thailand**

*Piyanuch Nontikansak, Asian Institute of Technology, Thailand*

*Co-Authors Sangam Shrestha*

**09:25-09:35 [66709] Tropical peatlands canal segmentation from high resolution optical image using U-NET architecture**

*Muhammad Haidar, The University of Tokyo, Japan*

*Co-Authors Wataru Takeuchi*

**09:35-09:45 [67627] Basic analysis of tourist behavior characteristics: Case study of Ishikawa prefecture, Japan**

*Yoshifumi Yamaya, Kanazawa University, Japan*

*Co-Authors Makoto Fujiu*

**09:45-09:55 [67633] Evaluation of tourist spot using review data posted on travel information website: Case study in Ishikawa prefecture**

*Yuta BaBa, Kanazawa University, Japan*

*Co-Authors Makoto Fujiu*

**09:55-10:05 [66794] Analysis of site selection for utilization of vacant houses considering regional characteristics**

*Aoto Sasaki, School of Geosciences and Civil Engineering, Kanazawa, University, Japan*

*Co-Authors Yuma Morisaki , Makoto Fujiu, Taiki Suwa*

**10:05-10:15 [67209] Assessment of brick-kiln induced air pollution in Bangladesh and impacts on public health**

*Shamima Ferdousi Sifa, Dept. of Disaster Science and Climate Resilience, University of Dhaka, Bangladesh*

*Co-Authors Md. Shakhawat Hossain, Md. Zillur Rahman, A.S.M Maksud Kamal, Wataru Takeuchi*

**10:15-10:25 [66171] Collaboration with Vietnam national university in analytical chemistry and social implementation for smart city**

*Kazuma Mawatari, The University of Tokyo, Japan*

**10:25-10:35 [67277] Urban heat island effect and green recovery: A case study of Dhaka city**

*Shamsuddin Shahid, Dept. of Disaster Science and Climate Resilience, University of Dhaka, Bangladesh*

*Co-Authors A.S.M.M. Maksud Kamal*

## Meeting Room 1

### **S.6 Urban Safety and Disaster Mitigation** **09:00-10:35**

*Chair:* Prof. Wataru Takeuchi (Institute of Industrial science, The University of Tokyo, Japan)

- 09:00-09:15** **[66747]** Pilot analysis to assess business continuity of industrial complexes in Thailand by changes in nitrogen dioxide concentration  
Prof. Akira Kodaka, *Keio university, Japan*  
Co-Authors Natt Leelawat , Jing Tang, Naohiko Kohtake
- 09:15-09:25** **[ 65875 ]** The intricacies in the implementation of integrated geospatial platform, database, and application for disaster risk management in Uttarakhand  
Hillson Ghimire *Geoinformatics Center, Asian Institute of Technology, Thailand*  
Co-Authors Manzul Kumar Hazarika
- 09:25-09:35** **[66590]** A large scale solar based microgrid applicability assessment for the future disaster resilient community in Japan  
Shoki Shimada *Institute of Industrial science, The University of Tokyo, Japan*  
Co-Authors Wataru Takeuchi
- 09:35-09:45** **[ 67486 ]** Inverse analysis for health monitoring of a historical MASONRY building  
Chayanon Hansapinyo, *Thailand*  
Co-Authors Chinnapat Buachart, Amorn Pimanmas, Mitsuhiro MIYAMOTO, Teewara Suwan
- 09:45-09:55** **[67823]** Landslide susceptibility mapping using trigs for Are-Di village, Chiang Rai province, Thailand  
Adisak Parapan, *Asian Institute of Technology, Thailand*  
Co-Authors Kuo-Chieh Chao
- 09:55-10:05** **[67237]** Verification of the effects of parking lot conversion and parking lot integration in the Kawagoe Ichiban Gai shopping street  
Yukitsugu Kojiya *Tokyo Denki University, Japan*  
Co-Authors Kazuyuki Takada
- 10:05-10:15** **[66194]** Multi-hazard risk assessment of Godavari municipality, Nepal  
Anish Ratna Shakya, *Geoinformatics Center, Asian Institute of Technology, Thailand*  
Co-Authors Cees Van Westen, Manzul Kumar Hazarika
- 10:15-10:25** **[66882]** Distribution and development process of slum districts in Yangon  
Osamu Murao, *International Research Institute of Disaster Science, Tohoku University, Japan*  
Co-Authors Hiroto Yamada, Tomohiro Tanaka

## Grand Ball Room

### **S.7 Infrastructure Management & Sustainable Built Environment** **11:00-12:45**

*Chair:* Dr. Chaitanya Krishna (Asian Institute of Technology, Thailand)

- 11:00-11:15** **[65833]** Application of a latest-model ground water flow meter  
Prof. Tsuyoshi Shiga, *Asano Taiseikiso Engineering LTD., Japan*  
Co-Authors Katsumasa Yamamoto, Shinji Hagi

- 11:15-11:25** 【67722】 A risk allocation method of sponge city PPP projects: multicriteria comparison in different proportions  
Ting Su, *Department of Urban and Regional Planning, Chulalongkorn University, Thailand*
- 11:25-11:35** 【66681】 3D Visualization of Subsurface Pipes by Volume Image Processing of Ground Penetrating Radar Signals  
Shuto Yotsumoto *The University of Tokyo, Japan*  
Co-Authors Tsukasa Mizutani , Takanori Imai
- 11:35-11:45** 【67847】 Bond strength of post-installed rebar in high strength concrete with different types of recycled aggregate  
Arkar Min, *Thammasat University, Thailand*  
Co-Authors Uruya Weesakul, Krisada Chayasarn
- 11:45-11:55** 【67216】 Geotechnical interpretation of the interlayered structure of fine-grained and coarse-grained soil adopted in Japanese old tumuli & lsquo; KOFUN  
Hara Yutaro, *The University of Tokyo, Japan*
- 11:55-12:05** 【67811】 Modified Andreasen & Anderson Particle Packing Method to Develop Low Cement High Performance Concrete with Partial Replacement by Fly Ash and Silica Fume  
Binay Karna, *School of Engineering and Technology, Asian Institute of Technology, Thailand, Thailand*
- 12:05-12:15** 【66723】 Point Cloud Observation Device that can be Inserted into A Cavity Observation Hole Under the Road Surface  
Makoto Kuno, *Institute of Industrial Science, The University of Tokyo, Japan*  
Co-Authors Reiko Kuwano
- 12:15-12:25** 【67762】 A case study of an investigation into the cause of canal side road failure along an irrigation can  
Taweephong Suksawat, *Department of Rural Road, Thailand*  
Co-Authors Jakkapohong Wongkhumchun, Kawin Saiprasertkij, Jiratchaya Ayawanna, Salisa Chaiyaput
- 12:25-12:35** 【67225】 Simplified engineering geomorphic unit based site characterization of Dhaka City DAP area  
Md. Shakhawat Hossain, *University of Tokyo, Japan (Doctoral Student) and University of Dhaka, Bangladesh (Assistant Prof.)*
- 12:35-12:45** 【66748】 A study to evaluate the effectiveness of the size of image for the transformer model-based bridge damage detection method  
Tomotaka Fukuoka, *Kanazawa university, Japan*  
Co-Authors Makoto Fujju

## Meeting Room 1

### **S.8 Urban Safety and Disaster Mitigation**

**11:00-12:45**

*Chair:* Prof. Kazuyuki Takada (Tokyo Denki University, Japan)

- 11:00-11:15** 【67456】 Investigation of liquefaction hazard in Chiang Rai and Chiang Mai provinces of the Northern Thailand  
Prof. Suched Likitlersuang, *Department of Civil Engineering, Chulalongkorn University, Thailand*  
Co-Authors Weeradetch Tanapalungkorn, Veerayut Komolvilas, Thanakorn Chompoorat, Tirawat Boonyatee

- 11:15-11:25 [67281] Evacuation Behavior of The Residents in Higashi–Matsuyama City During 2019 Typhoon No. 19 (HAGIBIS)**  
Shuhei Kaneko, *Tokyo Denki University, Japan*  
Co-Authors Kazuyuki Takada
- 11:25-11:35 [ 67094 ] Shallow Excavation with diaphragm wall to minimize surrounding soil displacement in Bangkok subsoils**  
Jirat Teeparaksa, *Department of Civil Engineering, Faculty of Engineering, Kasetsart University, Thailand*
- 11:35-11:45 [66561] Risk Assessment on Logistics and BCP Along the Southern Economic Corridor (SEC)**  
Nguonly Ung, *The University of Tokyo, Japan*  
Co-Authors Wataru Takeuchi
- 11:45-11:55 [68125] Sandbox Experiment of Subsoil Corrosion Detection using Geoelectrical Methods**  
Nartmongkhon Songserm, *Asian Institute of Technology, Thailand*  
Co-Authors Yotsawat Chunhakamolrat, Avirut Puttiwongrak
- 11:55-12:05 [67094] Review of artificial intelligence application in landslide mapping**  
Terdkiad Nontapot, *Asian Institute of Technology, Thailand*  
Co-Authors Kuo-Chieh Chao
- 12:05-12:15 [66787] Analysis of local pharmaceutical needs for rapid supply of medicines during large-scale disaster**  
Yuta Moriwaki, *Kanazawa University, Division of Geosciences and Civil Engineering, Japan*  
Co-Authors Makoto Fujii , Yuma Morisaki
- 12:15-12:25 [ 66688 ] Comparative analysis of resilience definitions to determine resilience factors application for urban districts’ disaster safety**  
Soheil Dashti, *The University of Tokyo, Japan*  
Co-Authors Takaaki KATO