

EASEC-18

The 18th East Asia-Pacific Conference on
Structural Engineering and Construction

PROGRAM BOOK

13-15 NOVEMBER 2024
SHANGRI-LA CHIANG MAI
CHIANG MAI, THAILAND



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The 18th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-18)

PROGRAM BOOK

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13–15 November 2024
Shangri-La Chiang Mai, Chiang Mai, Thailand

FOREWORD BY CONFERENCE CHAIRMAN



On behalf of the EASEC-18 conference organizer, I extend my warmest welcome to you to the EASEC-18 conference in Chiangmai City. Realizing that the latest EASEC-17 was an online conference in 2022, it has been 5 years since our last face-to-face meeting in Brisbane, Australia in 2019. I am very delighted that EASEC-18 has resumed the opportunity for all of us to meet in person again. With almost 300 quality papers and 13 keynote and invited speakers to be introduced during this conference together with the larger number of participants, I am confident that the conference will be a venue for effective academic, research, and practical information exchange in the areas related to structural and construction among

the participants. Please take a look and circle the sessions that interest you most. I also wish you to enjoy social events and visit many attractive locations in Chiangmai, one of the famous tourist destinations in Thailand, during your stay. As you may have acknowledged the flood disaster in the northern region of Thailand recently, which includes Chiangmai, I believe our Thai people, especially the local people in all affected cities, have spent our utmost efforts to return all the affected cities to their pre-flooding or even better conditions. I believe that your presence here is highly welcomed not only by my conference organizing team but also the local people.

Thank you for your support to EASEC-18.

Prof. Somnuk Tangtermsirikul
Chairman of the Organizing Committee

FOREWORD BY EASEC ISC CHAIRMAN



It is my great honor and privilege to welcome you all to the Eighteenth East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-18), held here in the beautiful and culturally rich city of Chiang Mai, Thailand.

The EASEC conference has always been more than just a platform for academic exchange. Founded by the visionary Professor Fumio Nishino in 1986, this conference series was born out of a desire to foster collaboration across the vast and diverse regions of East Asia and the Pacific. Professor Nishino's wisdom and leadership have shaped EASEC into what it is today—a premier forum for academicians, researchers, and engineers in structural engineering and construction.

Today, as we gather for the 18th edition of EASEC, we are honored to have over 350 participants from 20 countries. I would like to extend a warm welcome to our colleagues from China, Japan, Taiwan, Korea, Hong Kong, Singapore, Malaysia, Thailand, Vietnam, Indonesia, Australia, United States, United Kingdom and many other parts of the world. Your participation enriches this event and contributes to the diversity of ideas and experiences that are the hallmark of EASEC.

This conference continues to grow in significance because of the efforts of those who have come before us, and we remain committed to furthering the vision of EASEC's founder, Professor Nishino. As we come together in Chiang Mai, I encourage each of you to make the most of this opportunity—to share your knowledge, engage in meaningful discussions, and explore new avenues for collaboration.

Let us make EASEC-18 a memorable and fruitful event, as we work together to address the challenges of today and build the infrastructure for tomorrow.

Thank you once again for your participation, and I wish you all a successful and inspiring conference.

Prof. C. M. Wang

Chairperson of EASEC International Steering Committee

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All the papers in these conference proceedings were peer reviewed by members of the International Scientific Committee. This process entailed detailed reading of the papers, reporting of comments to authors, modification of papers by authors, and re-evaluation of revised papers to ensure quality of the content.

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PLENARY KEYNOTE SPEAKERS

Prof. J.N. Reddy

J. Mike Walker '66 Department of Mechanical Engineering, Texas A&M University, USA

Topic: *Fracture Modeling of Plate Bending using Graph-based Finite Element Analysis (GRAFEA)*



Biography:

Dr. Reddy is a Distinguished Professor, Regents' Professor, and the holder of the O'Donnell Foundation Chair IV in Mechanical Engineering at Texas A&M University, College Station, Texas. Dr. Reddy, an ISI highly-cited researcher, is known for his significant contributions to the field of applied mechanics through the authorship of a large number of textbooks (25) and journal papers (>800). His pioneering works on the development of shear deformation theories (that bear his name in the literature as the Reddy third-order plate theory and the Reddy layerwise theory) have had a major impact and have led to new research developments and applications. Some of the ideas on shear deformation theories and penalty finite element models of fluid flows have been implemented into commercial finite element computer programs like ABAQUS, NISA, and HyperXtrude. In recent years, Reddy's research has focused on the development of locking-free shell finite elements and nonlocal and non-classical continuum mechanics problems dealing with architected materials and structures and damage and failures in solids.

Dr. Reddy has received numerous honors and awards. Most recent ones include: 2023 Leonardo da Vinci Award from the European Academy of Sciences, 2023 Michael Païdoussis Medal from the Royal Society of Canada, 2022 IACM Congress (Gauss-Newton) Medal from the International Association of Computational Mechanics, the 2019 SP Timoshenko Medal from American Society of Mechanical Engineers, the 2018 Theodore von Karman Medal from the American Society of Civil Engineers, the 2017 John von Neumann Medal from the U.S. Association of Computational Mechanics, the 2016 Prager Medal from the Society of Engineering Science, and 2016 ASME Medal from

American Society of Mechanical Engineers. He is a member eight national academies, including the US National Academy of Engineering, and foreign fellow of Indian National Academy of Engineering, the Canadian Academy of Engineering, the Brazilian National Academy of Engineering, the Chinese Academy of Engineering, the Royal Engineering Academy of Spain, the European Academy of Sciences, and the European Academy of Sciences and Arts.

Prof. Caijun Shi

College of Civil Engineering, Hunan University, P.R. China

Topic: *Durability of CO₂ Mineralized Materials and Products*



Biography:

Dr. Caijun Shi is the President of Asian Concrete Federation (ACF), Chair Professor of College of Civil Engineering, Hunan University, founding Editor-in-Chief of <Journal of Sustainable Cement-based Materials> and editorial board member of CCR, CCR, CBM, JBE, etc. His research interests include characterization and utilization of industrial by-products and waste materials, carbon mineralization for cement and concrete, and design and production of low-carbon cement and concrete materials. He has been granted about 50 Chinese patents and 4 US patents, and several of which have been used in large construction projects or product manufacture. He has authored/co-authored more than 645 technical papers. His Google scholar citation is over 52,500 and H-index of 120 (by Oct 20, 2024). He ranks No. 1 for year 2024 and No.2 for career (1969-2024) in Building and Construction Sector worldwide based on Stanford University's ranking. He was elected as a fellow of International Energy Foundation in 2001, American Concrete Institute in 2007, RILEM in 2016, Hongkong Concrete Institute in 2022, and ACF in 2023.

Prof. Priyan Mendis

Faculty of Engineering, University of Melbourne, Australia

Topic: *Towards net-zero: Sustainable materials and Modular prefabricated construction*



Biography:

Professor Priyan Mendis is a Professor in the Department of Infrastructure Engineering and the Director of the ARC Centre for Advanced Manufacturing of Prefabricated Modular Housing (ARC AMP.H) and the Leader of the Advanced Protective Technology of Engineering Structures Group. He is the Deputy Director of the ARC Industry Transformation Research Hub - Transformation of Reclaimed Waste Resources to Engineered Materials and Solutions for a Circular Economy (TREMS). He is a world leader in Innovative Construction methods such as Prefabricated structures, Tall Buildings, Durability of Concrete Structures, Advanced Materials for Construction including Waste Materials, Protective Technology of structures, Wind, Earthquakes, Fire and Blast. He worked as a Consulting Engineer before joining the University in early 1990s. He is a member of the Australian Standard committees BD2 (Concrete structures) and BD6 (Loading of structures including wind and earthquakes). He was a member of the ARC College of Experts 2005-2017. Prof Mendis obtained his PhD in 1997 from Monash University, Australia. He is also a member of several institutions including Fellow of Engineers Australia, Concrete Institute of Australia, and American Concrete Institute. He is a highly cited researcher with more than 16000 citations. He has supervised 66 PhD students as the principal supervisor.

Prof. Pennung Warnitchai

School of Engineering and Technology, Asian Institute of Technology,
Thailand

Topic: *An Overview of Earthquake Engineering Research Activities in Thailand*



Biography:

Prof. Pennung Warnitchai received his doctoral degree in Civil Engineering from the University of Tokyo in 1990 and is currently a Professor of Structural Engineering at the Asian Institute of Technology (AIT). He has been actively involved in research and practices in structural dynamics, earthquake engineering, wind effects on structures, bridge engineering, and disaster management. Since 2002, he has led a long-term research program on "Mitigation of Earthquake Risk in Thailand" funded by the Thai Research Fund and later by the National Research Council of Thailand. More than 30 researchers from ten universities and three government agencies in Thailand have participated in this program. In the professional associations, he served as the chairman of the chapter on the effects of earthquakes and wind loads at the Engineering Institute of Thailand (EIT) from 2002 to 2016. He led a team of experts and professional engineers to develop the first official seismic design standard for buildings and structures in Thailand in 2009. Several research results from his research team, such as new design spectra for long-period ground motions in the Bangkok basin and a new method for analyzing the seismic response of tall buildings, were translated into code of practice in this seismic design standard. He is also currently Thailand's national delegate to the International Association for Earthquake Engineering (IAEE) and founding director of the Earthquake Research Center of Thailand (EARTH).

Prof. Jose Torero

UCL Department of Civil, Environmental & Geomatic Engineering,
University College London, United Kingdom

Topic: *Holistic Performance of Mass Timber Structures*



Biography:

Professor José L. Torero is Professor of Civil Engineering and Head of the Department of Civil, Environmental and Geomatic Engineering at University College London. He works in the field of fire safety where he specializes in complex environments such as complex urban environments, novel architectures, new construction materials, critical infrastructure, aircraft and spacecraft. José is a Chartered Engineer (UK), a Registered Professional Engineer in Queensland, a fellow of the Royal Academy of Engineering (UK), The Royal Society of Edinburgh (UK), The Australian Academy of Technology and Engineering, the Society of Fire Protection Engineers (USA), the Institution of Fire Engineers (UK) and the Institution of Civil Engineers (UK).

Assoc. Prof. Juhyuk Moon

Department of Civil and Environmental Engineering, Seoul National University, South Korea

Topic: *Recent global trends in CCUS technologies*



Biography:

Prof. Juhyuk Moon has been working in the Department of Civil and Environmental Engineering at Seoul National University (SNU). He had also worked at Stony Brook University and National University of Singapore as an Assistant Professor after receiving PhD degree from the University of California at Berkeley in 2023. His main research interests include multi-scale characterization technologies for cementitious materials, standards for carbon neutrality in cement-concrete industries, development and commercialization of innovative solutions for low carbon materials.

Prof. Jie Yang

School of Engineering, RMIT University, Australia and Lead Editor-in-Chief, Engineering Structures

Topic: *Phase change phononic crystals with high bandgap tunability of elastic waves*



Biography:

Dr. Yang is the Distinguished Professor in the School of Engineering, RMIT University, Australia. His main research interests include advanced composite and functionally graded structures, mechanical metamaterials, structural stability and dynamics, CNT/graphene reinforced nanocomposites, smart structures and control. He has authored 1 book and over 500 publications including 330 journal papers which have so far attracted over 26900 Google Scholar citations with h-index 88. He is listed the Highly Cited Researcher (Cross Field) for 5 consecutive years from 2019-2023 by Clarivate Analytics and is named by Australian Research

Magazine as the Global Field Leader in Mechanical Engineering in 2020, Australia's Research Field Leader in Structural Engineering in 2021, in Mechanical Engineering in 2019, 2020, 2021, 2022, 2023 as well as in Acoustics and Sound in 2023. Prof Yang is the Lead Editor-in-Chief of Engineering Structures and serves the editorial boards of many other international journals.

Prof. Louis Ge

Department of Civil Engineering at National Taiwan University, Taiwan

Topic: *Bio-cementation Technique for Soil Liquefaction Mitigation*



Biography:

Dr. Ge is a professor in the department of civil engineering at National Taiwan University. He also serves as department chair. Dr. Ge received his BS from National Taiwan University, MS and Ph.D. from University of Colorado at Boulder in 1995, 2000 and 2003, respectively. Before joining National Taiwan University in 2011, he was a tenured associate professor at Missouri University of Science and Technology, USA. His research work focuses on granular mechanics, including soil liquefaction, ground improvement, and constitutive modeling. He is currently serving as an associate editor of Journal of Materials in Civil Engineering, ASCE, an associate editor of International Journal of Geomechanics, ASCE, and an editorial board member of Journal of Testing and Evaluation, ASTM.

Shigeyoshi Tanaka

President of Japan Society of Civil Engineers and Chairman of Taisei Corporation, Japan

Topic: *The Evolution and Innovation of Civil Engineering Technology in Japan*



Biography:

Mr. Shigeyoshi Tanaka is the Chairman and Representative Director of Taisei Corporation, since April 2023. With a distinguished career spanning over four decades, he brings vast expertise in civil engineering and corporate leadership. As the President-Elected of the Japan Society of Civil Engineers (since June 2023), he continues to contribute significantly to the advancement of civil engineering in Japan. Throughout his career at Taisei Corporation, Mr. Tanaka has excelled in various management roles, including Executive Vice President and Representative Director. His strong expertise in Civil Engineering, corporate planning, and regional operations has significantly contributed to the company's success.

Prof. NG Shiu Tong Thomas

Department of Architecture and Civil Engineering, City University of Hong Kong, China

Topic: *Disrupting the Construction Industry through Digital Transformation*



Biography:

Prof. Ng is Head of Department of Architecture and Civil Engineering at City University of Hong Kong. As Chair Professor of Smart and Sustainable Construction, his research interests cover a wide range of topics not least low carbon built environment, community resilience, smart city, construction informatics, infrastructure asset management, construction productivity, etc. Over the years, Thomas has secured more than a hundred competitive research grants amounting to over USD 17 million. He has published over 460 scholarly items, and half of

which are refereed journal papers. Thomas is a Member of Technical Committee of Thermal Performance and Energy Use in the Built Environment set up by the International Organization for Standardization (ISO/TC163), and he is a Fellow of Institution of Civil Engineers, Royal Institution of Chartered Surveyors and Chartered Institute of Building.

Prof. David Chua Kim Huat

Department of Civil and Environmental Engineering, National University of Singapore, Singapore

Topic: *Towards Intelligent Lifting for DfMA Construction*



Biography:

Prof. David Chua is currently a Professor in the Department of Civil and Environmental Engineering at the National University of Singapore. In the recent past, he has served as Vice Dean of Student Life, Alumni and Development for the Faculty of Engineering, Deputy Head (Admin) and Deputy Head (Research) for the Department. He obtained his PhD degree in 1989 from University of California, Berkeley, USA, majoring in construction management. He is also a registered professional engineer in Singapore. His research interests in recent years have been in lean construction, BIM, and digital construction. To date, total grants awarded to his research group has exceeded \$11.5 million dollars with Professor Chua as the Principal Investigator (PI). He is a council member of System Safety Society Singapore Chapter since 2006. He was appointed member of BCA's International Panel of Experts on BIM, and also appointed Honorary Fellow of WSHi till mid 2018. He had served as the specialty editor for Cost and Scheduling for the Journal of Construction Engineering and Management, ASCE. Presently, he serves in the editorial board of Automation in Construction and other international journals.

INVITED SPEAKERS

Prof. Tomonori Nagayama

Department of Civil Engineering, School of Engineering, The University of Tokyo, Japan

Topic: *Infrastructure Assessment Using AIOT Technologies*



Biography:

Prof. Tomonori Nagayama obtained his B.S. (2000) and M.S. (2002) in civil engineering from the University of Tokyo and his Ph.D. (2007) in civil and environmental engineering from the University of Illinois at Urbana-Champaign. He is currently a professor in the Department of Civil Engineering at the University of Tokyo. He received 2007 ASCE Raymond C. Reese Research Prize, 2019 Prize for Science and Technology (Development Category), the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science, and Technology, and 2020 ASCE Moisseiff Award. His research interests include data assimilation for structural dynamics, seismic and wind engineering, and infrastructure monitoring using probe vehicles.

Prof. Lei Lei

College of Civil Engineering, Hunan University, China

Topic: *Advancing Alkali-Activated Slag Performance through Molecularly Tailored PCE*



Biography:

Dr. Lei Lei serves as a full Professor at the College of Civil Engineering at Hunan University. She has earned her Ph.D. from Technical University of Munich (TUM) in 2016 then worked as a lecturer at TUM. In 2023 she transitioned to her present faculty position at Hunan University. She specializes in chemical admixtures, supplementary cementitious materials (SCMs), and the interactions between admixtures and

binders. With a commendable contribution to academia, Prof. Lei has authored approximately 60 scientific papers, featured in peer-reviewed journals and conference proceedings. Her expertise is reflected in her membership in several prestigious committees, including her role as Secretary General of the Asian Concrete Federation, as well as her involvement as a member of RILEM and the Gesellschaft Deutscher Chemiker (GDCh) in the Construction Chemistry section. Notably, in 2021, Dr. Lei Lei was honored with the “Klaus Dyckerhoff Award for Young Scientists” by the Dres. Edith and Klaus Dyckerhoff Foundation.

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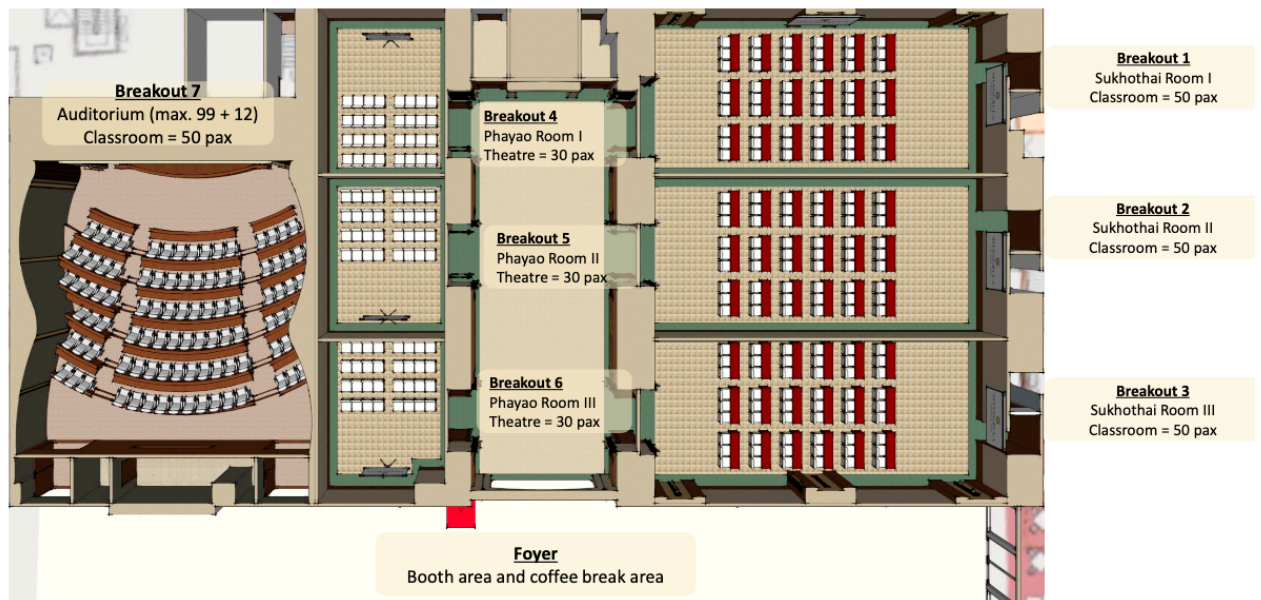
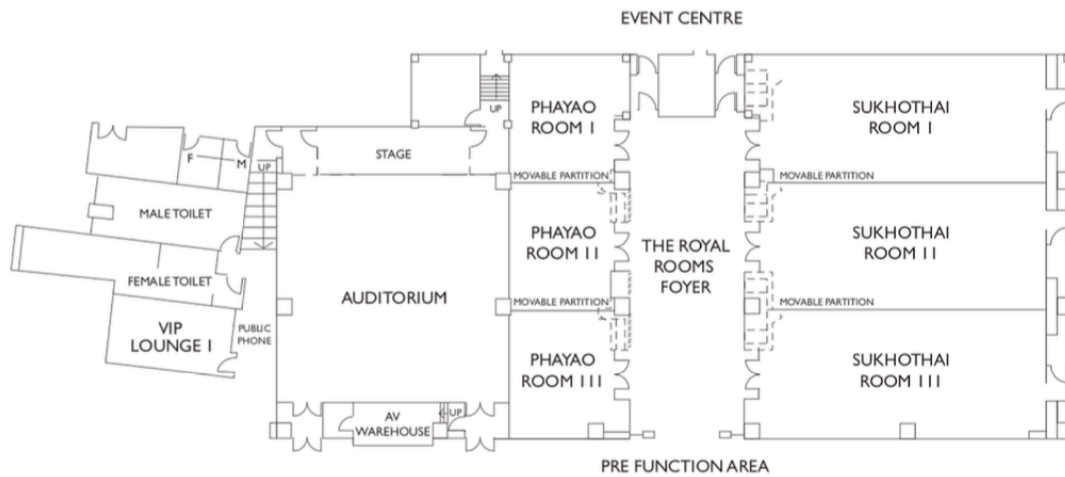
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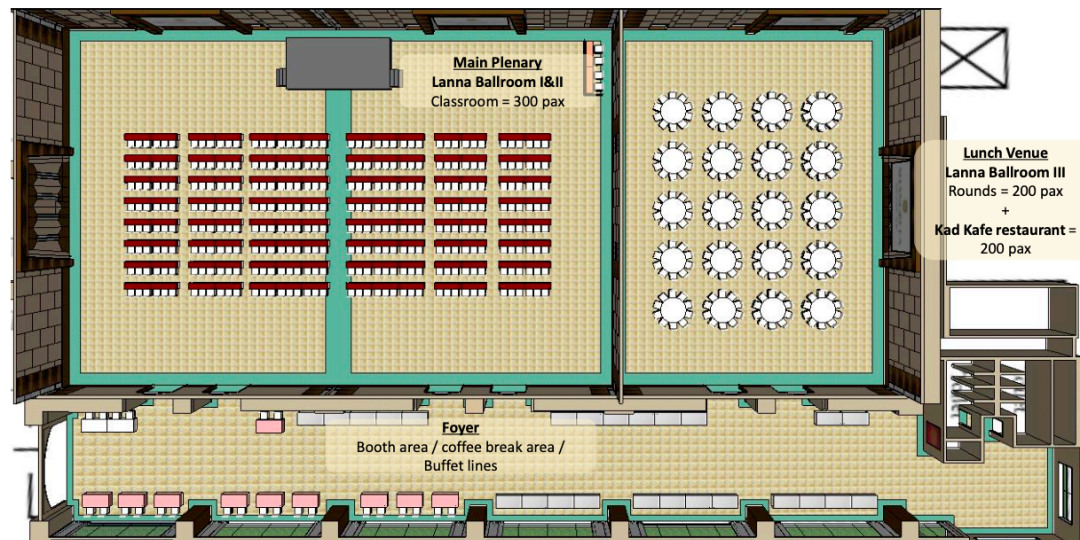
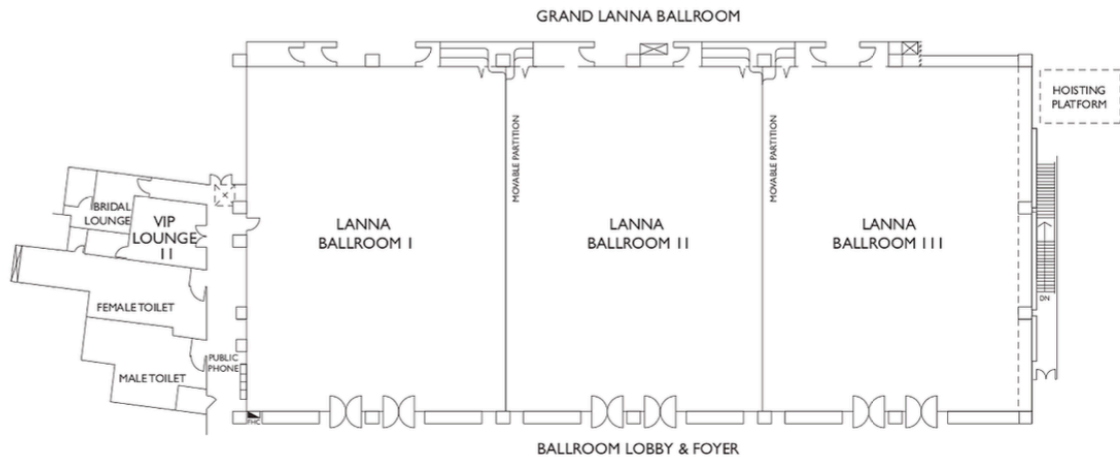
Floor Plan



1st floor



2nd floor



PROGRAM SCHEDULE

Tuesday 12 November 2024

15:00 – 17:45 Registration (Lobby, 1st Floor)

18:00 – 20:30 Welcome Reception Cocktail

Dress code: Smart Casual

Venue: Dhala Pool Bar, 1st Floor

Wednesday 13 November 2024

08:00 – 16:00 Registration (Lobby, 1st Floor)

Time	Activity
08:30 – 10:10	08:30 Opening Ceremony with Nishino Prize/Medal Presentations
	09:00 Plenary Keynote Session 1A Chair: Prof. Y.B. Yang Keynote #1: Prof. J.N. Reddy - Fracture Modeling of Plate Bending using Graph-based Finite Element Analysis (GRAFEA) Keynote #2: Prof. Caijun Shi - Durability of CO ₂ Mineralized Materials and Products <i>Venue: Lanna Ballroom 1&2, 2nd Floor</i>
10:10 – 10:30	Morning Coffee Break (Foyer, 2 nd Floor)
10:30 – 11:40	10:30 Plenary Keynote Session 1B Chair: Prof. Hong Hao Keynote #3: Prof. Priyan Mendis - Towards net-zero: Sustainable materials and Modular prefabricated construction Keynote #4: Prof. Pennung Warnitchai - An Overview of Earthquake Engineering Research Activities in Thailand <i>Venue: Lanna Ballroom 1&2, 2nd Floor</i>
11:40 – 13:00	Buffet lunch <i>Venue: Lanna Ballroom 3, 2nd Floor</i>

13:00 – 15:00	Parallel Sessions 1A (Breakout rooms, 1 st Floor) <ul style="list-style-type: none"> • Session 1A-1: Auditorium • Session 1A-2: Sukhothai I • Session 1A-3: Sukhothai II • Session 1A-4: Sukhothai III • Session 1A-5: Phayao I • Session 1A-6: Phayao II • Session 1A-7: Phayao III
15:00 – 15:30	Afternoon Coffee Break (Foyer, 1 st Floor)
15:30 – 17:30	Parallel Sessions 1B (Breakout rooms, 1 st Floor) <ul style="list-style-type: none"> • Session 1B-1: Auditorium • Session 1B-2: Sukhothai I • Session 1B-3: Sukhothai II • Session 1B-4: Sukhothai III • Session 1B-5: Phayao I • Session 1B-6: Phayao II • Session 1B-7: Phayao III

Thursday 14 November 2024

08:00 – 16:00 Registration (Lobby, 1st Floor)

Time	Activity
08:30 – 09:40	08:30 Plenary Keynote Session 2A Chair: Prof S. Kitipornchai Keynote #5: Prof. Jose Torero - Holistic Performance of Mass Timber Structures Keynote #6: Assoc. Prof. Juhyuk Moon - Recent global trends in CCUS technologies <i>Venue: Lanna Ballroom 1&2, 2nd Floor</i>
09:40 – 10:00	Morning Coffee Break (Foyer, 2 nd Floor)
10:00 – 11:50	10:00 Plenary Keynote Session 2B Chairs: Prof Tamon Ueda and Prof L.J. Leu Keynote #7: Prof. Jie Yang - Phase change phononic crystals with high bandgap tunability of elastic waves Keynote #8: Prof. Louis Ge - Bio-cementation Technique for Soil Liquefaction Mitigation Keynote #9: Shigeyoshi Tanaka - The Evolution and Innovation of Civil Engineering Technology in Japan

	<i>Venue: Lanna Ballroom 1&2, 2nd Floor</i>
11:50 – 13:00	Buffet lunch <i>Venue: Lanna Ballroom 3, 2nd Floor</i>
13:00 – 15:00	Parallel Sessions 2A (Breakout rooms, 1 st Floor) <ul style="list-style-type: none"> Session 2A-1: Auditorium (Invited Speaker: Prof. Lei Lei) Session 2A-2: Sukhothai I Session 2A-3: Sukhothai II Session 2A-4: Phayao I (Invited Speaker: Prof. Tomonori Nagayama) Session 2A-5: Phayao II Session 2A-6: Phayao III
15:00 – 15:30	Afternoon Coffee Break (Foyer, 1 st Floor)
15:30 – 17:30	Parallel Sessions 2B (Breakout rooms, 1 st Floor) <ul style="list-style-type: none"> Session 2B-1: Auditorium Session 2B-2: Sukhothai I Session 2B-3: Sukhothai II Session 2B-4: Phayao I Session 2B-5: Phayao II Session 2B-6: Phayao III
18:00-21:30	Conference Dinner Banquet including Awards Ceremony for: <ul style="list-style-type: none"> EASEC-18 Best Young Researcher's Paper Award EASEC Young Researcher/Engineer Award Dress code: Business Casual <i>Venue: Lanna Ballroom 1&2, 2nd Floor</i>

Friday 15 November 2024

08:00 – 12:00 Registration (Lobby, 1st Floor)

Time	Activity
08:30 – 09:40	08:30 Plenary Keynote Session 3A Chair: Assoc. Prof. Paul Lam Keynote #10: Prof. Shiu Tong Thomas NG - Disrupting the Construction Industry through Digital Transformation Keynote #11: Prof. David Chua Kim Huat - Towards Intelligent Lifting for DfMA Construction <i>Venue: Lanna Ballroom 1&2, 2nd Floor</i>
09:40 – 10:00	Morning Coffee Break (Foyer, 2 nd Floor)

10:00 – 12:00	Parallel Sessions 3A (Breakout rooms, 1 st Floor) <ul style="list-style-type: none"> • Session 3A-1: Auditorium • Session 3A-2: Sukhothai I • Session 3A-3: Sukhothai II • Session 3A-4: Sukhothai III • Session 3A-5: Phayao I • Session 3A-6: Phayao II • Session 3A-7: Phayao III
12:00 – 13:00	Buffet lunch <i>Venue: Lanna Ballroom 3, 2nd Floor</i>
13:00 – 15:00	Parallel Sessions 3B (Breakout rooms, 1 st Floor) <ul style="list-style-type: none"> • Session 3B-1: Auditorium • Session 3B-2: Sukhothai I • Session 3B-3: Sukhothai II • Session 3B-4: Sukhothai III • Session 3B-5: Phayao I • Session 3B-6: Phayao II
15:00 – 15:30	Afternoon Coffee Break (Foyer, 1 st Floor)
15:30 – 16:00	Closing ceremony and EASEC-19 handover <i>Venue: Lanna Ballroom 1&2, 2nd Floor</i>

PARALLEL SESSIONS SCHEDULE

Parallel Sessions 1A

Date: 13 November 2024, **Time:** 13:00-15:00

Session: 1A-1

Topic: Innovation in Materials Science and Engineering in Construction

Room: Auditorium

Chair: Assoc. Prof. Warangkana Saengsoy

No.	Paper ID	Paper Title	Presenter
1	INV2	Advancing Alkali-Activated Slag Performance through Molecularly Tailored PCE Superplasticizers	Prof. Lei Lei
2	A0023	Engineering properties of Sintered fly ash aggregates based Self-compacting concrete incorporating Supplementary cementitious materials	Mr. Pawan Kumar
3	A0024	Influence of sugarcane bagasse ash content on the strength of alkali-activated slag concrete developed with recycled coarse aggregates	Mr. Tejas S
4	A0054	A Study on Improvement of Initial Strength of Blast Furnace Slag Portland Cement Type C	Assoc. Prof. Daisuke Yamamoto
5	A0062	Study of Properties on High GGBS Concrete with Improved Low Quality Recycled Aggregate	Mr. Yota Takeiri
6	A0060	A Study of Effective Utilization of Concrete Sludge for Realization of Environment-Friendly TSC	Mr. Naito Yuya
7	A0038	Incorporating of thermal pretreated red mud to ground granulated blast furnace slag for production of high strength ambient-cured geopolymer	Mr. Jiarui Liu
8	H0004	Optimizing Aggregate Volume Fraction and Powder Integration for Enhanced Low Cement Concrete Performance	Prof. Antoni Antoni

Session: 1A-2

Topic: Advancements in Foundation and Geotechnical Engineering

Room: Sukhothai I

Chair: Prof. Sang Seom Jeong

No.	Paper ID	Paper Title	Presenter
1	A0098	Moisture-Density Relationship of Laterite Soil Stabilized with Waste Chip Tires	Mr. Yousong Lim
2	B0002	Numerical Analysis on Response of Rock-Socketed Piles under Uplift Loading in Soft Intact Rocks	Mr. R Ashwinth Raj
3	B0008	Compaction and UCS Characteristics of Recycled Concrete Aggregate and Lime Stabilized Laterite Soil	Mr. Syaifulloh Qoimuddin Ali Basyah
4	B0012	Countermeasures against the heaving by ground improvement under the invert with flat cross-section tunnel	Prof. Yasuyuki Nabeshima
5	B0016	Experimental Study on Dynamic Response and Liquefaction Characteristics of Sandy Silt Seabeds under Varied Wave Conditions	Mr. Xin Lan
6	B0017	Consideration of ground subsidence because of liquefaction based on Explainable AI	Mr. Kazuki Karimai
7	B0027	Research On Some Methods To Determine The Pre-Consolidation Pressure For Soft Clays	Mr. Nhat Truyen Phu
8	F0006	Embodied Carbon Upfront Data Calculations using an integrated BIM Power BI Approach	Assoc. Prof. Wonsiri Punurai

Session: 1A-3

Topic: Resilient structures and design for natural disasters and extreme events

Room: Sukhothai II

Chair: Prof. Masuhiro Beppu

No.	Paper ID	Paper Title	Presenter
1	C0014	Seismic performance of pile foundations reinforced with micropiles	Mr. Moshiur Rahman
2	C0015	Study of the Impact Performance of Expressway Concrete Barriers	Ms. Thilini Rajapaksha
3	C0019	Multi-Axis Cyclic and Hybrid Testing of Wind Turbine Towers under Seismic Loading	Assoc. Prof. Javad Hashemi
4	C0025	Seismic Assessment of Existing Reinforced Concrete Bridge in Indonesia by means Incremental Dynamic Analysis	Dr. Veby Citra Simanjuntak
5	C0031	Numerical simulation on impact resistant behavior of conventional rockfall protection fence	Prof. Masato Komuro
6	C0035	Numerical Analysis of Impact Behavior of RC Panels in NPP Structures under High-Speed Collision	Prof. Jae-Yeol Cho
7	C0042	Cyclic load tests on precast concrete wall with looped bars associated in vertical joint	Mr. Jetsada Sittikhankaew

Session: 1A-4

Topic: Advanced Construction Techniques, Operations, and Maintenance

Room: Sukhothai III

Chair: Prof. Jian-Guo Dai

No.	Paper ID	Paper Title	Presenter
1	D0002	Experimental study on pull-out behaviour of bonded anchor on masonry structures	Assoc. Prof. Hitoshi MORIYAMA
2	D0010	Comparison of Bed Channel Protector In Case of Reducing Length of The MDO Stilling Basin Using 3-D Print Model	Ms. Ingerawi Sekaring Bumi
3	D0015	Investigation of Out-of-plane Bending Behaviour of 3D-Printed Reinforced and Unreinforced Walls	Mr. Chamil Dhanasekara
4	D0022	Vision based structural displacement estimation method using template matching and target tracking	Mr. Jiale Hou
5	D0023	Axle-load-estimation of trucks running on urban expressway by using strains of transverse stiffeners	Prof. Eiki Yamaguchi
6	D0024	Soundness Evaluation of an Existing Steel Box Girder Bridge Using Rotational and Longitudinal Displacement Responses of Girder Ends	Mr. Phyo W. Hein
7	D0029	Mutual effects of adjacent bridges in bridge deflection estimation using track geometries	Mr. Koji Hattori

Session: 1A-5

Topic: Advancements in Structural Analysis and Design

Room: Phayao I

Chair: Asst. Prof. Ryo Sakura

No.	Paper ID	Paper Title	Presenter
1	E0022	Modeling techniques of end sway bracings for simplifying FE models of full scale bridges	Mr. Takuto Hirakawa
2	E0048	Multi-Restart CMA-ES with NNs and SNT for Finite Element Model Updating: A Case of a Short-Span Prestressed Concrete Girder Bridge	Mr. Koravith Tiprak
3	D0039	Development of a System-level Digital Twin for Precise Behavior Update of PSC Girder Bridge	Mr. Ki Yeol Kim
4	E0060	Load carrying performance evaluation of a short-span concrete deck slab bridge	Mr. Yoshifumi Ito
5	E0061	Precise Modelling and analysis of Ultra-high Hybrid Cable-Stayed Bridge Pylon with Special-shaped Composite Section of Construction	Mr. Chang Liu
6	E0064	Transitions in Load-Bearing Behaviors and Stress Distributions due to Damages to Modular Bridges	Mr. Kazuki Hara
7	E0065	Discrete Transition in Load-Bearing Capacity with Under the Preset Live Loads of Modular Bridge	Assoc. Prof. Takafumi Nishikawa
8	E0026	Design and Optimisation of Timber-Cardboard Sandwich Panels for Temporary Housing Applications	Mr. Mahmoud Abu-Saleem

Session: 1A-6

Topic: Symposia - Seismic Resilient Structures & Structural Vibration Control of Engineering Structures against Multiple Dynamic Hazards

Room: Phayao II

Chair: Prof. Bin Wang

No.	Paper ID	Paper Title	Presenter
1	K0001	Self-centering steel column base enabled by shape memory alloy bolts	Prof. Bin Wang
2	C0013	Development of a novel multi-stage yielding energy dissipation brace for seismic mitigation	Dr. Yu Xie
3	M0002	Using KDamper for seismic performance improvement of wind turbines	Dr. Haoran Zuo
4	M0008	Vibration Control of Offshore Wind Turbines with Self-powered Semi-active Tuned Mass Damper	Dr. Qinlin CAI
5	D0027	A study on the replacement evaluation method of prestressed concrete utility poles based on dynamic vibration characteristics	Mr. Ueno Takayuki
6	A0005	Using contact residuals of three-connected vehicles for identification of bridge frequencies and damping ratios	Prof. Judy P. Yang

Session: 1A-7

Topic: Symposia - Advances in Materials and Structural Engineering / Concrete technology and composite structures

Room: Phayao III

Chair: Assoc. Prof. Shingo Asamoto

No.	Paper ID	Paper Title	Presenter
1	P0015	Case Study of Sustainable Concrete Pavements Containing Recycled Waste Materials	Prof. Rebecca Gravina
2	A0107	Effective Control of Early-Age Cracking in Concrete Structures – Some New Insights	Assoc. Prof. Vinh Dao
3	P0014	Experimental Study on Patch Repair and Retrofit of RC Beam Members Using Epoxy Mortar.	Dr. Yu-Chuan Kao
4	S0001	The synergetic effect of IS and SSCA on the pre- and post-fire behavior of ultra-heavy-weight concrete	Assoc. Prof. Johny Ho
5	A0032	Effect of Iron Removal for Quality Improvement of Low-Grade Fly Ash in its Application in Green Concrete	Assoc. Prof. Januarti Jaya Ekaputri
6	A0049	Study on Time-Dependent Deformation Characteristics of Geopolymer Concrete	Mr. Kotaro Maekawa
7	A0108	Effects of Ammonia Contamination in Very High CaO Fly Ash on Properties of Pastes and Mortars	Mr. Puthvathna Chourn
8	A0080	EVALUATING THE INTEGRITY OF DAMAGED CONCRETE STRUCTURES	Assoc. Prof. Ayman Youssef Nassif

Parallel Sessions 1B
Date: 13 November 2024, Time: 15:30-17:30

Session: 1B-1

Topic: Innovation in Materials Science and Engineering in Construction

Room: Auditorium

Chair: Assoc. Prof. Phuong Trinh Bui

No.	Paper ID	Paper Title	Presenter
1	A0046	Influence of Different Accelerators on The Early Performance of Cement in Different Curing Temperature	Mr. Cheng Xuan Yu
2	A0034	Monitoring of shrinkage in mortar and concrete using conductive thermoplastic polyurethane	Mr. Sillawat Sathorn
3	A0074	Prediction and regression analysis of concrete shrinkage in Thailand using machine learning.	Ms. Chomlucx Chonnanobbharrat
4	A0031	A Novel Capsule Composite for Improved Self-Healing in Concrete Sewage Pipes	Prof. Yan Zhuge
5	A0078	Comparison of Corrosion Rate According to Weight Loss and Cross-sectional Area loss	Prof. Kyung Suk YOO
6	A0087	Experiment and Simulation on Tensile Properties of Strain-Hardening Cementitious Composites Incorporating Superabsorbent Polymers	Dr. Yao Luan
7	E0070	Numerical Study on Effect of Variation in Thickness of Expanded Polystyrene Core in Sandwich Panel under Axial Load	Mr. Hibretu Kaske Kassa
8	A0063	Investigation of DEF expansion suppression mechanism focusing on the space in hardened cement mortars	Ms. Mikoto Hirotsugi

Session: 1B-2

Topic: Advancements in Foundation and Geotechnical Engineering

Room: Sukhothai I

Chair: Assoc. Prof. Amin Eisazadeh

No.	Paper ID	Paper Title	Presenter
1	A0055	Effect of Sub Catchment Division on the Railway System: A case study in Chiangmai, Thailand	Mr. Oleg Gorbunov
2	B0001	Design charts and finite element analysis to predict the settlement of piles embedded in soft ground.	Dr. Chollada Kanjanakul
3	B0003	Numerical analysis of stability of slopes reinforced with micropiles	Mr. Befkadu Kurtaile Otoma
4	B0015	Case Study with Finite Element Analysis of Abutment for Jacked-Frame Bridge	Mr. Fang Dong
5	B0025	Dynamic Analysis of Piled-raft-soil systems by 1g shaking table tests	Prof. Sang Seom Jeong
6	B0028	Influence of Bermuda Vegetation Roots on the Shear Strength Parameters of Laterite Soil	Mr. John Bosco Niyomukiza
7	B0029	ANALYSIS OF SEISMIC STATIONS IN NORTHERN THAILAND USING HVSR (HORIZONTAL-TO-VERTICAL SPECTRAL RATIOS)	Mr. Payam Asadinia
8	C0040	Dynamic Response and Reliability Analysis of High-Pile Wharf under Ship Impact Load	Dr. Chenyu Hou

Session: 1B-3

Topic: Resilient structures and design for natural disasters and extreme events

Room: Sukhothai II

Chair: Prof. Sutat Leelataviwat

No.	Paper ID	Paper Title	Presenter
1	C0001	Volcanic Damage Investigations Using X-Ray Fluorescence	Mr. Matthew D. Ehlers
2	C0020	Study of the Importance of Moment Ratio and Anchorage Length in Preventing Joint Shear Failure in Exterior Beam-Column Joints	Mr. Altho Sagara
3	C0023	Analysis and Design of A Hazard-Resistant Fast-Laying Interlocking Brick System	Dr. Xihong Zhang
4	C0024	Development of Homogenized Constitutive Model for Analysis of Interlocking Brick Wall	Prof. Hong Hao
5	C0032	Experimental Performance of RWS Connections with Circular Openings	Prof. Heui-Yung Chang
6	C0033	Numerical simulation on required anchoring depth of steel post for high rockfall protection fence placed on concrete retaining wall under impact loading	Prof. Norimitsu Kishi
7	C0044	Finite Element Analysis of Precast Concrete Wall Joints under Lateral Loads: A Comparison of Different Modeling Approaches	Mr. Thakrit Sirimongkhon
8	C0017	Probabilistic Seismic Evaluation of Suspended Zipper-Braced Frames	Dr. Mohammadali Mohammad Taghizadeh

Session: 1B-4

Topic: Advanced Construction Techniques, Operations, and Maintenance

Room: Sukhothai III

Chair: Assoc. Prof. Pakawat Sancharoen

No.	Paper ID	Paper Title	Presenter
1	D0003	Comparison of corrosion rate measured by LPR and actual corrosion of reinforcing steel	Mr. Natthawat Sooksomklin
2	D0005	Examination of methods for determining curing periods for some kinds of cement	Prof. Takeshi Iyoda
3	D0006	A Study for Estimating Surface Quality Using a Simple Ultrasonic Measuring Device	Ms. Yurika Noguchi
4	D0021	Flowability and slump test of geopolymer with waste glass	Dr. Jeung-Hwan Doh
5	D0025	Assessing The Effects Of Heavy Corrosion-Induced Damage In Steel Girder Ends Over Buckling And Post-Buckling Shear Strength	Mr. Yasin Mumtaz
6	D0026	Numerical Evaluation on Buildability of 3D Printing Mortar Based on Time-Dependent Material Model	Dr. Shunsei Tanaka
7	D0032	Performance surfaces bonded and embedded zinc sacrificial anode to protect corrosion of reinforcing steel	Ms. Ramida Tanvilai

Session: 1B-5

Topic: Advancements in Structural Analysis and Design

Room: Phayao I**Chair:** Assoc. Prof. Pang-jo Chun

No.	Paper ID	Paper Title	Presenter
1	E0003	The development of the design charts for optimum column design using H-shaped steel sections	Asst. Prof. Thaksakorn Pornbunyanon
2	E0023	Estimation of web plate stress in a flush endplate connection with horizontal stiffeners	Mr. Shion Kimura
3	E0053	Shear Resistance of Non-projected and Sandglass-shaped Bolt with High Strength and Durability	Mr. Masashi TAKAYAMA
4	E0033	A web-based API for parametric design of Australian steel structures	Assoc. Prof. Joseph M Gattas
5	E0035	Numerical and theoretical analyses of the shear-out strength of single-bolt lap joints	Dr. Jingsheng Zhou
6	E0036	Numerical Analysis of High-Strength Bolted Frictional Joints with Multi-Splice-Plates for Enhanced Energy Absorption Capacity	Asst. Prof. Yuma Sugimoto
7	E0040	Integrated structural optimization of monopile support structure for offshore wind turbines based on guide-weight method	Mr. Yanchen Wang
8	E0030	Automated Design Method for H-shaped Steel Columns Based on Deep Reinforcement Learning	Mr. Bochao Fu

Session: 1B-6

Topic: Symposium - Advances in Materials and Structural Engineering

Room: Phayao II

Chair: Prof. Chang-Wei Huang

No.	Paper ID	Paper Title	Presenter
1	P0001	Doppler radio wave sensor development for civil structural health monitoring	Dr. Yung-Bin LIN
2	P0002	Subspace-based Approach for Online System Identification under Seismic Events	Assoc. Prof. Shieh-Kung Huang
3	P0003	Bridge scour depth determination using deep learning	Prof. Chang-Wei Huang
4	P0005	Bidirectional analysis of bridge with varying-friction functional bearing under seismic excitation	Asst. Prof. Li-Wei Liu
5	P0007	Failure Mechanism on Formwork Supports Used in Construction of Reinforced Concrete Buildings	Prof. JUI LIN PENG
6	P0008	The study of nonreciprocal wave propagation in spatio-temporal metamaterial	Prof. I-Ling Chang
7	P0010	Structural health monitoring applications in an extradosed bridge	Dr. Hsiao-Hui Hung
8	P0009	High Performing Lightweight Flexible Honeycomb Sandwich Geomats	Assoc. Prof. Hassan Karampour

Session: 1B-7

Topic: IJSSD Symposium 2024 - Advances in Structural Stability and Dynamics

Room: Phayao III

Chair: Prof. Xiangying Guo

No.	Paper ID	Paper Title	Presenter
1	J0026	Damage identification of steel frames with semi-rigid connections using machine learning	Mr. Khanh D. Duy
2	J0027	Inverse problem for health monitoring of functionally graded plates using deep learning	Mr. Khanh D. Dang
3	J0038	Effect of the end supports on the buckling performance of oblate hemi-ellipsoidal shells	Mr. Pakavat Kerdsuk
4	J0012	Dynamic Response of Low-profile Prestressed Concrete Bridges Subjected to Moving Vehicles	Dr. Dongqi Jiang
5	J0017	Identification of Internal Forces in Prestressed Concrete Bridges using Substructural Modelling and Lagrangian Interpolation Technique	Mr. Kunaratnam Jeyamohan
6	J0036	Research on Vibration Control of Manipulator Using Particle Damper	Dr. Yunan Zhu
7	J0045	Dynamic Behaviors of Multi-layer Plate on a Varying Stiffness Foundation under Dynamic Harmonic Load and Temperature using MEM	Dr. Luong Van Hai
8	F0007	Development of an IoT sensor for drive-by bridge condition monitoring	Prof. Jun Li

Parallel Sessions 2A
Date: 14 November 2024, Time: 13:00-15:00

Session: 2A-1

Topic: Innovation in Materials Science and Engineering in Construction

Room: Auditorium

Chair: Prof. Rebecca Gravina

No.	Paper ID	Paper Title	Presenter
1	A0109	Development of Technology to Spray and Fix CO ₂ during Concrete Manufacturing	Dr. Junichi MATSUMOTO
2	A0104	Workability and Compressive Strength of Multi-binder Concrete with Calcined Clay	Ms. Wasana Piumi Kumari Rupaisnghe
3	A0037	Experimental Evaluation Methods for the Carbon Dioxide Absorption Characteristics of Cement	Prof. Atsushi Shimabukuro
4	A0056	Evaluation of compressive strength characteristics induced by mineral carbonation in cement mortar using CO ₂ microbubble mixed water	Mr. Min-Seok Nam
5	A0040	Mechanical properties of recycled aggregate concrete using C-S-H seeds and fly ash	Mr. TIANYI ZHANG
6	A0051	Bulk Density and Compressive Strength of Hardened Concrete with Pelletized Aggregate Made from Mixture of Cement-Fly Ash-CaSO ₄ .2H ₂ O	Mr. Ngoc Duy Vo
7	A0061	The embedded steel connection in geopolymer concrete subjected to coupled cyclic pull-out force and water	Mr. Hiroyuki Takashina
8	A0013	Development of Cement-Free Mortar Integrated with Aluminosilicate Materials	Mr. Rohit Rawat

Session: 2A-2

Topic: Advanced Construction Techniques, Operations, and Maintenance

Room: Sukhothai I

Chair: Asst. Prof. Yuma Sugimoto

No.	Paper ID	Paper Title	Presenter
1	D0004	Reinforcement schemes for large web openings in cold-formed steel joists	Prof. Ken Sivakumaran
2	D0028	A Calculation Method for Construction Safety Control of Welded Rebar Parts in Concrete Bridge Towers Based on Finite Element Analysis	Mr. Chunsong Gao
3	D0035	Flexural behavior of RC beams hybrid strengthened with TRUHPC using end self-locking and grooving techniques	Prof. Yi Wang
4	D0036	Cause Investigation of Damages to Cross Beam Connections of Steel Langer Bridge with Stiffening Truss	Mr. JINSEI FURUIE
5	D0037	Research on adhesive construction method of building exterior decoration materials	Assoc. Prof. Chutsen Liao
6	D0040	Shape Memory Alloy Plate Reinforced Cracked Steel Bridge - A Practical Engineering Case Study	Mr. Zhongyu Fei
7	D0042	ANALYTICAL CONSIDERATIONS ON DELAMINATION AND SHEAR DEFORMATION SHAPES IN RUBBER DAMPERS	Mr. Suguru Kodaka
8	B0026	Quantitative Study on the Damage of Pile Wharf Foundation Piles Based on BP Neural Network	Dr. Zhengxie Zhang

Session: 2A-3

Topic: Advancements in Structural Analysis and Design

Room: Sukhothai II

Chair: Assoc. Prof. Teraphan Ornthanmarath

No.	Paper ID	Paper Title	Presenter
1	E0044	A study for utilizations of full-scale FEM fatigue simulations at road bridge maintenance management	Mr. Yusei Yoshikawa
2	E0054	Evaluation of fatigue damage ratio for slotted tubular joints of overhead transmission tower with fatigue cracks	Mr. Naohiro Soda
3	E0017	Component-Level Fatigue Reliability Assessment of Novel Ring-Flange Connections in Lattice-Tubular Hybrid (LTH) Wind Turbine Towers	Dr. Yuxiao Luo
4	E0063	Dynamic response of steel and composite girders considering train/bridge dynamic interaction effects	Mr. Haruyuki KITAGAWA
5	E0007	Utilizing Nonlinear Dynamic Time history Analysis Method for Seismic Evaluation and Retrofitting of RC Buildings Structure	Mr. Pu Wen Weng
6	E0029	Seismic Performance Evaluation of Masonry Walls Subjected to In-Plane Rocking Behavior	Prof. Ho Choi
7	E0052	Assessing the Impact of Stiffness Modifiers on Seismic Performance of Typical Low-Rise and High-Rise Buildings in Nepal: A Comparative Numerical Analysis	Mr. Ashish Sapkota
8	E0057	Estimate Damaged Structural Seismic Performance Based on Damage Index	Dr. Kunyang Wang

Session: 2A-4

Topic: Smart Infrastructure Systems and Construction Management

Room: Phayao I

Chair: Prof. John Julian Smallwood

No.	Paper ID	Paper Title	Presenter
1	INV1	Infrastructure Assessment Using AIOT Technologies	Prof. Tomonori Nagayama
2	F0008	Survey of BIM Utilization in Japan through Questionnaire	Mr. Mizuki AKIYAMA
3	F0032	Building BIM-GIS model for post-vessel collision assessment and re-design of wharf structure: A case study in southern Vietnam	Mr. KHOA Dang Ly
4	F0012	Mixed Reality Visualizations for Building Construction and Operations: Concept, Applications, Benefits and Challenges	Prof. Salman Azhar
5	F0027	Integrating AI and 3D Data Platform for Advancing Infrastructure Inspection including Enhanced Damage Assessment and Modeling	Assoc. Prof. Pang-jo Chun
6	F0018	Circular economy: an overview of drivers and benefits in the context of construction industry	Mr. Trung Quang Khuc
7	F0028	A Study on Bridge Abolition Planning in Rural Areas of Japan Using Spatial Information	Mr. Kento Fukuzawa
8	F0020	The Correlation Between Wind Disaster Events and Wind Induced Damage to Structures in Indonesia	Dr. Prasanti Widyasih Sarli

Session: 2A-5

Topic: IJSSD Symposium 2024 - Advances in Structural Stability and Dynamics

Room: Phayao II**Chair:** TBC

No.	Paper ID	Paper Title	Presenter
1	D0017	Study on fatigue behaviors of steel plates in neutral salt spray environment	Dr. An Chang
2	E0020	High-efficiency bracing system design of three-ribbed arches for out-of-plane stability	Mr. Chuanhao Zhao
3	J0008	Hencky bar-chain model for buckling analysis of arches of any shape, support and loading conditions	Mr. Jinming Zhang
4	J0039	Surface Stress and Couple Stress Effects on Large Deflection Behavior of End Supported Nanorods	Mr. Sitti Prasittikulwat
5	J0028	Dynamic behavior of inelastic nonlinear space steel frames with bracing system under earthquake using advanced analysis method	Dr. Qui X. Lieu
6	J0030	Multi-objective optimization of trusses under constraints using modified firefly algorithm	Dr. Qui X. Lieu
7	J0040	Size-Dependent Effect on Natural Frequency of Hemispherical Shells Based on Modified Couple Stress Theory	Mr. Piyawat Suwankornkij

Session: 2A-6

Topic: Symposium - Structural Health Monitoring and Damage Identification
Under Changing Environment and Operational Conditions

Room: Phayao III

Chair: Prof. Dongsheng Li

No.	Paper ID	Paper Title	Presenter
1	L0003	Robust vision-based structural displacement measurement using a complementary strategy	Dr. YUFENG WENG
2	L0005	Improvement of Experimental Method Aimed at Enhancing the Accuracy of Calibration Curves in Magnetostriction Measurement	Ms. Haruna Saito
3	L0006	Basic Study on Maintenance Scenario for Aging Steel Bridges by Using Numerical Corrosion Progress Model and 3D Scanners	Ms. Aya Inoue
4	L0007	Consideration on Field Measurement and Stress Analysis for Crossbeam of Steel Bridge Piers Using the Magnetostriction Method	Ms. Yui Kubota
5	L0008	Research on Topological Signal Processing Method for Damping Identification under Ambient Vibration Measurements	Dr. Peng Guo
6	L0010	Experimental Investigation and Analytical Model on the Flexural Behavior of Corroded Reinforced Concrete Beams	Ms. Nutchanok Ueatrongchit
7	L0012	Structural Monitoring for Road Bridges: An Evaluation Method for Damping Characteristics and the Impact of Temperature	Dr. Kouichi Takeya
8	L0013	A new method for shape sensing of structural large deformations	Assoc. Prof. Tao Jiang

Parallel Sessions 2B
Date: 14 November 2024, Time: 15:30-17:30

Session: 2B-1

Topic: Innovation in Materials Science and Engineering in Construction

Room: Auditorium

Chair: Assoc. Prof. Ganchai Tanapornraweekit

No.	Paper ID	Paper Title	Presenter
1	A0112	Modeling the tensile fracture behavior of rebar-reinforced UHPC members based on 3D RBSM	Dr. Minghong Qiu
2	A0004	Utilization of One-stage Detection Algorithm to Predict UHPFRC Cracking Locations Through Fiber Distribution Analysis	Dr. Xin LUO
3	A0015	Effect of Early-Age Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) on Fatigue Behavior of Repaired RC Slab	Ms. Amatulhay Pribadi
4	A0017	Failure Mechanisms of Post-tensioned Flat Plate Structures with High-Performance Reinforced Concrete (HPC) Slab-Column Joint	Ms. Ziqi Zhao
5	A0033	Investigation on the shear-bond strength between ultra-high performance concrete (UHPC) and normal concrete with interface joint	Mr. Natthapon Suksomklin
6	A0064	Study on the Load-Bearing Characteristics of Fiber-Reinforced Concrete Members Using Low-Melting-Point Metal Fibers	Prof. Nobuhiro Chijiwa
7	A0057	Experimental study on capacitance-based internal damage monitoring of GFRP	Dr. Akihiko Sato
8	A0106	Integrating Graphene Oxide for the Design of Low-Carbon Concrete	Mr. Danula Udumulla

Session: 2B-2

Topic: Advanced Construction Techniques, Operations, and Maintenance

Room: Sukhothai I

Chair: Assoc. Prof. Takafumi Nishikawa

No.	Paper ID	Paper Title	Presenter
1	D0007	Structural Strengthening of Concrete Bridge Girders, Piers and Foundation	Dr. Riyad Aboutaha
2	D0008	Replacement of Fiji Central and Western Critical Bridges – Wainawi Bridge – 2 Stage Construction Methodology	Mr. Tiago Jose Teixeira Ribeiro
3	D0009	Replacement of Fiji Central and Western Critical Bridges – Bulu Bridge Repairs and Overlay with Latex Modified Concrete Reinforced with Fibres	Mr. Tiago Jose Teixeira Ribeiro
4	D0019	A study about the combined deterioration progress in reinforced concrete members with water-submerged three-point bending fatigue tests	Mr. Kai Matsutani
5	D0030	Improving Girder Bridge Deterioration Forecasts in Japan with Graph Transformer on Element Adjacency Graphs	Dr. Shogo Inadomi
6	D0033	Statistical deterioration modeling of national road bridges in Bhutan	Mr. Masaya Okada
7	D0038	Strengthening of Reinforced Concrete Structures Using Small-Diameter FRP Bars and Ultra-High-Strength Engineered Cementitious Composites	Prof. Jian-Guo Dal

Session: 2B-3

Topic: Advancements in Structural Analysis and Design

Room: Sukhothai II

Chair: Prof. Ken Sivakumaran

No.	Paper ID	Paper Title	Presenter
1	E0024	Mechanical behaviors of combined friction and bearing type bolted joints with adjustment plates	Mr. Shuto Yoshida
2	E0019	Confinement Reinforcement of Reinforced Concrete Tied Columns under High Axial Load	Mr. Wen-Cheng Shen
3	E0047	Determination of Bending Rigidities of Beams Using Physics-Informed Neural Networks	Ms. Reza Afrah Afifah
4	E0005	Low-carbon design of reinforced concrete structures using knowledge-enhanced graph neural networks	Prof. Xinzheng Lu
5	E0072	Preliminary Design with a Simple Boundary Condition for a Deep-Water Substructure Supporting a Floating Offshore Wind Turbine	Dr. Wichuda Munbua
6	E0062	Assessment of Grout Defect in Post-Tensioned PC Duct with Hammer Impact Test and Machine Learning	Dr. Keigo Suzuki
7	E0034	Machine Learning Models to consider the Impact of Initial Imperfections on the axial buckling strength calculation of steel CHS members	Mr. Zhengyang Hou

Session: 2B-4

Topic: Transportation Engineering

Room: Phayao I

Chair: Dr. Azam Amir

No.	Paper ID	Paper Title	Presenter
1	G0001	Investigating Geometric Design Characteristics and Crash Rates of Roundabouts in Thailand	Mr. Chaiwat Yaibok
2	G0003	Prediction of pavement condition index from visual surface condition rating using regression analysis	Dr. Azam Amir
3	G0006	Optimizing Airport Pavement Condition Index through Redefining Deduct Value Curve Model, Area, and Orientation of Sample Unit	Mr. Aris Wibowo
4	G0007	Development of Maximum Temperature Prediction Model Within Asphalt Pavement Layers for Airports in Tropical Regions	Mr. Pebri Herry
5	G0010	Assessing the Effect of Signalizing the Romulo Highway and Tibag-San Isidro Road Intersection in Tarlac City, Philippines Using LocalSim	Mr. Alvin Joseph Santos Dolores
6	G0012	Semi-Automated Pedestrian Verandas Quality Assessments	Mr. Weiche Yen
7	G0013	Understanding the Impact of Weather Conditions on Transportation Mode Choices in Taiwan	Mr. Non Phichetkunbodee
8	F0019	Transit-Oriented Development in Ho Chi Minh City: Exploring Challenges and Opportunities for Sustainable Growth	Mr. Trung Quang Khuc

Session: 2B-5

Topic: Circular and Green Construction Economy

Room: Phayao II

Chair: Prof. Salman Azhar

No.	Paper ID	Paper Title	Presenter
1	H0011	Progress of corporate social responsibility for sustainable practices in Japanese construction companies in the SDGs era	Dr. Ludmila Soares Carneiro
2	H0001	The Role of Energy Efficiency for the New Green Roofs Construction Techniques by Using Lightweight Cellular Concrete	Mr. Hanny Chandra Pratama
3	H0008	Carbon Emission Assessment of 3D Printed Hybrid Modular Concrete Building: Work Breakdown Structure	Ms. Thet Htet Ye Htun
4	H0009	Effectiveness of TiO ₂ -Anatase & Rutile Phase in Photocatalytic Reduction of Urban Air Pollution	Ms. Shweta Mishra
5	H0010	A restoration plan for damaged bridge that takes into the river environment and waste reduction	Mr. Koichi Sawajiri
6	H0013	IMPLEMENTATION OF CIRCULAR ECONOMY WITHIN THE THAI CONSTRUCTION INDUSTRY SUPPLY CHAIN	Mr. Worawat Sriudom
7	H0006	Sustainable modular timber membrane shade structures from under-utilised plantation thinnings	Assoc. Prof. Joseph M Gattas
8	H0007	Flexural performance of hybrid fibre-reinforced recycled aggregate concrete beams with steel fibre-reinforced polymer composite bars (SFCBs)	Mr. Paing Htet

Session: 2B-6

Topic: IJSSD Symposium 2024 - Advances in Structural Stability and Dynamics

Room: Phayao III

Chair: Assoc. Prof. Wenhao Pan

No.	Paper ID	Paper Title	Presenter
1	J0002	Analyses of functionally graded porous structures	Dr. Da Chen
2	J0005	Predicting Post-critical Load drop in Conical Shells through Artificial Neural Network	Mr. Rohan Majumder
3	J0006	Aerodynamic Stability Analysis of Orthotropic Tensile Membrane	Mr. Ajay Kumar
4	J0014	Effect of basalt macro fibres on the impact behaviour of geopolymer concrete beams with composite bars	Assoc. Prof. Wensu Chen
5	J0031	Dynamic fracture investigation of 2D concrete structures by a rate-dependent cohesive zone model based on finite particle method	Dr. Yufeng Kang
6	J0011	Evaluating the Residual Seismic Capacity of Damaged Low-Rise Reinforced Concrete Walls	Prof. WEN-I LIAO

Parallel Sessions 3A
Date: 15 November 2024, Time: 10:00-12:00

Session: 3A-1

Topic: Innovation in Materials Science and Engineering in Construction

Room: Auditorium

Chair: Assoc. Prof. Siti Aminah Osman

No.	Paper ID	Paper Title	Presenter
1	A0027	Rethinking Rigid Pavement Subbases: Development of Eco-Friendly Lean-Mixed Concrete	Dr. Janitha Madhavia Migunthanna
2	A0066	Construction of Madhumati Bridge - Erection Nielsen Lohse Bridge Over the Ganges River–	Mr. MASAO MINAGAWA
3	A0077	Advancing Bridge Construction: Integrating High-Performance Concrete (HPC) for Enhanced Durability and Sustainability	Dr. NGOC THI HUYNH
4	A0036	Introduction of a composite seismic wall incorporating CLT panel infill into RC moment-resisting frame	Prof. Yasushi Sanada
5	A0047	Effect of Node on Compressive and Shear Strengths of Bambusa Multiplex	Asst. Prof. Vatwong Greepala
6	A0073	An experimental study on deformation performance of precast beam-column joint with closed lap splices	Mr. Koichi Matsumoto
7	A0014	Effect of corrosion on bonding of galvanized reinforcing steel	Mr. Mengty Toeng

Session: 3A-2

Topic: Advancements in Structural Analysis and Design

Room: Sukhothai I

Chair: TBC

No.	Paper ID	Paper Title	Presenter
1	E0056	Stress sharing between the slab and main girder for lateral loads in road bridges	Mr. Yoshiharu Kanno
2	E0074	Comparison of Member Forces in Transfer Girder System based on Numerical Models	Mr. Jihun Kim
3	E0037	Mechanical Slip Behavior of the Bolted Box Girder Connection consisting of Slip Critical Flange and Web Joints	Asst. Prof. Ryo Sakura
4	E0068	Assessing the fragility of Standing Seam Metal Roofs to Installation defects	Mr. Kyungrok Kwon
5	E0073	Proposal of Natural Period Correction Factors for Unreinforced Masonry Walls in RC Moment Frame Buildings	Mr. JungWoo Lee
6	E0012	Virtual Spring Method for Real-time hybrid testing of a Seven-story Reinforced Concrete Building	Dr. ShihWei Yeh
7	E0075	Carbon Fiber Textile Reinforced Concrete Slab Elements Subjected to Flexural Loading	Assoc. Prof. Rami Eid

Session: 3A-3

Topic: Symposium - Bayesian System Identification of Civil Engineering Structures

Room: Sukhothai II

Chair: Assoc. Prof. Jia-Hua Yang

No.	Paper ID	Paper Title	Presenter
1	N0002	A time-domain Bayesian model updating method in the absence of excitation information	Dr. Zheng Yi FU
2	N0003	MCMC-based Bayesian model updating of a long-span bridge utilizing measured modal parameters	Assoc. Prof. Heung Fai Lam
3	N0004	Bayesian System Identification Using Convolutional Neural Networks Integrated with Physics	Mr. Ze-Chen Li
4	N0005	Structural damage identification of an unsymmetrical frame based on variational Bayesian model updating with an improved PSO algorithm	Prof. Qin Hu
5	N0006	Quantifying Non-uniqueness in model updating and damage detection following a Bayesian approach	Dr. Jia-Hua Yang
6	N0008	Integrating Physics-Informed and Generative Adversarial Networks for forward and inverse problems of System Identification	Mr. Chi-Xiao Yang
7	N0009	Bayesian structural identification using subset simulation	Mr. QingFeng Gui

Session: 3A-4

Topic: Contract and Legal Affairs in Construction / Professional Practices and Education

Room: Sukhothai III

Chair: Prof. Sai On Cheung

No.	Paper ID	Paper Title	Presenter
1	I0004	Structural engineering recent graduate competences- Part I: Perception of employers	Assoc. Prof. Ayman Youssef Nassif
2	Q0001	Machiavellianism and Idiosyncratic Deals in Construction Dispute Mediation	Prof. Sai On Cheung
3	Q0002	Organizational Justice in Construction Dispute Negotiation: How Different Types of Justice Shape Negotiation Settlement	Dr. Sen LIN
4	Q0003	Revealing the Role of Organizational Resilience in Relationship Quality between Government and Private Sector in PPP Projects	Assoc. Prof. Liuying ZHU
5	Q0005	The State of the South African Construction Industry	Prof. John Julian Smallwood
6	A0053	Development of a Supporting Tool to Enhance Imagination in Learning Structural Mechanics	Dr. Li Li
7	I0003	Consideration of bridge failure based on the main factors of modern suspension bridge collapses and accidents	Mr. Michio Saitoh
8	I0005	The Importance-Performance Analysis of Crisis Management Strategies of Thailand's Small Construction Business During the Covid-19 Pandemic	Dr. Somjintana Kanangkaew

Session: 3A-5

Topic: Symposium - Australian Network of Structural Health Monitoring (ANSHM)
mini-symposium: Emerging techniques for structural health monitoring of civil infrastructure

Room: Phayao I

Chair: Prof. Jun Li

No.	Paper ID	Paper Title	Presenter
1	A0039	Multi-Scale Domain Adversarial Neural Networks for Enhanced Bearing Fault Diagnosis	Dr. Zhengkun Xie
2	R0001	Structural Damage Identification based on Physics-guided Deep Learning: Numerical and Experimental Validations	Mr. Yongzhi Lei
3	R0002	Study on the effect of TMD damper on vibration control of cable-stayed cable of cross-sea bridge	Dr. Zheng Wang
4	R0003	A study of the validity of LoRa sensor nodes in footbridge vibration monitoring	Ms. Huiyue Qiao
5	R0004	Automatic pavement crack width and depth quantification using a deep learning framework with RGB-D information fusion	Dr. Yancheng Li
6	L0002	Rapid structural identification of existing buildings subject to earthquake ground motion: The case study of Chiang Mai and Chiang Rai	Prof. Pennung Warnitchai

Session: 3A-6

Topic: IJSSD Symposium 2024 - Advances in Structural Stability and Dynamics

Room: Phayao II

Chair: Assoc. Prof. Wenhao Pan

No.	Paper ID	Paper Title	Presenter
1	E0071	Cancellation of Resonance for Elastically Supported Beams Subjected to Successive Moving Loads	Prof. Yeong-Bin Yang
2	J0004	Nonlinear Vibration of a Buckled Magneto-Electro-Elastic Nano Beam including Surface Energy Effects	Dr. Manjur Alam
3	J0007	Vibration Stability Analysis of Beam String Structures based on Exact Matrix Stiffness Method	Mr. yufei guo
4	J0016	Analysis of the effects of damaged structural component's type and floor distribution on natural frequency in high-rise buildings	Mr. Huahua Qiu
5	J0029	Free vibration analysis of plates using reduced isogeometric analysis	Dr. Qui X. Lieu
6	C0004	Seismic responses of segmental-columns supported bridges subjected to crossing-fault ground motions	Dr. Kaiming Bi
7	J0044	Ride Comfort Analysis of High-speed Train Subject to Braking Torque	Mr. Abdul Hakim Masyhur

Session: 3A-7

Topic: Innovation in Materials Science and Engineering in Construction

Room: Phayao III

Chair: Prof. Nakhorn Poovarodom

No.	Paper ID	Paper Title	Presenter
1	A0070	Valorization of Abaca (<i>Musa textilis</i> Nee) Fibers By-products for Textile-Reinforced Mortar in Structural Strengthening	Mr. Earl Gerald Lansangan Gregorio
2	A0102	Design and Construction Study of New Prefabricated Bridge Piers	Mr. Zekai Shu
3	A0065	Experimental and FE Analytical Study on Flexural Load-Bearing Mechanism of Hybrid Basalt FRTP-Steel-RC Beams	Mr. Yasuo Yamasaki
4	A0084	Strengths and Impact Resistance of Functionally Graded Concrete Incorporating Recycled Concrete Aggregate and Polypropylene Fiber	Assoc. Prof. Phuong Trinh Bui
5	A0021	READINESS AND BARRIERS TOWARD IMPLEMENTING LEAN CONSTRUCTION MANAGEMENT IN URBAN ROAD PROJECTS IN ADDIS ABABA, ETHIOPIA	Mr. MEKONNEN TIBEBU CHEKOL
6	A0071	Study on steel corrosion resistance of mortar mixed by water with high NaCl salinity over 10 %	Dr. Shingo Asamoto
7	A0105	Development of Non-Cement Mortars Using Calcined Clay, Fly Ash, and Calcium Carbide Residue	Mr. Bao Van Do

Parallel Sessions 3B
Date: 15 November 2024, Time: 13:00-15:00

Session: 3B-1

Topic: Innovation in Materials Science and Engineering in Construction

Room: Auditorium

Chair: Prof. Nobuhiro Chijiwa

No.	Paper ID	Paper Title	Presenter
1	A0075	Data Delivery for Digital Twin Models of Prestressed Concrete Bridges	Prof. Changsu Shim
2	F0004	Challenges in Adopting Building Information Modelling (BIM) in Vietnam: A Decade's Perspective.	Dr. Peter Nørkjær Gade
3	F0011	Building Information Modeling Object Accuracy Analysis Based on Point Cloud Using an Unmanned Aerial Vehicle (UAV)	Mr. Bhima Dhanardono
4	A0076	Investigating Brittle Failure in Timber Connections: An Image-Based Experimental Approach	Mr. MUHAMMAD ABUL KALAM AZAD
5	A0083	KNOCKDOWN FACTOR (KDF) IN LAMINATED COMPOSITE CYLINDRICAL SHELLS WITH GEOMETRIC IMPERFECTIONS	Mr. Ayan Dutta
6	A0085	Preliminary study on a novel brace-to-gusset plate connection utilising SMA angles	Ms. Min Zhu
7	A0086	Study on the Recovery Stress Loss and Mechanical Behavior of NiTi Shape Memory Alloy Plates	Dr. Jun Deng

Session: 3B-2

Topic: Advancements in Structural Analysis and Design

Room: Sukhothai I

Chair: Assoc. Prof. Wensu Chen

No.	Paper ID	Paper Title	Presenter
1	E0041	Fundamental test on the characteristics of blast pressure acting on a box-type structure	Prof. Masuhiro Beppu
2	E0066	Consecutive drop-weight impact load testing for RC beams with externally bonded AFRP sheets	Asst. Prof. Tomoki Kawai
3	E0067	Effect of Constitutive Laws on Numerical Simulation Accuracy and Applicability to Impact-Loaded RC Beams	Mr. LUONG THAI ANH DUY
4	E0046	Enhancing Subsurface Crack Detection in Orthotropic Steel Decks: A Numerical Study of Optimized Eddy Current Techniques and Probe Configurations	Mr. Nitipong PRAPHAPHANKUL
5	F0003	An Enhanced Digital Twin Solution with Crack Type Classification in CHS X-Joints under Brace Axial Loading	Mr. Evan Wei Wen Cheok
6	E0045	Image-Based SBFE-BESO Approach for Solving In-Plane Multi-Material Topology Optimization	Dr. Rut Su

Session: 3B-3

Topic: Advancements in Structural Analysis and Design

Room: Sukhothai II

Chair: TBC

No.	Paper ID	Paper Title	Presenter
1	E0059	Analytical study on stress reduction in single patch plate bonded joints under bending force by patch plate end design optimization	Asst. Prof. Visal Thay
2	E0008	The Investigation of Complex Geometric Orthotropic Material Structures Based on A Novel Analytical Method	Assoc. Prof. Yi-Chuang Wu
3	E0076	Effects of printing interval time on the structural performance of 3D-printed beams under four-point bending loads	Ms. Sirakan Seepim
4	F0025	Deep Learning-Based Image Analysis for Attribute Assignment in Bridge 3D Modeling	Asst. Prof. Tatsuro Yamane
5	E0025	Revolutionizing Freeform Concrete Shells with Geodesic Grids and Fabric Formwork	Mr. Chonlanut Boonmadam

Session: 3B-4

Topic: Symposium - Artificial Intelligence in Structural Health Monitoring

Room: Sukhothai III**Chair:** Assoc. Prof. Jun Hu

No.	Paper ID	Paper Title	Presenter
1	O0008	Real-time Traffic Load Monitoring Framework Based on Deep Learning Model and Statistical Regularities of Vehicle Shape Prior Information	Mr. Boqiang Xu
2	O0002	Comparative Analysis of Deep Learning Segmentation Algorithms in Concrete Damage Detection for Building Inspection Applications	Prof. Tamon Ueda
3	O0005	Hybrid Supervised Model Based on Sample Quality Assessment for Rotating Machinery Fault Diagnosis with Limited Labelled Data	Assoc. Prof. Jun Hu
4	O0006	A Novel Double-Stage Partial Adversarial Network in Cross-Domain Fault Diagnostics	Prof. Kejia Zhuang
5	O0007	Using Supervised Variational Autoencoders to detect Aerodynamic Erosion in Wind Turbines	Mr. Kiran Daniel Bacsa
6	O0001	Dynamic Response Reconstruction with Neural Network-Assisted Kalman Filtering	Ms. Yiqing Wang

Session: 3B-5

Topic: Advancements in Structural Analysis and Design

Room: Phayao I**Chair:** Assoc. Prof. Rami Eid

No.	Paper ID	Paper Title	Presenter
1	E0049	Enhancing shear connectors behavior of precast concrete walls with embedded shear keys	Dr. Warakorn Tantrapongsaton
2	E0031	Propagation and attenuation characteristics of ground vibrations due to construction activities	Ms. Thilini Asanka Rajapaksha
3	E0014	Multi-state Analysis and Control for Multi-Petal Supertall Buildings under Construction	Prof. Xin Zhao
4	E0015	Comparison of Multiple Vibration Reduction Devices for super-tall buildings under wind excitation	Prof. Xin Zhao
5	E0038	Analytical study on load sharing ratio and stress distribution of structural strand rope	Mr. Kaito Terao

Session: 3B-6

Topic: Resilient structures and design for natural disasters and extreme events

Room: Phayao II

Chair: Assoc. Prof. Kaiming Bi

No.	Paper ID	Paper Title	Presenter
1	C0021	Observed amplified ground motion in Bangkok basin from recent moderate to large earthquakes	Assoc. Prof. Teraphan Ornthammarath
2	C0026	Development of multi-strut macro models for masonry infilled RC frames using machine learning techniques	Asst. Prof. Eknara Junda
3	K0005	Damage Index for Infill Walls in Reinforced Concrete Frames	Assoc. Prof. Sutat Leelataviwat
4	C0012	Redundancy-Data-Based Automated Optimization of a Supertall Structure by Viscously Damped Outriggers in a High Seismic Zone	Mr. Chornay Morn
5	C0027	The effects of friction coefficients on the performance behavior of triple friction pendulum base bearings	Assoc. Prof. Siti Aminah Osman
6	C0041	Engineering Documentation of Cultural Heritage Sites in Ayutthaya Historical Park, Thailand	Prof. Nakhorn Poovarodom
7	E0018	Study on Hybrid Testing Technologies of Nonlinear Reinforced Concrete Structure and Verification with Shaking Table Tests	Prof. Fu-Pei Hsiao

Papers and sessions index

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
A0004	Utilization of One-stage Detection Algorithm to Predict UHPFRC Cracking Locations Through Fiber Distribution Analysis	Dr. Xin LUO	Xin LUO and Takashi MATSUMOTO	2B-1	Auditorium	14 November 2024	15:30-17:30
A0005	Using contact residuals of three-connected vehicles for identification of bridge frequencies and damping ratios	Prof. Judy P. Yang	Judy P. Yang and Yi He	1A-6	Phayao II	13 November 2024	13:00-15:00
A0013	Development of Cement-Free Mortar Integrated with Aluminosilicate Materials	Mr. Rohit Rawat	Rohit Rawat and Dinakar Pasla	2A-1	Auditorium	14 November 2024	13:00-15:00
A0014	Effect of corrosion on bonding of galvanized reinforcing steel	Mr. Mengty Toeng	Mengty Toeng, Pakawat Sancharoen, and Somnuk Tangtermsirikul	3A-1	Auditorium	15 November 2024	10:00-12:00
A0015	Effect of Early-Age Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) on Fatigue Behavior of Repaired RC Slab	Ms. Amatulhay Pribadi	Amatulhay PRIBADI and Takashi MATSUMOTO	2B-1	Auditorium	14 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
A0017	Failure Mechanisms of Post-tensioned Flat Plate Structures with High-Performance Reinforced Concrete (HPC) Slab-Column Joint	Ms. Ziqi Zhao	Ziqi Zhao, Hong Guan, Yi Li, Mengzhu Diao, and Ziyang Jiao	2B-1	Auditorium	14 November 2024	15:30-17:30
A0021	READINESS AND BARRIERS TOWARD IMPLEMENTING LEAN CONSTRUCTION MANAGEMENT IN URBAN ROAD PROJECTS IN ADDIS ABABA, ETHIOPIA	Mr. MEKONNEN TIBEBU CHEKOL	Mekonnen Tibebu Chekol and Michael Henry	3A-7	Phayao III	15 November 2024	10:00-12:00
A0023	Engineering properties of Sintered fly ash aggregates based Self-compacting concrete incorporating Supplementary cementitious materials	Mr. Pawan Kumar	Pawan Kumar, Dinakar Pasla, and T. Jothi Saravanan	1A-1	Auditorium	13 November 2024	13:00-15:00
A0024	Influence of sugarcane bagasse ash content on the strength of alkali-activated slag concrete developed with recycled coarse aggregates	Mr. Tejas S	S Tejas and Dinakar Pasla	1A-1	Auditorium	13 November 2024	13:00-15:00
A0027	Rethinking Rigid Pavement Subbases: Development of	Dr. Janitha Madhavia Migunthanna	Janitha Migunthanna, Pathmanathan	3A-1	Auditorium	15 November 2024	10:00-12:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	Eco-Friendly Lean-Mixed Concrete		Rajeev, and Jay Sanjayan				
A0031	A Novel Capsule Composite for Improved Self-Healing in Concrete Sewage Pipes	Prof. Yan Zhuge	Yan Zhuge, Hossein Sanaei Ataabadi, and Yue Liu	1B-1	Auditorium	13 November 2024	15:30-17:30
A0032	Effect of Iron Removal for Quality Improvement of Low-Grade Fly Ash in its Application in Green Concrete	Assoc. Prof. Januarti Jaya Ekaputri	Januarti Jaya Ekaputri, Yusak Nurrizki, Ferian Anggara, Puput Risdanareni, Ipung Fitri Purwanti, IDAA Warmadewanthi, and Min-Chih Liao	1A-7	Phayao III	13 November 2024	13:00-15:00
A0033	Investigation on the shear-bond strength between ultra-high performance concrete (UHPC) and normal concrete with interface joint	Mr. Natthapon Suksoomklin	Natthapon Suksoomklin, Ganchai Tanapornraweevit, Somnuk Tangtermsirikul, and Kritsada Sisomphon	2B-1	Auditorium	14 November 2024	15:30-17:30
A0034	Monitoring of shrinkage in mortar and concrete using conductive thermoplastic polyurethane	Mr. Sillawat Sathorn	Sillawat Sathorn, Milad Razbin, Vimonsatit Vanissorn, Mohsen Asadnia, and Shuying Wu	1B-1	Auditorium	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
A0036	Introduction of a composite seismic wall incorporating CLT panel infill into RC moment-resisting frame	Prof. Yasushi Sanada	Yasushi Sanada	3A-1	Auditorium	15 November 2024	10:00-12:00
A0037	Experimental Evaluation Methods for the Carbon Dioxide Absorption Characteristics of Cement	Prof. Atsushi Shimabukuro	Atsushi Shimabukuro	2A-1	Auditorium	14 November 2024	13:00-15:00
A0038	Incorporating of thermal pretreated red mud to ground granulated blast furnace slag for production of high strength ambient-cured geopolymer	Mr. Jiarui Liu	Jiarui Liu, Zhongyuan Ren, Tianyu Sun, Jeung-Hwan Doh, and Dominic E.L. Ong	1A-1	Auditorium	13 November 2024	13:00-15:00
A0039	Multi-Scale Domain Adversarial Neural Networks for Enhanced Bearing Fault Diagnosis	Dr. Zhengkun Xie	Jun Hu and Zhengkun Xie	3A-5	Phayao I	15 November 2024	10:00-12:00
A0040	Mechanical properties of recycled aggregate concrete using C-S-H seeds and fly ash	Mr. TIANYI ZHANG	Tianyi Zhang, Yuko Ogawa, and Kenji Kawai	2A-1	Auditorium	14 November 2024	13:00-15:00
A0046	Influence of Different Accelerators on The Early Performance of Cement in Different Curing Temperature	Mr. Cheng Xuan Yu	Cheng-Xuan Yu, Hoang-Trung-Hieu Duong, Wei-Chien Wang, Wei-Hsing	1B-1	Auditorium	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
			Huang, Jia-Chen Xue, and Jun-Yu Wu				
A0047	Effect of Node on Compressive and Shear Strengths of Bambusa Multiplex	Asst. Prof. Vatwong Greepala	Vatwong Greepala and Jessada Techamahasarnont	3A-1	Auditorium	15 November 2024	10:00-12:00
A0049	Study on Time-Dependent Deformation Characteristics of Geopolymer Concrete	Mr. Kotaro Maekawa	Kotaro Maekawa, Ryo Sakamoto, Nobuhiro Chijiwa, and Kazuhide Nakayama	1A-7	Phayao III	13 November 2024	13:00-15:00
A0051	Bulk Density and Compressive Strength of Hardened Concrete with Pelletized Aggregate Made from Mixture of Cement-Fly Ash-CaSO ₄ .2H ₂ O	Mr. Ngoc Duy Vo	Phuong Trinh Bui, Ngoc Duy Vo, Thanh Tinh Nguyen, and Ngoc Thanh Nguyen	2A-1	Auditorium	14 November 2024	13:00-15:00
A0053	Development of a Supporting Tool to Enhance Imagination in Learning Structural Mechanics	Dr. Li Li	Li Li and Ayaka Fuchigami	3A-4	Sukhothai III	15 November 2024	10:00-12:00
A0054	A Study on Improvement of Initial Strength of Blast Furnace Slag Portland Cement Type C	Assoc. Prof. Daisuke Yamamoto	Daisuke Yamamoto, Sou Yoshioka, and Keito Takahashi	1A-1	Auditorium	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
A0055	Effect of Sub Catchment Division on the Railway System: A case study in Chiangmai, Thailand	Mr. Oleg Gorbunov	Oleg Gorbunov, Chana Sinsabvarodom, Damrongsak Rinchumphu, Teewara Suwan, Pheerawat Plangoen, and Thirasak Panyaphirawat	1B-2	Sukhothai I	13 November 2024	15:30-17:30
A0056	Evaluation of compressive strength characteristics induced by mineral carbonation in cement mortar using CO2 microbubble mixed water	Mr. Min-Seok Nam	Nam Min Seok, Park Dong Cheon, and Jeung-Hwan Doh	2A-1	Auditorium	14 November 2024	13:00-15:00
A0057	Experimental study on capacitance-based internal damage monitoring of GFRP	Dr. Akihiko Sato	Akihiko Sato, Yasuo Kitane, and Kunitomo Sugiura	2B-1	Auditorium	14 November 2024	15:30-17:30
A0060	A Study of Effective Utilization of Concrete Sludge for Realization of Environment-Friendly TSC	Mr. Naito Yuya	Yuya Naito, Runa Yahiro, and Takeshi Iyoda	1A-1	Auditorium	13 November 2024	13:00-15:00
A0061	The embedded steel connection in geopolymer concrete subjected to	Mr. Hiroyuki Takashina	Hiroyuki Takashina, Miki Fujimoto, and Chikako Fujiyama	2A-1	Auditorium	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	coupled cyclic pull-out force and water						
A0062	Study of Properties on High GGBS Concrete with Improved Low Quality Recycled Aggregate	Mr. Yota Takeiri	Yota Takeiri, Nobuhiro Matsuda, and Takeshi Iyoda	1A-1	Auditorium	13 November 2024	13:00-15:00
A0063	Investigation of DEF expansion suppression mechanism focusing on the sapce in haredened cement mortars	Ms. Mikoto Hiro sugi	Mikoto Hiro sugi, Runa Yahiro, and Takeshi Iyoda	1B-1	Auditorium	13 November 2024	15:30-17:30
A0064	Study on the Load-Bearing Characteristics of Fiber-Reinforced Concrete Members Using Low-Melting-Point Metal Fibers	Prof. Nobuhiro Chijiwa	Nobuhiro Chijiwa, Takumi Yabe, Kyoka Inoue, Satoshi Noboru, Kazuhide Nakayama, Masatoshi Kondo, and Minho O	2B-1	Auditorium	14 November 2024	15:30-17:30
A0065	Experimental and FE Analytical Study on Flexural Load-Bearing Mechanism of Hybrid Basalt FRTP-Steel-RC Beams	Mr. Yasuo Yamasaki	Yasuo Yamasaki, Ryota Kurihara, Motohiro Ohno, and Tetsuya Ishida	3A-7	Phayao III	15 November 2024	10:00-12:00
A0066	Construction of Madhumati Bridge - Erection Nielsen Lohse Bridge Over the Ganges River–	Mr. MASAO MINAGAWA	Tetsuya Matsuyama, Masao Minagawa, and Hayahito Ito	3A-1	Auditorium	15 November 2024	10:00-12:00

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A0070	Valorization of Abaca (Musa textilis Nee) Fibers By-products for Textile-Reinforced Mortar in Structural Strengthening	Mr. Earl Gerald Lansangan Gregorio	Earl Gerald Gregorio, Ephraim De Gracia, Julius Leaño Jr., Andres Winston Oreta, and Jason Maximino Ongpeng	3A-7	Phayao III	15 November 2024	10:00-12:00
A0071	Study on steel corrosion resistance of mortar mixed by water with high NaCl salinity over 10 %	Dr. Shingo Asamoto	Shingo Asamoto, Shinichiro Okazaki, and Keisuke Takahashi	3A-7	Phayao III	15 November 2024	10:00-12:00
A0073	An experimental study on deformation performance of precast beam-column joint with closed lap splices	Mr. Koichi Matsumoto	Koichi Matsumoto, Hayato Ito, and Vikas Singh Kuntal	3A-1	Auditorium	15 November 2024	10:00-12:00
A0074	Prediction and regression analysis of concrete shrinkage in Thailand using machine learning.	Ms. Chomlucx Chonnanobbharrat	Chomlucx Chonnanobbharrat, Shingo Asamoto, Somnuk Tangtermsirikul, and Sontaya Tongaroonsri	1B-1	Auditorium	13 November 2024	15:30-17:30
A0075	Data Delivery for Digital Twin Models of Prestressed Concrete Bridges	Prof. Changsu Shim	Changsu Shim, Gitae Roh, and Seok-Goo Youn	3B-1	Auditorium	15 November 2024	13:00-15:00
A0076	Investigating Brittle Failure in Timber Connections: An Image-Based Experimental Approach	Mr. MUHAMMAD ABUL KALAM AZAD	Muhammad Abul Kalam Azad, Safat Al-Deen, and Damith Mohotti	3B-1	Auditorium	15 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
A0077	Advancing Bridge Construction: Integrating High-Performance Concrete (HPC) for Enhanced Durability and Sustainability	Dr. NGOC THI HUYNH	Quoc Dat Huynh, Ngoc-Thi Huynh, Phuong Trinh Bui, Long Thanh Tran, Thi Anh Thu Phan and Minh-Tam Pham	3A-1	Auditorium	15 November 2024	10:00-12:00
A0078	Comparison of Corrosion Rate According to Weight Loss and Cross-sectional Area loss	Prof. Kyung Suk YOO	Kyung Suk Yoo and Jee-Sang Kim	1B-1	Auditorium	13 November 2024	15:30-17:30
A0080	EVALUATING THE INTEGRITY OF DAMAGED CONCRETE STRUCTURES	Assoc. Prof. Ayman Youssef Nassif	Ayman Youssef Nassif, Long Nguyen-Minh, and Hung Dinh Nguyen	1A-7	Phayao III	13 November 2024	13:00-15:00
A0083	KNOCKDOWN FACTOR (KDF) IN LAMINATED COMPOSITE CYLINDRICAL SHELLS WITH GEOMETRIC IMPERFECTIONS	Mr. Ayan Dutta	Ayan Dutta, Rohan Majumder, and Sudib Kumar Mishra	3B-1	Auditorium	15 November 2024	13:00-15:00
A0084	Strengths and Impact Resistance of Functionally Graded Concrete Incorporating Recycled Concrete Aggregate and Polypropylene Fiber	Assoc. Prof. Phuong Trinh Bui	Phuong Trinh Bui, Cao Hoang Long Nguyen, Ngoc Duy Vo, Ngoc Thanh Nguyen, and Thanh Long Tran	3A-7	Phayao III	15 November 2024	10:00-12:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
A0085	Preliminary study on a novel brace-to-gusset plate connection utilising SMA angles	Ms. Min Zhu	Min Zhu, Michael Chi Ho Yam, Kwok-Fai Chung, Ping Zhang, and Yicen Liu	3B-1	Auditorium	15 November 2024	13:00-15:00
A0086	Study on the Recovery Stress Loss and Mechanical Behavior of NiTi Shape Memory Alloy Plates	Dr. Jun Deng	Jun Deng, Dong Guo, Miaochang Zhu, and Zhongyu Fei	3B-1	Auditorium	15 November 2024	13:00-15:00
A0087	Experiment and Simulation on Tensile Properties of Strain-Hardening Cementitious Composites Incorporating Superabsorbent Polymers	Dr. Yao Luan	Yao Luan and Kohei Yoshinaga	1B-1	Auditorium	13 November 2024	15:30-17:30
A0098	Moisture-Density Relationship of Laterite Soil Stabilized with Waste Chip Tires	Mr. Yousong Lim	Yousong Lim and Amin Eisazadeh	1A-2	Sukhothai I	13 November 2024	13:00-15:00
A0102	Design and Construction Study of New Prefabricated Bridge Piers	Mr. Zekai Shu	Zhigang Wang, Zekai Shu, and Yan Xu	3A-7	Phayao III	15 November 2024	10:00-12:00
A0104	Workability and Compressive Strength of Multi-binder Concrete with Calcined Clay	Ms. Wasana Piumi Kumari Rupaisnghe	Wasana Rupasinghe, Warangkana Saengsoy, and Somnuk Tangtermsirikul	2A-1	Auditorium	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
A0105	Development of Non-Cement Mortars Using Calcined Clay, Fly Ash, and Calcium Carbide Residue	Mr. Bao Van Do	Bao Do Van, Tanapat Kaewkrajok, Warangkana Saengsoy, and Somnuk Tangtermsirikul	3A-7	Phayao III	15 November 2024	10:00-12:00
A0106	Integrating Graphene Oxide for the Design of Low-Carbon Concrete	Mr. Danula Udumulla	Danula Udumulla, Thusitha Ginigaddara, Pasadi Devapura, Priyan Mendis, and Jinghan Lu	2B-1	Auditorium	14 November 2024	15:30-17:30
A0107	Effective Control of Early-Age Cracking in Concrete Structures – Some New Insights	Assoc. Prof. Vinh Dao	Vinh Dao	1A-7	Phayao III	13 November 2024	13:00-15:00
A0108	Effects of Ammonia Contamination in Very High CaO Fly Ash on Properties of Pastes and Mortars	Mr. Puthvathna Chourn	Puthvathna Chourn, Warangkana Saengsoy, and Somnuk Tangtermsirikul	1A-7	Phayao III	13 November 2024	13:00-15:00
A0109	Development of Technology to Spray and Fix CO ₂ during Concrete Manufacturing	Dr. Junichi MATSUMOTO	Junichi Matsumoto, Osamu Hashimoto, Jun Sakamoto, and Tsuyoshi Maruya	2A-1	Auditorium	14 November 2024	13:00-15:00
A0112	Modeling the tensile fracture behavior of rebar-	Dr. Minghong Qiu	Minghong Qiu and Kohei Nagai	2B-1	Auditorium	14 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	reinforced UHPC members based on 3D RBSM						
B0001	Design charts and finite element analysis to predict the settlement of piles embedded in soft ground.	Dr. Chollada Kanjanakul	Chollada Kanjanakul, Thaksakorn Pornbunyanon, Tanan Chub-Uppakarn, Piyapong Suwanno, and Chaiwat Yaibok	1B-2	Sukhothai I	13 November 2024	15:30-17:30
B0002	Numerical Analysis on Response of Rock-Socketed Piles under Uplift Loading in Soft Intact Rocks	Mr. R Ashwinth Raj	Ramanathan Ayothiraman, R. Ashwinth Raj, and Satyam Kumar	1A-2	Sukhothai I	13 November 2024	13:00-15:00
B0003	Numerical analysis of stability of slopes reinforced with micropiles	Mr. Befkadu Kurtaile Otoma	Befkadu Kurtaile Otoma and Ramanathan Ayothiraman	1B-2	Sukhothai I	13 November 2024	15:30-17:30
B0008	Compaction and UCS Characteristics of Recycled Concrete Aggregate and Lime Stabilized Laterite Soil	Mr. Syaifulloh Qoimuiddin Ali Basyah	Syaifulloh Qoimuiddin Ali Basyah and Amin Eisazadeh	1A-2	Sukhothai I	13 November 2024	13:00-15:00
B0012	Countermeasures against the heaving by ground improvement under the invert with flat cross-section tunnel	Prof. Yasuyuki Nabeshima	Yasuyuki Nabeshima	1A-2	Sukhothai I	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
B0015	Case Study with Finite Element Analysis of Abutment for Jacked-Frame Bridge	Mr. Fang Dong	Fang Dong, Erwin Oh, Jialin Zhou, Xiangge Wang, Yanwu Guan , and Zichen Wei	1B-2	Sukhothai I	13 November 2024	15:30-17:30
B0016	Experimental Study on Dynamic Response and Liquefaction Characteristics of Sandy Silt Seabeds under Varied Wave Conditions	Mr. Xin Lan	Xin Lan, Yonglai Zheng, and Xubing Xu	1A-2	Sukhothai I	13 November 2024	13:00-15:00
B0017	Consideration of ground subsidence because of liquefaction based on Explainable AI	Mr. Kazuki Karimai	Kazuki Karimai, Wen Liu, and Yoshihisa Maruyama	1A-2	Sukhothai I	13 November 2024	13:00-15:00
B0025	Dynamic Analysis of Piled-raft-soil systems by 1g shaking table tests	Prof. Sang Seom Jeong	Sangseom Jeong and Sumin Song	1B-2	Sukhothai I	13 November 2024	15:30-17:30
B0026	Quantitative Study on the Damage of Pile Wharf Foundation Piles Based on BP Neural Network	Dr. Zhengxie Zhang	Zhengxie Zhang, Yonglai Zheng, Tanbo Pan, Fei Xiao, Chenyu Hou, and Xin Lan	2A-2	Sukhothai I	14 November 2024	13:00-15:00
B0027	Research On Some Methods To Determine The Pre-Consolidation Pressure For Soft Clays	Mr. Nhat Truyen Phu	Nhat Truyen Phu, Thanh Phong Le, and Dai Nhat Vo	1A-2	Sukhothai I	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
B0028	Influence of Bermuda Vegetation Roots on the Shear Strength Parameters of Laterite Soil	Mr. John Bosco Niyomukiza	John Bosco Niyomukiza, Amin Eisazadeh, and Somnuk Tangtermsirikul	1B-2	Sukhothai I	13 November 2024	15:30-17:30
B0029	ANALYSIS OF SEISMIC STATIONS IN NORTHERN THAILAND USING HVSR (HORIZONTAL-TO-VERTICAL SPECTRAL RATIOS)	Mr. Payam Asadinia	Payam Asadinia and Teraphan Ornthammarath	1B-2	Sukhothai I	13 November 2024	15:30-17:30
C0001	Volcanic Damage Investigations Using X-Ray Fluorescence	Mr. Matthew D. Ehlers	Michael A. Greer and Matthew Ehlers	1B-3	Sukhothai II	13 November 2024	15:30-17:30
C0004	Seismic responses of segmental-columns supported bridges subjected to crossing-fault ground motions	Dr. Kaiming Bi	Kaiming Bi and Sumeng Song	3A-6	Phayao II	15 November 2024	10:00-12:00
C0012	Redundancy-Data-Based Automated Optimization of a Supertall Structure by Viscously Damped Outriggers in a High Seismic Zone	Mr. Chornay Morn	Chornay Morn and Xin Zhao	3B-6	Phayao II	15 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
C0013	Development of a novel multi-stage yielding energy dissipation brace for seismic mitigation	Dr. Yu Xie	Yu Xie, Bin Wang, and Theodore L. Karavasilis	1A-6	Phayao II	13 November 2024	13:00-15:00
C0014	Seismic performance of pile foundations reinforced with micropiles	Mr. Moshior Rahman	Moshior Rahman, Iwamura Soma, Chandra Shekhar Goit, and Masato Saitoh	1A-3	Sukhothai II	13 November 2024	13:00-15:00
C0015	Study of the Impact Performance of Expressway Concrete Barriers	Ms. Thilini Rajapaksha	Thilini Rajapaksha, Ganchai Tanapornraweekit, and Somnuk Tangtermsirikul	1A-3	Sukhothai II	13 November 2024	13:00-15:00
C0017	Probabilistic Seismic Evaluation of Suspended Zipper-Braced Frames	Dr. Mohammadali Mohammad Taghizadeh	Bijan Samali, Mohammad Ali Mohammad Taghizadeh, and Abbas Karamodin	1B-3	Sukhothai II	13 November 2024	15:30-17:30
C0019	Multi-Axis Cyclic and Hybrid Testing of Wind Turbine Towers under Seismic Loading	Assoc. Prof. Javad Hashemi	Chengeng Wei, Javad Hashemi, Riadh Al-Mahaidi, and Emad Gad	1A-3	Sukhothai II	13 November 2024	13:00-15:00
C0020	Study of the Importance of Moment Ratio and Anchorage Length in Preventing Joint Shear	Mr. Altho Sagara	Altho Sagara, Iswandi Imran, Erwin Lim, and Patria Kusumaningrum	1B-3	Sukhothai II	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	Failure in Exterior Beam-Column Joints						
C0021	Observed amplified ground motion in Bangkok basin from recent moderate to large earthquakes	Assoc. Prof. Teraphan Ornthammarath	Teraphan Ornthammarath, Pennung Warnitchai, and Amornthep Jirasakjamroonsri, and Nakhorn Poovarodom	3B-6	Phayao II	15 November 2024	13:00-15:00
C0023	Analysis and Design of A Hazard-Resistant Fast-Laying Interlocking Brick System	Dr. Xihong Zhang	Xihong Zhang, Tingwei Shi, Guanyu Xie, Guochao Wang, Hong Hao, and Joyis Thomas	1B-3	Sukhothai II	13 November 2024	15:30-17:30
C0024	Development of Homogenized Constitutive Model for Analysis of Interlocking Brick Wall	Prof. Hong Hao	Xihong Zhang, Tingwei Shi, Guanyu Xie, Hong Hao, and Joyis Thomas	1B-3	Sukhothai II	13 November 2024	15:30-17:30
C0025	Seismic Assessment of Existing Reinforced Concrete Bridge in Indonesia by means Incremental Dynamic Analysis	Dr. Veby Citra Simanjuntak	Veby Citra Simanjuntak and Iswandi Imran	1A-3	Sukhothai II	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
C0026	Development of multi-strut macro models for masonry infilled RC frames using machine learning techniques	Asst. Prof. Eknara Junda	Eknara Junda, Jarun Srechai, Wongs Wararuksajja, and Sutat Leelataviwat	3B-6	Phayao II	15 November 2024	13:00-15:00
C0027	The effects of friction coefficients on the performance behavior of triple friction pendulum base bearings	Assoc. Prof. Siti Aminah Osman	Tariq H. R. Bermany, S. Aminah. Osman, Mohd. Yazmil, and Mohd. Ramli	3B-6	Phayao II	15 November 2024	13:00-15:00
C0031	Numerical simulation on impact resistant behavior of conventional rockfall protection fence	Prof. Masato Komuro	Masato Komuro, Tomoki Kawai, Takuro Nakamura, and Norimitsu Kishi	1A-3	Sukhothai II	13 November 2024	13:00-15:00
C0032	Experimental Performance of RWS Connections with Circular Openings	Prof. Heui-Yung Chang	Heui-Yung Chang, Jun-You Ye, and Ker-Chun Lin	1B-3	Sukhothai II	13 November 2024	15:30-17:30
C0033	Numerical simulation on required anchoring depth of steel post for high rockfall protection fence placed on concrete retaining wall under impact loading	Prof. Norimitsu Kishi	Norimitsu Kishi, Masato Komuro, Tomoki Kawai, and Shigeki Hayashi	1B-3	Sukhothai II	13 November 2024	15:30-17:30
C0035	Numerical Analysis of Impact Behavior of RC Panels in NPP Structures under High-Speed Collision	Prof. Jae-Yeol Cho	Junhwi Ye, Hyukjun Ahn, and Jae-Yeol Cho	1A-3	Sukhothai II	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
C0040	Dynamic Response and Reliability Analysis of High-Pile Wharf under Ship Impact Load	Dr. Chenyu Hou	Chenyu Hou, Yonglai Zheng, Xubing Xu, and Tanbo Pan	1B-2	Sukhothai I	13 November 2024	15:30-17:30
C0041	Engineering Documentation of Cultural Heritage Sites in Ayutthaya Historical Park, Thailand	Prof. Nakhorn Poovarodom	Nakhorn Poovarodom, Phromphat Thansirichaisree, Naret Limsamphancharoen, Bhakapong Bhadrakom, and Amorntep Jirasakjamroonsri	3B-6	Phayao II	15 November 2024	13:00-15:00
C0042	Cyclic load tests on precast concrete wall with looped bars associated in vertical joint	Mr. Jetsada Sittikhankaew	Jetsada Sittikhankaew, Chayanon Hansapinyo, Piyapong Wongmatar, Warakorn Tantrapongsaton, Amorn Pimanmas, and Preeda Chaimahawan	1A-3	Sukhothai II	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
C0044	Finite Element Analysis of Precast Concrete Wall Joints under Lateral Loads: A Comparison of Different Modeling Approaches	Mr. Thakrit Sirimongkhon	Thakrit Sirimongkhon, Chayanon Hansapinyo, Kittikun Jitpaired, Worathep Sae-Long, and Suchart Limkatanyu	1B-3	Sukhothai II	13 November 2024	15:30-17:30
D0002	Experimental study on pull-out behaviour of bonded anchor on masonry structures	Assoc. Prof. Hitoshi MORIYAMA	H. Moriyama, M. Matsumura, D. Sasaki, and T. Yamao	1A-4	Sukhothai III	13 November 2024	13:00-15:00
D0003	Comparison of corrosion rate measured by LPR and actual corrosion of reinforcing steel	Mr. Natthawat Sooksomklin	Natthawat Sooksomklin, Pakawat Sancharoen, Pitichon Klomjit, and Somnuk Tangtermsirikul	1B-4	Sukhothai III	13 November 2024	15:30-17:30
D0004	Reinforcement schemes for large web openings in cold-formed steel joists	Prof. Ken Sivakumaran	Ken S. Sivakumaran	2A-2	Sukhothai I	14 November 2024	13:00-15:00
D0005	Examination of methods for determining curing periods for some kinds of cement	Prof. Takeshi Iyoda	Iyoda Takeshi and Yahiro Runa	1B-4	Sukhothai III	13 November 2024	15:30-17:30
D0006	A Study for Estimating Surface Quality Using a Simple Ultrasonic Measuring Device	Ms. Yurika Noguchi	Yurika Noguchi and Takeshi Iyoda	1B-4	Sukhothai III	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
D0007	Structural Strengthening of Concrete Bridge Girders, Piers and Foundation	Dr. Riyad Aboutaha	Riyad Aboutaha	2B-2	Sukhothai I	14 November 2024	15:30-17:30
D0008	Replacement of Fiji Central and Western Critical Bridges – Wainawi Bridge – 2 Stage Construction Methodology	Mr. Tiago Jose Teixeira Ribeiro	Tiago Ribeiro and Vinitesh Kumar	2B-2	Sukhothai I	14 November 2024	15:30-17:30
D0009	Replacement of Fiji Central and Western Critical Bridges – Bulu Bridge Repairs and Overlay with Latex Modified Concrete Reinforced with Fibres	Mr. Tiago Jose Teixeira Ribeiro	Tiago Ribeiro and Rolesh Chand	2B-2	Sukhothai I	14 November 2024	15:30-17:30
D0010	Comparison of Bed Channel Protector In Case of Reducing Length of The MDO Stilling Basin Using 3-D Print Model	Ms. Ingerawi Sekaring Bumi	Didit Puji Riyanto, Suhardi, Wahyu Prasetyo, Daru Jaka Sasangka, and Ingerawi Sekaring Bumi	1A-4	Sukhothai III	13 November 2024	13:00-15:00
D0015	Investigation of Out-of-plane Bending Behaviour of 3D-Printed Reinforced and Unreinforced Walls	Mr. Chamil Dhanasekara	Chamil Dhanasekara, Ganchai Tanapornraweekit, Somnuk Tangtermsirikul, Sirakan Seepim, Passarin	1A-4	Sukhothai III	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
			Jongvisuttisun, and Chalermwut Snguanyat				
D0017	Study on fatigue behaviors of steel plates in neutral salt spray environment	Dr. An Chang	An Chang and Qian-Qian Yu	2A-5	Phayao II	14 November 2024	13:00-15:00
D0019	A study about the combined deterioration progress in reinforced concrete members with water-submerged three-point bending fatigue tests	Mr. Kai Matsutani	Kai Matsutani, Yanyue Qin, Yuya Takahashi, Kazunori Miyanaga, and Hideto Kida	2B-2	Sukhothai I	14 November 2024	15:30-17:30
D0021	Flowability and slump test of geopolymer with waste glass	Dr. Jeung-Hwan Doh	Tianyu Sun, Jiarui Liu, Zhongyuan Ren, and Jeung-Hwan Doh	1B-4	Sukhothai III	13 November 2024	15:30-17:30
D0022	Vision based structural displacement estimation method using template matching and target tracking	Mr. Jiale Hou	Jiale Hou and Yi Zhang	1A-4	Sukhothai III	13 November 2024	13:00-15:00
D0023	Axle-load-estimation of trucks running on urban expressway by using strains of transverse stiffeners	Prof. Eiki Yamaguchi	Eiki Yamaguchi, Kaito Shiraishi, Fumihiko Tabata, and Shuichi Tsunematsu	1A-4	Sukhothai III	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
D0024	Soundness Evaluation of an Existing Steel Box Girder Bridge Using Rotational and Longitudinal Displacement Responses of Girder Ends	Mr. Phyoe W. Hein	Phyoe W. Hein, Kunitomo Sugiura, Yoshinao Goi, Yasuo Kitane, and Marino Kato	1A-4	Sukhothai III	13 November 2024	13:00-15:00
D0025	Assessing The Effects Of Heavy Corrosion-Induced Damage In Steel Girder Ends Over Buckling And Post-Buckling Shear Strength	Mr. Yasin Mumtaz	Yasin Mumtaz, Tetsuhiro Shimozato, Shuhei Yamashita, and Yoshiaki Tamaki	1B-4	Sukhothai III	13 November 2024	15:30-17:30
D0026	Numerical Evaluation on Buildability of 3D Printing Mortar Based on Time-Dependent Material Model	Dr. Shunsei Tanaka	Shunsei Tanaka, Kohei Yoshida, Yujin Yamamoto, and Koji Kinomura	1B-4	Sukhothai III	13 November 2024	15:30-17:30
D0027	A study on the replacement evaluation method of prestressed concrete utility poles based on dynamic vibration characteristics	Mr. Ueno - Takayuki	Takayuki Ueno, Hiroki Tamai, Kanoko Yasukawa, Hirotsugu Ikeda, and Kenta Ide	1A-6	Phayao II	13 November 2024	13:00-15:00
D0028	A Calculation Method for Construction Safety Control of Welded Rebar Parts in Concrete Bridge Towers Based on Finite Element Analysis	Mr. Chunsong Gao	Chunsong Gao, Wei Wang, and Chao Liu	2A-2	Sukhothai I	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
D0029	Mutual effects of adjacent bridges in bridge deflection estimation using track geometries	Mr. Koji Hattori	Koji Hattori, Kodai Matsuoka, and Hirofumi Tanaka	1A-4	Sukhothai III	13 November 2024	13:00-15:00
D0030	Improving Girder Bridge Deterioration Forecasts in Japan with Graph Transformer on Element Adjacency Graphs	Dr. Shogo Inadomi	Shogo Inadomi and Pang-jo Chun	2B-2	Sukhothai I	14 November 2024	15:30-17:30
D0032	Performance surfaces bonded and embedded zinc sacrificial anode to protect corrosion of reinforcing steel	Ms. Ramida - Tanvilai	Ramida Tanvilai, Nathan Kengkriengkrai, Pareploy Phokhao, Pakawat Sancharoen, and Somnuk Tangtermsirikul	1B-4	Sukhothai III	13 November 2024	15:30-17:30
D0033	Statistical deterioration modeling of national road bridges in Bhutan	Mr. Masaya Okada	Masaya Okada, Michael Henry, and Kinga Zangpo	2B-2	Sukhothai I	14 November 2024	15:30-17:30
D0035	Flexural behavior of RC beams hybrid strengthened with TRUHPC using end self-locking and grooving techniques	Prof. Yi Wang	Ridho Surahman, Yi Wang, Chaoyang Zhou, Tamon Ueda, and Kohei Nagai	2A-2	Sukhothai I	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
D0036	Cause Investigation of Damages to Cross Beam Connections of Steel Langer Bridge with Stiffening Truss	Mr. JINSEI FURUIE	Jinsei FURUIE, Takafumi NISHIKAWA, Shozo NAKAMURA, Toshihiro OKUMATSU, and Shinobu KAKEHASHI	2A-2	Sukhothai I	14 November 2024	13:00-15:00
D0037	Research on adhesive construction method of building exterior decoration materials	Assoc. Prof. Chutsen Liao	Chutsen Liao and Minju Lu	2A-2	Sukhothai I	14 November 2024	13:00-15:00
D0038	Strengthening of Reinforced Concrete Structures Using Small-Diameter FRP Bars and Ultra-High-Strength Engineered Cementitious Composites	Prof. Jian-Guo Dai	Ji-Xiang Zhu, Ke-Fan Weng, Bo-Tao Huang, and Jian-Guo Dai	2B-2	Sukhothai I	14 November 2024	15:30-17:30
D0039	Development of a System-level Digital Twin for Precise Behavior Update of PSC Girder Bridge	Mr. Ki Yeol Kim	JaeWook Park, KiYeol Kim, GiTae Roh, and Chang-Su Shim	1A-5	Phayao I	13 November 2024	13:00-15:00
D0040	Shape Memory Alloy Plate Reinforced Cracked Steel Bridge - A Practical Engineering Case Study	Mr. zhongyu Fei	Zhongyu Fei, Miaochang Zhu, Dong Guo, and Jun Deng	2A-2	Sukhothai I	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
D0042	ANALYTICAL CONSIDERATIONS ON DELAMINATION AND SHEAR DEFORMATION SHAPES IN RUBBER DAMPERS	Mr. Suguru Kodaka	Suguru Kodaka, Kazutoshi Nagata, Kunitomo Sugiura, Yuina Ota, and Zicheng Han	2A-2	Sukhothai I	14 November 2024	13:00-15:00
E0003	The development of the design charts for optimum column design using H-shaped steel sections	Asst. Prof. Thaksakorn Pornbunyanon	Thaksakorn Pornbunyanon, Chollada Kanjanakul, Piyapong Suwanno, and Chaiwat Yaibok	1B-5	Phayao I	13 November 2024	15:30-17:30
E0005	Low-carbon design of reinforced concrete structures using knowledge-enhanced graph neural networks	Prof. Xinzheng Lu	Yifan Fei, Wenjie Liao, Xinzheng Lu, and Hong Guan	2B-3	Sukhothai II	14 November 2024	15:30-17:30
E0007	Utilizing Nonlinear Dynamic Time history Analysis Method for Seismic Evaluation and Retrofitting of RC Buildings Structure	Mr. Pu Wen Weng	Pu-Wen Weng, Chia-Chen Lin, Fu-Pei Hsiao, and Chih-Hsun Huang	2A-3	Sukhothai II	14 November 2024	13:00-15:00
E0008	The Investigation of Complex Geometric Orthotropic Material Structures Based on A Novel Analytical Method	Assoc. Prof. Yi-Chuang Wu	Yi-Chuang Wu	3B-3	Sukhothai II	15 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
E0012	Virtual Spring Method for Real-time hybrid testing of a Seven-story Reinforced Concrete Building	Dr. ShihWei Yeh	ShihWei Yeh, LyanYwan Lu, FuPei Hsiao, and FanPo Chang	3A-2	Sukhothai I	15 November 2024	10:00-12:00
E0014	Multi-state Analysis and Control for Multi-Petal Supertall Buildings under Construction	Prof. Xin Zhao	Yutong Xu, Xin Zhao, Yiqing Zhao, and Kun Ding	3B-5	Phayao I	15 November 2024	13:00-15:00
E0015	Comparison of Multiple Vibration Reduction Devices for super-tall buildings under wind excitation	Prof. Xin Zhao	Du Bingjie, Zhao Xin, Liu Bingjie, and Wang Jie	3B-5	Phayao I	15 November 2024	13:00-15:00
E0017	Component-Level Fatigue Reliability Assessment of Novel Ring-Flange Connections in Lattice-Tubular Hybrid (LTH) Wind Turbine Towers	Dr. Yuxiao Luo	Dong Zhou, Yuxiao Luo, Junlin Heng, and Kaoshan Dai	2A-3	Sukhothai II	14 November 2024	13:00-15:00
E0018	Study on Hybrid Testing Technologies of Nonlinear Reinforced Concrete Structure and Verification with Shaking Table Tests	Prof. Fu-Pei Hsiao	Fu-Pei Hsiao, Lyan-Ywan Lu, Shih-Wei Yeh, Hsuan-Wen Huang, Bo-Tse Hsu and Cheng Hung	3B-6	Phayao II	15 November 2024	13:00-15:00
E0019	Confinement Reinforcement of Reinforced Concrete Tied	Mr. Wen-Cheng Shen	Wen-Cheng Shen and Shyh-Jiann Hwang	2B-3	Sukhothai II	14 November 2024	15:30-17:30

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	Columns under High Axial Load						
E0020	High-efficiency bracing system design of three-ribbed arches for out-of-plane stability	Mr. Chuanhao Zhao	Chuan-Hao Zhao, Wen-Hao Pan, Chien-Ming Wang, and Yao-Zhi Luo	2A-5	Phayao II	14 November 2024	13:00-15:00
E0022	Modeling techniques of end sway bracings for simplifying FE models of full scale bridges	Mr. Takuto Hirakawa	Takuto Hirakawa, Yuma Sugimoto, and Hiroshi Onishi	1A-5	Phayao I	13 November 2024	13:00-15:00
E0023	Estimation of web plate stress in a flush endplate connection with horizontal stiffeners	Mr. Shion Kimura	Shion Kimura and Yuma Sugimoto	1B-5	Phayao I	13 November 2024	15:30-17:30
E0024	Mechanical behaviors of combined friction and bearing type bolted joints with adjustment plates	Mr. Shuto Yoshida	Shuto Yoshida, Yuma Sugimoto, Tetsuo Akatani, Tsutomu Kitanaka, and Rina Araki	2B-3	Sukhothai II	14 November 2024	15:30-17:30
E0025	Revolutionizing Freeform Concrete Shells with Geodesic Grids and Fabric Formwork	Mr. Chonlanut Boonmadam	Felicia Wagiri, Shen-Guan Shih, Mu-Kuan Lu, Deser Christian Wijaya, Kevin Harsono, and Chonlanut Boonmadam	3B-3	Sukhothai II	15 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
E0026	Design and Optimisation of Timber-Cardboard Sandwich Panels for Temporary Housing Applications	Mr. Mahmoud Abu-Saleem	Mahmoud Abu-Saleem and Joseph M. Gattas	1A-5	Phayao I	13 November 2024	13:00-15:00
E0029	Seismic Performance Evaluation of Masonry Walls Subjected to In-Plane Rocking Behavior	Prof. Ho Choi	Ho Choi	2A-3	Sukhothai II	14 November 2024	13:00-15:00
E0030	Automated Design Method for H-shaped Steel Columns Based on Deep Reinforcement Learning	Mr. Bochao Fu	Bochao Fu, Yuqing Gao, and Wei Wang	1B-5	Phayao I	13 November 2024	15:30-17:30
E0031	Propagation and attenuation characteristics of ground vibrations due to construction activities	Ms. Thilini Asanka Rajapaksha	Thilini Rajapaksha and Sudhira De Silva	3B-5	Phayao I	15 November 2024	13:00-15:00
E0033	A web-based API for parametric design of Australian steel structures	Assoc. Prof. Joseph M Gattas	Yuyu Wang and Joseph M. Gattas	1B-5	Phayao I	13 November 2024	15:30-17:30
E0034	Machine Learning Models to consider the Impact of Initial Imperfections on the axial buckling strength calculation of steel CHS members	Mr. Zhengyang Hou	Zhengyang Hou, Shuling Hu, and Wei Wang	2B-3	Sukhothai II	14 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
E0035	Numerical and theoretical analyses of the shear-out strength of single-bolt lap joints	Dr. Jingsheng Zhou	Jingsheng Zhou, Shen Yan, Kim J.R. Rasmussen, and Gregory G. Deierlein	1B-5	Phayao I	13 November 2024	15:30-17:30
E0036	Numerical Analysis of High-Strength Bolted Frictional Joints with Multi-Splice-Plates for Enhanced Energy Absorption Capacity	Asst. Prof. Yuma Sugimoto	Yuma Sugimoto	1B-5	Phayao I	13 November 2024	15:30-17:30
E0037	Mechanical Slip Behavior of the Bolted Box Girder Connection consisting of Slip Critical Flange and Web Joints	Asst. Prof. Ryo Sakura	Ryo Sakura, Taisei Kiyama, Yoshiki Taniguchi, Miki Nishimura, and Takashi Yamaguchi	3A-2	Sukhothai I	15 November 2024	10:00-12:00
E0038	Analytical study on load sharing ratio and stress distribution of structural strand rope	Mr. Kaito Terao	Kaito Terao and Hitoshi Moriyama	3B-5	Phayao I	15 November 2024	13:00-15:00
E0040	Integrated structural optimization of monopile support structure for offshore wind turbines based on guide-weight method	Mr. Yanchen Wang	Yanchen Wang, Junling Chen, and Youquan Feng	1B-5	Phayao I	13 November 2024	15:30-17:30
E0041	Fundamental test on the characteristics of blast	Prof. Masuhiro Beppu	Chien Trinh Minh, Masuhiro Beppu,	3B-2	Sukhothai I	15 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	pressure acting on a box-type structure		Hiroyoshi Ichino, and Ryo Matsuzawa				
E0044	A study for utilizations of full-scale FEM fatigue simulations at road bridge maintenance management	Mr. Yusei Yoshikawa	Yusei Yoshikawa, Yuya Takahashi, Jie Fang, Taiju Yoneda, and Tetsuya Ishida	2A-3	Sukhothai II	14 November 2024	13:00-15:00
E0045	Image-Based SBFE-BESO Approach for Solving In-Plane Multi-Material Topology Optimization	Dr. Rut Su	Rut Su, Sawekchai Tangaramvong, and Chongmin Song	3B-2	Sukhothai I	15 November 2024	13:00-15:00
E0046	Enhancing Subsurface Crack Detection in Orthotropic Steel Decks: A Numerical Study of Optimized Eddy Current Techniques and Probe Configurations	Mr. Nitipong PRAPHAPHANKUL	Mr. Nitipong PRAPHAPHANKUL, Asst. Prof. Ayako AKUTSU, and Prof. Eiichi SASAK	3B-2	Sukhothai I	15 November 2024	13:00-15:00
E0047	Determination of Bending Rigidities of Beams Using Physics-Informed Neural Networks	Ms. Reza Afrah Afifah	Reza Afrah Afifah, Nafees Khaliq, Nghi Huu Duong, Duy Vo, and Pruettha Nanakorn	2B-3	Sukhothai II	14 November 2024	15:30-17:30
E0048	Multi-Restart CMA-ES with NNs and SNT for Finite Element Model Updating: A Case of a Short-Span	Mr. Koravith Tiprak	Koravith Tiprak, Kouichi Takeya, and Eiichi Sasaki	1A-5	Phayao I	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	Prestressed Concrete Girder Bridge						
E0049	Enhancing shear connectors behavior of precast concrete walls with embedded shear keys	Dr. Warakorn Tantrapongsaton	Piyapong Wongmatar, Warakorn Tantrapongsaton, Chayanon Hansapinyo, Teewara Suwan, and Amorn Pimanmas	3B-5	Phayao I	15 November 2024	13:00-15:00
E0052	Assessing the Impact of Stiffness Modifiers on Seismic Performance of Typical Low-Rise and High-Rise Buildings in Nepal: A Comparative Numerical Analysis	Mr. Ashish Sapkota	Ashish Sapkota, Jhabindra Poudel, Binod Sapkota, Suyog Giri, and Dr. Naveed Anwar	2A-3	Sukhothai II	14 November 2024	13:00-15:00
E0053	Shear Resistance of Non-projected and Sandglass-shaped Bolt with High Strength and Durability	Mr. Masashi TAKAYAMA	M. TAKAYAMA, H. MORIYAMA, M. YOSHIMI, G. HAYASHI, and T. YAMAGUCHI	1B-5	Phayao I	13 November 2024	15:30-17:30
E0054	Evaluation of fatigue damage ratio for slotted tubular joints of overhead transmission tower with fatigue cracks	Mr. Naohiro Soda	Naohiro Soda, Kazuo Tateishi, Takeshi Hanji, and Masaru Shimizu	2A-3	Sukhothai II	14 November 2024	13:00-15:00

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E0056	Stress sharing between the slab and main girder for lateral loads in road bridges	Mr. Yoshiharu Kanno	Yoshiharu Kanno, Nozomu Taniguchi, Takeshi Terada, Kazufumi Koguchi, and Michio Saitoh	3A-2	Sukhothai I	15 November 2024	10:00-12:00
E0057	Estimate Damaged Structural Seismic Performance Based on Damage Index	Dr. Kunyang Wang	Kunyang Wang and Yukihide Kajita	2A-3	Sukhothai II	14 November 2024	13:00-15:00
E0059	Analytical study on stress reduction in single patch plate bonded joints under bending force by patch plate end design optimization	Asst. Prof. Visal Thay	Visal Thay, Yuta Kanazawa, Shuichi Fujikura, Hitoshi Nakamura, and Hisakazu Horii	3B-3	Sukhothai II	15 November 2024	13:00-15:00
E0060	Load carrying performance evaluation of a short-span concrete deck slab bridge	Mr. Yoshifumi Ito	Yoshifumi Ito, Keigo Suzuki, Shinichi Miyazato, Yoshihiko Ueno, and Hiroki Fujita	1A-5	Phayao I	13 November 2024	13:00-15:00
E0061	Precise Modelling and analysis of Ultra-high Hybrid Cable-Stayed Bridge Pylon with Special-shaped Composite Section of Construction	Mr. Chang Liu	Chang Liu, Wei Wang, and Chao Liu	1A-5	Phayao I	13 November 2024	13:00-15:00

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E0062	Assessment of Grout Defect in Post-Tensioned PC Duct with Hammer Impact Test and Machine Learning	Dr. Keigo Suzuki	Keigo Suzuki, Naruki Nosaka, and Eiji Yoshida	2B-3	Sukhothai II	14 November 2024	15:30-17:30
E0063	Dynamic response of steel and composite girders considering train/bridge dynamic interaction effects	Mr. Haruyuki KITAGAWA	Haruyuki Kitagawa, Munemasa Tokunaga, and Manabu Ikeda	2A-3	Sukhothai II	14 November 2024	13:00-15:00
E0064	Transitions in Load-Bearing Behaviors and Stress Distributions due to Damages to Modular Bridges	Mr. Kazuki Hara	Kazuki HARA, Takafumi NISHIKAWA, Shozo NAKAMURA, and Toshihiro OKUMATSU	1A-5	Phayao I	13 November 2024	13:00-15:00
E0065	Discrete Transition in Load-Bearing Capacity with Under the Preset Live Loads of Modular Bridge	Assoc. Prof. Takafumi Nishikawa	Hidenori Shibaoka, Takafumi Nishikawa, Shozo Nakamura, and Toshihiro Okumatsu	1A-5	Phayao I	13 November 2024	13:00-15:00
E0066	Consecutive drop-weight impact load testing for RC beams with externally bonded AFRP sheets	Asst. Prof. Tomoki Kawai	Tomoki Kawai, Masato Komuro, Norimitsu Kishi, and Yasuyoshi Nagai	3B-2	Sukhothai I	15 November 2024	13:00-15:00
E0067	Effect of Constitutive Laws on Numerical Simulation Accuracy and Applicability to Impact-Loaded RC Beams	Mr. LUONG THAI ANH DUY	Luong Thai Anh Duy, Yusuke Kurihashi, Zen Takahashi, and Hiroshi Masuya	3B-2	Sukhothai I	15 November 2024	13:00-15:00

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E0068	Assessing the fragility of Standing Seam Metal Roofs to Installation defects	Mr. Kyungrok Kwon	Kyungrok Kwon, Yangrok Choi, YoungJae Bae, Seungchan Oh, and Jung-Sik Koing	3A-2	Sukhothai I	15 November 2024	10:00-12:00
E0070	Numerical Study on Effect of Variation in Thickness of Expanded Polystyrene Core in Sandwich Panel under Axial Load	Mr. Hibretu Kaske Kassa	Hibretu Kaske Kassa, Putul Haldar, and Adil Ahmad	1B-1	Auditorium	13 November 2024	15:30-17:30
E0071	Cancellation of Resonance for Elastically Supported Beams Subjected to Successive Moving Loads	Prof. Yeong-Bin Yang	Zhi-Lu Wang, Lei Chen, Y.B. Yang, Hao Xu, Wen-Yu He, and Kang Shi	3A-6	Phayao II	15 November 2024	10:00-12:00
E0072	Preliminary Design with a Simple Boundary Condition for a Deep-Water Substructure Supporting a Floating Offshore Wind Turbine	Dr. Wichuda Munbua	Wichuda Munbua and Chikako Fujiyama	2B-3	Sukhothai II	14 November 2024	15:30-17:30
E0073	Proposal of Natural Period Correction Factors for Unreinforced Masonry Walls in RC Moment Frame Buildings	Mr. JungWoo Lee	Lee, Jungwoo, Chang, Hakjong, Kim, and Junhee	3A-2	Sukhothai I	15 November 2024	10:00-12:00

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E0074	Comparison of Member Forces in Transfer Girder System based on Numerical Models	Mr. Jihun Kim	Jihun Kim, Hakjong Chang, and JunHee Kim	3A-2	Sukhothai I	15 November 2024	10:00-12:00
E0075	Carbon Fiber Textile Reinforced Concrete Slab Elements Subjected to Flexural Loading	Assoc. Prof. Rami Eid	Offri Rashti, Rami Eid, Alva Peled, and Erez Gal	3A-2	Sukhothai I	15 November 2024	10:00-12:00
E0076	Effects of printing interval time on the structural performance of 3D-printed beams under four-point bending loads	Ms. Sirakan Seepim	Sirakan Seepim, Chamil Dhanasekara, Ganchai Tanapornraweekit, Somnuk Tangtermsirikul, Passarin Jongvisuttisun, Patiphat Jiramarootapong, and Chalermwut Snguanyat	3B-3	Sukhothai II	15 November 2024	13:00-15:00
F0003	An Enhanced Digital Twin Solution with Crack Type Classification in CHS X-Joints under Brace Axial Loading	Mr. Evan Wei Wen Cheok	Evan Wei Wen Cheok and Xudong Qian	3B-2	Sukhothai I	15 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
F0004	Challenges in Adopting Building Information Modelling (BIM) in Vietnam: A Decade's Perspective.	Dr. Peter Nørkjær Gade	Peter Nørkjær Gade and Thái Hiệp Nguyễn	3B-1	Auditorium	15 November 2024	13:00-15:00
F0006	Embodied Carbon Upfront Data Calculations using an integrated BIM Power BI Approach	Assoc. Prof. Wonsiri Punurai	Nisarath Phonna, Supreya Sripattana, Wonsiri Punurai, and Thitipat Pratharnsap	1A-2	Sukhothai I	13 November 2024	13:00-15:00
F0007	Development of an IoT sensor for drive-by bridge condition monitoring	Prof. Jun Li	Jun Li, Zhen Peng, and Hong Hao	1B-7	Phayao III	13 November 2024	15:30-17:30
F0008	Survey of BIM Utilization in Japan through Questionnaire	Mr. Mizuki AKIYAMA	Mizuki Akiyama, Takashi Goso, and Shuntarou Tagawa	2A-4	Phayao I	14 November 2024	13:00-15:00
F0011	Building Information Modeling Object Accuracy Analysis Based on Point Cloud Using an Unmanned Aerial Vehicle (UAV)	Mr. Bhima Dhanardono	Bhima Dhanardono, Febri Fahmi Hakim, and Didit Puji Riyanto	3B-1	Auditorium	15 November 2024	13:00-15:00
F0012	Mixed Reality Visualizations for Building Construction and Operations: Concept, Applications, Benefits and Challenges	Prof. Salman Azhar	Rana Muhammad Irfan Anwar, Salman Azhar, and Amna Salman	2A-4	Phayao I	14 November 2024	13:00-15:00
F0018	Circular economy: an overview of drivers and	Mr. Trung Quang Khuc	Trung Quang Khuc, Viet Thanh Nguyen, and Sy Tien Do	2A-4	Phayao I	14 November 2024	13:00-15:00

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	benefits in the context of construction industry						
F0019	Transit-Oriented Development in Ho Chi Minh City: Exploring Challenges and Opportunities for Sustainable Growth	Mr. Trung Quang Khuc	Van Hong Nguyen, Tuan Anh Le, Long Le-Hoai, and Trung Quang Khuc	2B-4	Phayao I	14 November 2024	15:30-17:30
F0020	The Correlation Between Wind Disaster Events and Wind Induced Damage to Structures in Indonesia	Dr. Prasanti Widyasih Sarli	Anindya Apsari, Prasanti W. Sarli, Kidung Kinanti, and Muhammad Abdillah	2A-4	Phayao I	14 November 2024	13:00-15:00
F0025	Deep Learning-Based Image Analysis for Attribute Assignment in Bridge 3D Modeling	Asst. Prof. Tatsuro Yamane	Mai Sadamoto and Tatsuro Yamane	3B-3	Sukhothai II	15 November 2024	13:00-15:00
F0027	Integrating AI and 3D Data Platform for Advancing Infrastructure Inspection including Enhanced Damage Assessment and Modeling	Assoc. Prof. Pang-jo Chun	Pang-jo Chun, Tatsuro Yamane, Shreejan Maharjan, Shogo Inadomi, Chao Lin, Shitao Zheng, and Xianfeng Li	2A-4	Phayao I	14 November 2024	13:00-15:00
F0028	A Study on Bridge Abolition Planning in Rural Areas of Japan Using Spatial Information	Mr. Kento Fukuzawa	Kento Fukuzawa and Kohei Nagai	2A-4	Phayao I	14 November 2024	13:00-15:00

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F0032	Building BIM-GIS model for post-vessel collision assessment and re-design of wharf structure: A case study in southern Vietnam	Mr. KHOA Dang Ly	Ly Dang KHOA, Tran Phuc Minh KHOI, Tran Khanh HUNG, and Nguyen Danh THAO	2A-4	Phayao I	14 November 2024	13:00-15:00
G0001	Investigating Geometric Design Characteristics and Crash Rates of Roundabouts in Thailand	Mr. Chaiwat Yaibok	Chaiwat Yaibok, Piyapong Suwanno, Paramet Luatthep, Sittha Jaensirisak, and Atsushi Fukuda	2B-4	Phayao I	14 November 2024	15:30-17:30
G0003	Prediction of pavement condition index from visual surface condition rating using regression analysis	Dr. Azam Amir	Angela Odera, Michael Henry, and Azam Amir	2B-4	Phayao I	14 November 2024	15:30-17:30
G0006	Optimizing Airport Pavement Condition Index through Redefining Deduct Value Curve Model, Area, and Orientation of Sample Unit	Mr. Aris Wibowo	Aris Wibowo, Bambang Sugeng Subagio, Harmein Rahman, and Russ Bona Frazila	2B-4	Phayao I	14 November 2024	15:30-17:30
G0007	Development of Maximum Temperature Prediction Model Within Asphalt Pavement Layers for Airports in Tropical Regions	Mr. Pebri Herry	Pebri Herry, Bambang Sugeng Subagio, Eri Hariyadi Susanto, and Sony Sulaksono Wibowo	2B-4	Phayao I	14 November 2024	15:30-17:30

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G0010	Assessing the Effect of Signalizing the Romulo Highway and Tibag-San Isidro Road Intersection in Tarlac City, Philippines Using LocalSim	Mr. Alvin Joseph Santos Dolores	Jedidiah Rosario, Alvin Joseph Dolores, Ma. Bernadeth Lim, Marloe Sundo, and Crisaulo Reynoso	2B-4	Phayao I	14 November 2024	15:30-17:30
G0012	Semi-Automated Pedestrian Verandas Quality Assessments	Mr. Weiche Yen	Wei-Che Yen and Ying-Chieh Chan	2B-4	Phayao I	14 November 2024	15:30-17:30
G0013	Understanding the Impact of Weather Conditions on Transportation Mode Choices in Taiwan	Mr. Non Phichetkunbodee	Non Phichetkunbodee, Damrongsak Rinchumphu, Simeon N. Ingabo, and Ying-Chieh Chan	2B-4	Phayao I	14 November 2024	15:30-17:30
H0001	The Role of Energy Efficiency for the New Green Roofs Construction Techniques by Using Lightweight Cellular Concrete	Mr. Hanny Chandra Pratama	Hanny Chandra Pratama, Theerawat Sinsiri, Mongkol Jirawacharadet, and Aphai Chapirom	2B-5	Phayao II	14 November 2024	15:30-17:30
H0004	Optimizing Aggregate Volume Fraction and Powder Integration for Enhanced Low Cement Concrete Performance	Prof. Antoni Antoni	Antoni Antoni, Aaron Adiputra, Theofilus Natanael Wijaya, Albert Kuncoro, and Djwantoro Hardjito	1A-1	Auditorium	13 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
H0006	Sustainable modular timber membrane shade structures from under-utilised plantation thinnings	Assoc. Prof. Joseph M Gattas	Joseph M. Gattas, Kim Baber, and Geoffrey Stringer	2B-5	Phayao II	14 November 2024	15:30-17:30
H0007	Flexural performance of hybrid fibre-reinforced recycled aggregate concrete beams with steel fibre-reinforced polymer composite bars (SFCBs)	Mr. Paing Htet	Paing Htet, Wensu Chen, Zhijie Huang, and Hong Hao	2B-5	Phayao II	14 November 2024	15:30-17:30
H0008	Carbon Emission Assessment of 3D Printed Hybrid Modular Concrete Building: Work Breakdown Structure	Ms. Thet Htet Ye Htun	Thet Htet Ye Htun, Kriengsak Panuwatwanich, Ganchai Tanapornraweekit, Passarin Jongvisuttisun, and Chalermwut Snguanyat	2B-5	Phayao II	14 November 2024	15:30-17:30
H0009	Effectiveness of TiO ₂ -Anatase & Rutile Phase in Photocatalytic Reduction of Urban Air Pollution	Ms. Shweta Mishra	Shweta Mishra, Prathmesh Zende, Putul Haldar, and Indramani Dhada	2B-5	Phayao II	14 November 2024	15:30-17:30

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H0010	A restoration plan for damaged bridge that takes into the river environment and waste reduction	Mr. Koichi Sawajiri	Koichi Sawajiri, Masayuki Kitano, Kyoichiro Yoshii, Tomoko Fujita, Ryota Jinnai, and Wataru Kirino	2B-5	Phayao II	14 November 2024	15:30-17:30
H0011	Progress of corporate social responsibility for sustainable practices in Japanese construction companies in the SDGs era	Dr. Ludmila Soares Carneiro	Ludmila Soares Carneiro and Michael Henry	2B-5	Phayao II	14 November 2024	15:30-17:30
H0013	IMPLEMENTATION OF CIRCULAR ECONOMY WITHIN THE THAI CONSTRUCTION INDUSTRY SUPPLY CHAIN	Mr. Worawat Sriudom	Worawat Sriudom and Kriengsak Panuwatwanich	2B-5	Phayao II	14 November 2024	15:30-17:30
I0003	Consideration of bridge failure based on the main factors of modern suspension bridge collapses and accidents	Mr. Michio Saitoh	Michio Saitoh, Nozomu Taniguchi, Koichiro Shitama, and Mutsumi Miyagawa	3A-4	Sukhothai III	15 November 2024	10:00-12:00
I0004	Structural engineering recent graduate competences- Part I: Perception of employers	Assoc. Prof. Ayman Youssef Nassif	Ayman Y. Nassif and Le Thi Hong Vo	3A-4	Sukhothai III	15 November 2024	10:00-12:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
I0005	The Importance-Performance Analysis of Crisis Management Strategies of Thailand's Small Construction Business During the Covid-19 Pandemic	Dr. Somjintana Kanangkaew	Somjintana Kanangkaew, Manop Kaewmoracharoen, Warawit Eakintumas, Pongammard Kanangkaew, and Phatsaphan Charnwasununth	3A-4	Sukhothai III	15 November 2024	10:00-12:00
INV1	Infrastructure Assessment Using AIOT Technologies	Prof. Tomonori Nagayama	Tomonori Nagayama	2A-4	Phayao I	14 November 2024	13:00-15:00
INV2	Advancing Alkali-Activated Slag Performance through Molecularly Tailored PCE Superplasticizers	Prof. Lei Lei	Lei Lei	1A-1	Auditorium	13 November 2024	13:00-15:00
J0002	Analyses of functionally graded porous structures	Dr. Da Chen	Da Chen	2B-6	Phayao III	14 November 2024	15:30-17:30
J0004	Nonlinear Vibration of a Buckled Magneto-Electro-Elastic Nano Beam including Surface Energy Effects	Dr. Manjur Alam	Manjur Alam and Yutao Guo	3A-6	Phayao II	15 November 2024	10:00-12:00
J0005	Predicting Post-critical Load drop in Conical Shells through Artificial Neural Network	Mr. Rohan Majumder	Rohan Majumder and Sudib Kumar Mishra	2B-6	Phayao III	14 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
J0006	Aerodynamic Stability Analysis of Orthotropic Tensile Membrane	Mr. Ajay Kumar	Ajay Kumar and Sudib Kumar Mishra	2B-6	Phayao III	14 November 2024	15:30-17:30
J0007	Vibration Stability Analysis of Beam String Structures based on Exact Matrix Stiffness Method	Mr. yufei guo	Yu-Fei Guo, Wen-Hao Pan, and Yao-Zhi Luo	3A-6	Phayao II	15 November 2024	10:00-12:00
J0008	Hencky bar-chain model for buckling analysis of arches of any shape, support and loading conditions	Mr. Jinming Zhang	J.M. Zhang, C.M. Wang, and W.H. Pan	2A-5	Phayao II	14 November 2024	13:00-15:00
J0011	Evaluating the Residual Seismic Capacity of Damaged Low-Rise Reinforced Concrete Walls	Prof. WEN-I LIAO	Wen-I Liao, Yu-Ze Chen, and Xin-Chun Li	2B-6	Phayao III	14 November 2024	15:30-17:30
J0012	Dynamic Response of Low-profile Prestressed Concrete Bridges Subjected to Moving Vehicles	Dr. Dongqi Jiang	Dongqi Jiang, Jiaqi Yi, and Jian Dai	1B-7	Phayao III	13 November 2024	15:30-17:30
J0014	Effect of basalt macro fibres on the impact behaviour of geopolymer concrete beams with composite bars	Assoc. Prof. Wensu Chen	Zhijie Huang, Paing Min Htet, Ziheng Liu, Wensu Chen, and Hong Hao	2B-6	Phayao III	14 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
J0016	Analysis of the effects of damaged structural component's type and floor distribution on natural frequency in high-rise buildings	Mr. Huahua Qiu	Huahua Qiu, Cuikun Wang, Mingzhe Cui, Shengyuan Qiu, Caihua Chen, Shukun Duan, and Jianguo Nie	3A-6	Phayao II	15 November 2024	10:00-12:00
J0017	Identification of Internal Forces in Prestressed Concrete Bridges using Substructural Modelling and Lagrangian Interpolation Technique	Mr. Kunaratnam Jeyamohan	Kunaratnam Jeyamohan, Tommy H.T. Chan, Khac-Duy Nguyen, and David P. Thambiratnam	1B-7	Phayao III	13 November 2024	15:30-17:30
J0026	Damage identification of steel frames with semi-rigid connections using machine learning	Mr. Khanh D. Duy	Khanh D. Dang, Quan M. Lieu, Qui X. Lieu, Tuan Anh Le, and Van Hai Luong	1B-7	Phayao III	13 November 2024	15:30-17:30
J0027	Inverse problem for health monitoring of functionally graded plates using deep learning	Mr. Khanh D. Dang	Khanh D. Dang, Quan M. Lieu, Qui X. Lieu, Tuan Anh Le, and Van Hai Luong	1B-7	Phayao III	13 November 2024	15:30-17:30
J0028	Dynamic behavior of inelastic nonlinear space steel frames with bracing system under earthquake using advanced analysis method	Dr. Qui X. Lieu	Quan M. Lieu, Khanh D. Dang, Van Hai Luong, Tuan Anh Le, and Qui X. Lieu	2A-5	Phayao II	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
J0029	Free vibration analysis of plates using reduced isogeometric analysis	Dr. Qui X. Lieu	Quan M. Lieu, Khanh D. Dang, Van Hai Luong, Tuan Anh Le, and Qui X. Lieu	3A-6	Phayao II	15 November 2024	10:00-12:00
J0030	Multi-objective optimization of trusses under constraints using modified firefly algorithm	Dr. Qui X. Lieu	Quan M. Lieu, Khanh D. Dang, Van Hai Luong, Tuan Anh Le, and Qui X. Lieu	2A-5	Phayao II	14 November 2024	13:00-15:00
J0031	Dynamic fracture investigation of 2D concrete structures by a rate-dependent cohesive zone model based on finite particle method	Dr. Yufeng Kang	Yufeng Kang, Yanfeng Zheng, and Yaozhi Luo	2B-6	Phayao III	14 November 2024	15:30-17:30
J0036	Research on Vibration Control of Manipulator Using Particle Damper	Dr. Yunan Zhu	Yu-nan Zhu, Xiangying Guo, and Dongxing Cao	1B-7	Phayao III	13 November 2024	15:30-17:30
J0038	Effect of the end supports on the buckling performance of oblate hemi-ellipsoidal shells	Mr. Pakavat Kerdsuk	Pakavat Kerdsuk, Tawich Pulngern, Chanachai Tangbanjongkij, Somchai Chucheepsakul, and Weeraphan Jiammeepreecha	1B-7	Phayao III	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
J0039	Surface Stress and Couple Stress Effects on Large Deflection Behavior of End Supported Nanorods	Mr. Sitti Prasittikulwat	Sitti Prasittikulwat, Tawich Pulgern, Somchai Chucheeepsakul, and Boonchai Phungpaingam	2A-5	Phayao II	14 November 2024	13:00-15:00
J0040	Size-Dependent Effect on Natural Frequency of Hemispherical Shells Based on Modified Couple Stress Theory	Mr. Piyawat Suwankornkij	Piyawat Suwankornkij, Tawich Pulngern, Weeraphan Jiammeepreecha, Chanachai Tangbanjongkij, and Somchai Chucheeepsakul	2A-5	Phayao II	14 November 2024	13:00-15:00
J0044	Ride Comfort Analysis of High-speed Train Subject to Braking Torque	Mr. Abdul Hakim Masyhur	Abdul Hakim Masyhur, Tommy H. T. Chan, Yunendar Aryo Handoko, and Craig Cowled	3A-6	Phayao II	15 November 2024	10:00-12:00
J0045	Dynamic Behaviors of Multi-layer Plate on a Varying Stiffness Foundation under Dynamic Harmonic Load and Temperature using MEM	Dr. Luong Van Hai	Hoang Nhan Nguyen, Thai-Binh Nguyen, and Van Hai Luong	1B-7	Phayao III	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
K0001	Self-centering steel column base enabled by shape memory alloy bolts	Prof. Bin Wang	Bin Wang	1A-6	Phayao II	13 November 2024	13:00-15:00
K0005	Damage Index for Infill Walls in Reinforced Concrete Frames	Assoc. Prof. Sutat Leelataviwat	Vanatchaporn Ngamprathuengsopa, Jarun Srechai, Wongs Wararuksajja, and Sutat Leelataviwat	3B-6	Phayao II	15 November 2024	13:00-15:00
L0002	Rapid structural identification of existing buildings subject to earthquake ground motion: The case study of Chiang Mai and Chiang Rai	Prof. Pennung Warnitchai	Pennung Warnitchai, Nakhorn Poovarodom, and Teraphan Ornthammarath	3A-5	Phayao I	15 November 2024	10:00-12:00
L0003	Robust vision-based structural displacement measurement using a complementary strategy	Dr. YUFENG WENG	Yufeng Weng, Ser-Tong Quek, and Justin Ker-Wei Yeoh	2A-6	Phayao III	14 November 2024	13:00-15:00
L0005	Improvement of Experimental Method Aimed at Enhancing the Accuracy of Calibration Curves in Magnetostriction Measurement	Ms. Haruna Saito	Haruna SAITO, Tastumasa KAITA, Chisato SHIMIZU, Kana CHOGO, and Shuhei KAWAMI	2A-6	Phayao III	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
L0006	Basic Study on Maintenance Scenario for Aging Steel Bridges by Using Numerical Corrosion Progress Model and 3D Scanners	Ms. Aya Inoue	Aya INOUE, Tastumasa KAITA, Kenshin MARUHASHI, and Shuhei KAWAMI	2A-6	Phayao III	14 November 2024	13:00-15:00
L0007	Consideration on Field Measurement and Stress Analysis for Crossbeam of Steel Bridge Piers Using the Magnetostriction Method	Ms. Yui Kubota	Yui KUBOTA, Tastumasa KAITA, Haruna SAITO, Kana CHOGO, and Shuhei KAWAMI	2A-6	Phayao III	14 November 2024	13:00-15:00
L0008	Research on Topological Signal Processing Method for Damping Identification under Ambient Vibration Measurements	Dr. Peng Guo	Peng Guo and Dongsheng Li	2A-6	Phayao III	14 November 2024	13:00-15:00
L0010	Experimental Investigation and Analytical Model on the Flexural Behavior of Corroded Reinforced Concrete Beams	Ms. Nutchanok Ueatrongchit	Nutchanok Ueatrongchit, Chayanon Hansapinyo, and Vanissorn Vimonsatit	2A-6	Phayao III	14 November 2024	13:00-15:00
L0012	Structural Monitoring for Road Bridges: An Evaluation Method for Damping Characteristics and the Impact of Temperature	Dr. Kouichi Takeya	Kouichi Takeya	2A-6	Phayao III	14 November 2024	13:00-15:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
L0013	A new method for shape sensing of structural large deformations	Assoc. Prof. Tao Jiang	Tao Jiang, Dongsheng Li, and Jiezhong Huang	2A-6	Phayao III	14 November 2024	13:00-15:00
M0002	Using KDamper for seismic performance improvement of wind turbines	Dr. Haoran Zuo	Haoran Zuo, Xunyi Pan, Kaiming Bi, and Hong Hao	1A-6	Phayao II	13 November 2024	13:00-15:00
M0008	Vibration Control of Offshore Wind Turbines with Self-powered Semi-active Tuned Mass Damper	Dr. Qinlin CAI	Qinlin CAI	1A-6	Phayao II	13 November 2024	13:00-15:00
N0002	A time-domain Bayesian model updating method in the absence of excitation information	Dr. Zheng Yi FU	Zhengyi Fu and Heung Fai Lam	3A-3	Sukhothai II	15 November 2024	10:00-12:00
N0003	MCMC-based Bayesian model updating of a long-span bridge utilizing measured modal parameters	Assoc. Prof. Heung Fai Lam	Heung-fai LAM and Zhengyi FU	3A-3	Sukhothai II	15 November 2024	10:00-12:00
N0004	Bayesian System Identification Using Convolutional Neural Networks Integrated with Physics	Mr. Ze-Chen Li	Ze-Chen Li and Jia-Hua Yang	3A-3	Sukhothai II	15 November 2024	10:00-12:00
N0005	Structural damage identification of an unsymmetrical frame	Prof. Qin Hu	Qin Hu and Nanfei Zhou	3A-3	Sukhothai II	15 November 2024	10:00-12:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	based on variational Bayesian model updating with an improved PSO algorithm						
N0006	Quantifying Non-uniqueness in model updating and damage detection following a Bayesian approach	Dr. Jia-Hua Yang	Jia-Hua Yang	3A-3	Sukhothai II	15 November 2024	10:00-12:00
N0008	Integrating Physics-Informed and Generative Adversarial Networks for forward and inverse problems of System Identification	Mr. Chi-Xiao Yang	Chi-Xiao Yang and Jia-Hua Yang	3A-3	Sukhothai II	15 November 2024	10:00-12:00
N0009	Bayesian structural identification using subset simulation	Mr. QingFeng Gui	Jia-Hua Yang and Qing-Feng Gui	3A-3	Sukhothai II	15 November 2024	10:00-12:00
O0001	Dynamic Response Reconstruction with Neural Network-Assisted Kalman Filtering	Ms. Yiqing Wang	Yiqing Wang, Mingming Song, and Limin Sun	3B-4	Sukhothai III	15 November 2024	13:00-15:00
O0002	Comparative Analysis of Deep Learning Segmentation Algorithms in Concrete Damage	Prof. Tamon Ueda	Jiehui Wang and Yong Li Tamon Ueda	3B-4	Sukhothai III	15 November 2024	13:00-15:00

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	Detection for Building Inspection Applications						
O0005	Hybrid Supervised Model Based on Sample Quality Assessment for Rotating Machinery Fault Diagnosis with Limited Labelled Data	Assoc. Prof. Jun Hu	Li Zou, Kejia Zhuang, and Jun Hu	3B-4	Sukhothai III	15 November 2024	13:00-15:00
O0006	A Novel Double-Stage Partial Adversarial Network in Cross-Domain Fault Diagnostics	Prof. Kejia Zhuang	Kejia Zhuang, Xinyu Yang, and Jun Hu	3B-4	Sukhothai III	15 November 2024	13:00-15:00
O0007	Using Supervised Variational Autoencoders to detect Aerodynamic Erosion in Wind Turbines	Mr. Kiran Daniel Bacsa	Kiran Bacsa, Imad Abdallah, Wei Liu, Xudong Jian, and Eleni Chatzi	3B-4	Sukhothai III	15 November 2024	13:00-15:00
O0008	Real-time Traffic Load Monitoring Framework Based on Deep Learning Model and Statistical Regularities of Vehicle Shape Prior Information	Mr. Boqiang Xu	Boqiang Xu, Zhijun Shi, and Chao Liu	3B-4	Sukhothai III	15 November 2024	13:00-15:00
P0001	Doppler radio wave sensor development for civil structural health monitoring	Dr.Yung-Bin LIN	Yung-Bin Lin	1B-6	Phayao II	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
P0002	Subspace-based Approach for Online System Identification under Seismic Events	Assoc. Prof. Shieh-Kung Huang	Shieh-Kung Huang and Fu-Chung Chi	1B-6	Phayao II	13 November 2024	15:30-17:30
P0003	Bridge scour depth determination using deep learning	Prof. Chang-Wei Huang	Chang-Wei Huang, Shu-Wei Chang, Chang-Yi Lee, Yen-Yu Yang, and Lian-Gui He	1B-6	Phayao II	13 November 2024	15:30-17:30
P0005	Bidirectional analysis of bridge with varying-friction functional bearing under seismic excitation	Asst. Prof. Li-Wei Liu	Li-Wei Liu, Kuang-Yen Liu, Shih-Hsuan Hsu, and Cheng-Yuan Chen	1B-6	Phayao II	13 November 2024	15:30-17:30
P0007	Failure Mechanism on Formwork Supports Used in Construction of Reinforced Concrete Buildings	Prof. JUI LIN PENG	Jui-Lin Peng, Chung-Sheng Wang, Jake L.Y. Chan, and Chi-Ling Pan	1B-6	Phayao II	13 November 2024	15:30-17:30
P0008	The study of nonreciprocal wave propagation in spatio-temporal metamaterial	Prof. I-Ling Chang	I-Ling Chang and Chih-Chieh Ko	1B-6	Phayao II	13 November 2024	15:30-17:30
P0009	High Performing Lightweight Flexible Honeycomb Sandwich Geomats	Assoc. Prof. Hassan Karampour	Hassan Karampour, Sadaf Karkoodi, and Barry Kok	1B-6	Phayao II	13 November 2024	15:30-17:30

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
P0010	Structural health monitoring applications in an extradosed bridge	Dr. Hsiao-Hui Hung	Hsiao-Hui Hung, Chia-Chuan Hsu, Zheng-Kuan Lee, Chang-Wei, Huang, Wen-Hsuan Lin, and Kuang-Wu Chou	1B-6	Phayao II	13 November 2024	15:30-17:30
P0014	Experimental Study on Patch Repair and Retrofit of RC Beam Members Using Epoxy Mortar.	Dr. Yu-Chuan Kao	Yu-Chuan Kao and Chien-Kuo Chiua	1A-7	Phayao III	13 November 2024	13:00-15:00
P0015	Case Study of Sustainable Concrete Pavements Containing Recycled Waste Materials	Prof. Rebecca Gravina	Rebecca J. Gravina	1A-7	Phayao III	13 November 2024	13:00-15:00
Q0001	Machiavellianism and Idiosyncratic Deals in Construction Dispute Mediation	Prof. Sai On Cheung	Nan CAO and Sai On CHEUNG	3A-4	Sukhothai III	15 November 2024	10:00-12:00
Q0002	Organizational Justice in Construction Dispute Negotiation: How Different Types of Justice Shape Negotiation Settlement	Dr. Sen LIN	Sen Lin and Sai On Cheung	3A-4	Sukhothai III	15 November 2024	10:00-12:00
Q0003	Revealing the Role of Organizational Resilience in Relationship Quality between Government and	Assoc. Prof. Liuying ZHU	Liuying Zhu, Hao Wang, Liang Ma, and Yangyang Hu	3A-4	Sukhothai III	15 November 2024	10:00-12:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
	Private Sector in PPP Projects						
Q0005	The State of the South African Construction Industry	Prof. John Julian Smallwood	John Smallwood	3A-4	Sukhothai III	15 November 2024	10:00-12:00
R0001	Structural Damage Identification based on Physics-guided Deep Learning: Numerical and Experimental Validations	Mr. Yongzhi Lei	Yongzhi Lei, Jun Li, and Hong Hao	3A-5	Phayao I	15 November 2024	10:00-12:00
R0002	Study on the effect of TMD damper on vibration control of cable-stayed cable of cross-sea bridge	Dr. Zheng Wang	Zheng Wang, Jian Guo, Hongguang Ma, and Jiaxuan Liu	3A-5	Phayao I	15 November 2024	10:00-12:00
R0003	A study of the validity of LoRa sensor nodes in footbridge vibration monitoring	Ms. Huiyue Qiao	Huiyue Qiao, Hong Guan, and Yong Zhu	3A-5	Phayao I	15 November 2024	10:00-12:00
R0004	Automatic pavement crack width and depth quantification using a deep learning framework with RGB-D information fusion	Dr. Yancheng Li	Yancheng Li, Yingjie Wu, Shaoqi Li, and Jianchun Li	3A-5	Phayao I	15 November 2024	10:00-12:00

Paper ID	Paper Title	Presenter	Authors	Session	Room	Date	Time
S0001	The synergetic effect of IS and SSCA on the pre- and post-fire behavior of ultra-heavy-weight concrete	Assoc. Prof. Johnny Ho	Zicheng Huang, Qibin Gan, Boxi Zhang, Johnny Ching Ming Ho, and Mianheng Lai	1A-7	Phayao III	13 November 2024	13:00-15:00