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INTERNATIONAL CONFERENCE  
**CIGOS 2019**  
INNOVATION FOR SUSTAINABLE INFRASTRUCTURE

<https://cigos2019.sciencesconf.org>

# GUIDE NOTEBOOK

Hanoi, 2019

(The venue: Grand Plaza Hanoi Hotel, 117 Tran Duy Hung,  
Ha Noi, Vietnam)



## Introduction

Since 2010, with the great success of all four consecutive events, CIGOS (Congrès International de Géotechnique - Ouvrages - Structures) has firmly established its international reputation and is perceived as an important conference for promoting both academic and professional high-quality exchanges in the fields of Geotechnics, Civil Engineering Works and Structures. This, the fifth International Conference - CIGOS 2019 held in Hanoi, Vietnam, is co-organized by the Association of Vietnamese Scientists and Experts (AVSE Global) in collaboration with the University of Transport Technology (UTT) and in partnership with the Ecole Normale Supérieure de Paris-Saclay (ENS).

CIGOS 2019 places particular focus on the theme of “Innovation for Sustainable Infrastructure”, aiming to not only raise awareness of the vital importance of sustainability in infrastructure development but also highlight the essential roles of innovation and technology in helping to plan and build sustainable infrastructure. Having built on the success of CIGOS 2017, this year's conference see almost double the number of published papers, which include 8 keynote lectures, about 170 oral presentations and 40 posters. The peer-reviewed papers are published online by the international publisher Springer as a volume in the Lecture Notes in Civil Engineering series, indexed by SCOPUS.

We wish to acknowledge the wonderful support of the scientific committee and the external reviewers, who provided valuable assistance in the review process and undoubtedly made a tremendous contribution in raising the quality of the proceedings. We are thankful to the keynote speakers, authors and participants for their enthusiastic efforts and time in preparing valuable papers as well as bringing encouragement and inspiration to the conference. Our special thanks also to the organizing committee, without whom it would have been difficult to run this conference. Last but not least, we would also like to thank all sponsors for their support and generosity in making our CIGOS 2019 such a success.

Ha Minh Cuong and Dao Van Dong  
On behalf of the CIGOS Organizing Committee  
Website: <https://cigos2019.sciencesconf.org>  
Email: [cigos@a-vse.org](mailto:cigos@a-vse.org)

## Keynote speakers



**Hojjat Adeli**

Professor, Ohio State University  
& Editor-in-Chief of Computer-  
Aided Civil and Infrastructure  
Engineering, USA

Hojjat Adeli received his Ph.D. from Stanford University in 1976 at the age of 26. He is currently an Academy Professor at The Ohio State University where he held the Abba G. Lichtenstein Professorship for ten years. He has authored over 600 research and scientific publications in various fields of computer science, engineering, applied mathematics, and medicine, including 16 ground-breaking high-technology books, and holds a United States patent in the area of design optimization. He is the recipient of 55 awards and honors including an Honorary Doctorate.

In 1998 he received the Distinguished Scholar Award, The Ohio State University's highest research award "in recognition of extraordinary accomplishment in research and scholarship". In 2005, he was elected Distinguished Member, ASCE: "for wide-ranging, exceptional, and pioneering contributions to computing in civil engineering and extraordinary leadership in advancing the use of computing and information technologies in many engineering disciplines throughout the world." In 2007 he received the Peter L. and Clara M. Scott Award for Excellence in Engineering Education and Charles E. MacQuigg Outstanding Teaching Award from OSU.

In 2010, he was profiled as an Engineering Legend in the ASCE journal of Leadership and Management in Engineering. He has presented 110 Keynote/Pleary Lectures at conferences held in 44 different countries. He has held Honorary/Distinguished Professorship at six Asian and European Universities, and served as Honorary Chair or member of the organizing/scientific board of nearly 400 conferences held in 64 different countries. He is a corresponding member of the Spanish Royal Academy of Engineering, a foreign member of Lithuanian Academy of Sciences and Polish Academy of Science, and a Fellow of AAAS, IEEE, AIMBE, and American Neurological Association. He is a Clarivate Analytics Highly Cited Researcher in two categories of Computer Science and Engineering.

Keynote:

Machine Learning – An Increasingly ubiquitous Technology in the 21st Century

## Keynote speakers



**Laurence Rilett**

Professor, Director of the Nebraska  
Transportation Center and the Mid-  
America Transportation Center, USA

Dr. Laurence R. Rilett is a Distinguished Professor of Civil Engineering and his field of research is in the transportation system analysis area. He has been a principal investigator or co-principal investigator on over 30 research projects with total funding in excess of \$45 million. His research sponsors have included the U.S.D.O.T., the National Science Foundation, the Texas Department of Transportation, the Nebraska Department of Roads, the U.S. Environmental Protection Agency, the US Department of Defense Transportation Command (TRANSCOM), and the Federal Railway Administration.

Dr. Rilett's field of research is in the transportation system analysis area and his specific research may be divided into two main areas: Intelligent Transportation Systems applications and large-scale transportation system modeling. He has authored or co-authored over 70 refereed journal papers and over 80 conference papers based on his research. In 2002 he was awarded the Texas Transportation Institute TTI/Trinity Researcher Award, in 2007 he was awarded the UNL College of Engineering Research Award, and in 2015 he was awarded the National Strategic Research Institute Distinguished Scientist Award. Dr. Rilett is the Managing Editor of the ASCE Journal of Transportation Engineering and on the editorial board of the Journal of Intelligent Transportation Systems: Technology, Planning, and Operations.

Keynote:

Using Simulation to Estimate and Forecast Transportation Metrics

## Keynote speakers



**Ben Young**

Professor Vice President (Student Affairs) of The Hong Kong Polytechnic University & Co-Editor-in-Chief of the Journal of Constructional Steel Research

Professor Ben Young is currently the Vice President (Student Affairs) of The Hong Kong Polytechnic University. He was Associate Dean of the Graduate School, Associate Dean of the Faculty of Engineering at The University of Hong Kong (HKU). He received BSc, BEng and PhD degrees from The University of Sydney, Australia in 1991, 1993 and 1998, respectively.

Professor Young is the Vice-President of the Hong Kong Institute of Steel Construction. He is a committee member of the SEI/ASCE-8 Specification for the "Design of Cold-formed Stainless Steel Structural Members", American Society of Civil Engineers. His research interests include cold-formed steel structures, testing and design of steel structures, high strength steel structures, stainless steel structures, aluminium structures, structural stability, fire resistance of metal structures and engineering education. Professor Young is currently a Co-Editor-in-Chief of the Journal of Constructional Steel Research, ELSEVIER.

He has published over 500 international journal and conference papers, of which over 240 are SCI indexed journal papers. He has an h-index of 40 in Scopus. According to the ISI's essential science indicators, Professor Young has been listed for many years in the "Top 1% scholars" for highly cited papers.

Professor Young received the Michael G. Gale Medal for Distinguished Teaching Award in 2004 from The Hong Kong University of Science and Technology. He also received the Best Teacher Award in 2006, the Outstanding Young Researcher Award in 2006, the Outstanding Teaching Award in 2008, the Outstanding Research Student Supervisor Award in 2015 and the Outstanding Researcher Award in 2017 from The University of Hong Kong. Professor Young also received the Best Research Paper Award given by the Journal of Structures, ELSEVIER in 2016.

Keynote:

Austenitic and Lean Duplex Stainless Steel Bolted Connections at Elevated Temperatures



**Suzanne Lacasse**

Expert Adviser at the Norwegian Geotechnical Institute (NGI), Norway

Dr Suzanne Lacasse was born in Noranda, Québec. She did a Bachelor of Art at University of Montréal and her civil engineering studies at Ecole Polytechnique of Montréal and MIT. After 12 years on MIT's faculty, she moved to the Norwegian Geotechnical Institute (NGI).

She became Managing Director of NGI in 1991, a position she held until 2011. She gave the 37<sup>th</sup> Terzaghi Lecture in 2001, the 55<sup>th</sup> Rankine Lecture in 2015, the 8<sup>th</sup> ISSMGE Terzaghi Oration in 2013 and the 9<sup>th</sup> Coulomb Lecture in 2011. Dr Lacasse received PhD's Honoris Causa from the University of Dundee, the Norwegian University of Science and Technology and the University du Québec. She is elected member of the National Academy of Engineers in the US, Canada, Norway and France. She is member of the Royal Society of Canada, the Royal Academy of Norway and the Academy of Sciences and Letters in Norway. She is Honorary Professor at Tongji University in Shanghai and at Zhejiang University in Hangzhou.

Keynote: Innovation Reduces Risk for Sustainable Infrastructure



**Manfred Boltze**

Professor, Head of Institute for Transport Planning and Traffic Engineering, Technische Universität Darmstadt, Germany

Manfred Boltze is professor for Transport Planning and Traffic Engineering at Technische Universität Darmstadt (Germany) since 1997. He studied civil engineering and received a doctor degree for his work on traffic signal control in 1988. His research covers a broad range of traffic and transport related topics, such as planning methodology, traffic management, Intelligent Transport Systems, road traffic signals, traffic safety, and transport and health. 34 doctoral students and more than 200 Diploma and Master students graduated under his supervision. 190 publications, memberships in editorial boards and advisory boards, and many other activities indicate his comprehensive commitment to promote research and education in his discipline. Since 2004, Manfred Boltze is committed in Vietnam. From 2009 until 2014, he was Director of the Vietnamese-German Transport Research Centre at the Vietnamese-German University. In 2014, he was decorated with a medal "For Significant Contributions to the Transport Development of Vietnam" by the Vietnamese Minister of Transport, and in 2017 with a medal "For the Cause of Education" by the Vietnamese Minister of Education and Training.

Keynote:

eHighway - An Infrastructure for Sustainable Road Freight Transport



## Keynote speakers



**Jose Turmo**

Professor of Technical University of Catalonia BarcelonaTech (UPC), Spain

Jose TURMO (Spain, 1974) got his 6-year program degree in Civil Engineer (1998) from University of Cantabria (Santander, Spain) and his PhD (2003) in Construction Engineering from Technical University of Catalonia BarcelonaTech - UPC (Barcelona, Spain). At the moment, he is Professor in the School of Civil Engineering in Barcelona, BarcelonaTech (Spain), where he teaches Construction Engineering. His area of expertise is Construction and Maintenance of Concrete Bridges and Structures and Structural System Identification. Topics as different as structural behaviour of externally prestressed concrete bridges, applications of high performance concrete, shear strength of concrete structures, dynamics of cable suspended bridges, structural analysis of bridge construction, structural

maintenance or model updating has been addressed by him, as well as improvement of health and safety and environmental issues of bridge construction. He has done several research stays as a postdoc, being appointed as Visiting Faculty at the Indian Institute of Technology, Madras (2005), Fulbright Scholar at the University of California, San Diego, USA (2006) and Kwang-Hua Visiting Professor (2010) and High End Foreign Expert (2014-2016) at the Department of Bridge Engineering, Tongji University, Shanghai, China. He has authored around forty SCI papers and seventy conference papers. He is an international expert of CTI (Quality Assurance Agency for the Schools of Engineering in France). He is member of ACHE, IABSE and IABMAS. He organized the IV 2018 Barcelona EUCET Civil Engineering Education International Conference and he is organizing the 2018 IABMAS 2022 Conference.

Keynote:

Industrialized construction of medium span concrete bridges using movable false work



**Mirosław J. Skibniewski**

Professor of University of Maryland, USA Editor-in-Chief of the journal of Automation in Construction

testing, construction claims reviews, value engineering, and forensic engineering projects.

Keynote:

Ensuring success with 3D printing applications in construction



**Adam Matthews**

Head of International for the UK Government's Building Information Modelling (BIM) Task Group - Chairman of the EU BIM Task Group, UK

Adam Matthews MBA is Head of International for the UK Government's Building Information Modelling (BIM) Task Group (Digital Built Britain) and Chairman of the EU BIM Task Group. Adam leads the UK's Digital Built Britain International programme, sharing the UK's strategic approach for the national introduction of BIM, its experience and lessons learned with governments around the world. He leads the collaboration with policy officials, public asset owners and public agencies across Europe, Latin America and Asia. The international team provides

strategic insights and technical assistance to governments for the national introduction of BIM. This builds common understanding across countries in support of global infrastructure development and joint prosperity. He is Chairman of the European Union BIM Task Group, a public sector network from over 20 nations which is

co-funded by the European Commission to develop a common framework for the introduction of BIM by the European public sector. With over 25 years' experience in information technology and change management across various sectors, including infrastructure, retail and airports, he led the information exchange recommendation for the UK Government's BIM Strategy (2011) and co-authored the EU BIM Task Group Handbook (2017). Adam holds an MBA with a focus on sustainability and public policy for the construction sector from Kingston University, London.

Keynote:

Applying a national BIM model to Vietnam's National Implementation of BIM: Lessons learned from the UK-Vietnam collaboration for the industry

## Committees of CIGOS 2019

### International Scientific Committee

#### AMCS - Advanced Modeling and Characterization of Structures

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TURMO Coderque José	School of Civil Engineering of Barcelona, Spain
VO Thuc	Northumbria University, UK

#### BIM - Building Information Modelling

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Hoang Mai Han	The BIM Factory, Vietnam
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NGO Quang Tuan	Hanoi Architectural University, Vietnam
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NGUYEN The Quan	National University of Civil Engineering, Vietnam
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PARK Manwoo	Myongji University, Korea
PHAM Hong Luan	Ho Chi Minh City University of Technology, Vietnam
PREECE Christopher	Abu Dhabi University, UAE
SHIM Changsu	Chung-Ang University, Korean
SHIN Dohyoung	Inha University, Korea
SURYANTO Krishna	Institute teknologi Bandung, Indonesia
TA Ngoc Binh	Institute of Construction Economics, Vietnam
THANG Anh Long	Structemp, UK
WU Wei	California State University, USA

#### DML - Data mining & Machine learning

BUI Tien Dieu	University of South-Eastern Norway, Norway
CHOU Jui-Sheng (Rayson)	National Taiwan University of Science and Technology, Taiwan
DOU Jie	University of Tokyo, Japan
INDRA Prakash	Bhaskaracharya Institute For Space Applications and Geoinformatics, India
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MEDINA-CETINA Zenon	Texas A&M University, USA
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PHAN Quang Tuan	National University of Singapore, Singapore
POURGHASEMI Hamid Reza	Shiraz University, Iran
TANG Pingbo	Arizona State University, USA

## GEE - Geotechnics for environment and energy

BOUVARD Anne	INSA de Lyon, France
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CHOI Jung Chan	Norwegian Geotechnical Institute, Norway
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DIAS Daniel	University Grenoble Alpes, France
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KAYNIA Amir M.	Norwegian Geotechnical Institute, Norway
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LEO Chin	Western Sydney University, Australia
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PHAM Thai Binh	University of Transport Technology, Vietnam
TAHERZADEH Reza	Tractebel, INSA de Lyon, France
TANG Anh Minh	Ecole des Ponts ParisTech, France
TRAN NGUYEN Hoang Hung	Hochiminh City University of Technology, Vietnam
WONG Henry	ENTPE, France
WU Li	China University of Geosciences, China

## SCMT - Sustainable Construction Materials and Technologies

ASHRAF Mahmud	Deakin University, Australia
BEAKOU Alexis	IFMA/SIGMA Clermont, France
BENBOUDJEMA Farid	ENS Paris Saclay, France
BUI Ha	Monash University, Australia
BUI Quoc Tinh	Tokyo Institute of Technology, Japan
DOTELLI Giovanni	Politecnico Milano, Italy
FORTH John	School of Leeds, UK
GARIBALDI Luigi	Politecnico di Torino, Italy
GOLINVAL Jean-Claude	Université de Liège, France
GRANDE Daniel	University of Paris Est Creteil, France
GRILLET Anne-Cécile	Université Savoie Mont Blanc, France

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NAKARAI Kenichiro	Hiroshima University, Japan
NGUYEN Van Bac	University of Derby, UK
NGUYEN Khanh Son	Hochiminh City University of Technology, Vietnam
NGUYEN The Duong	Duy Tan University, Vietnam
POH Leong Hien	National University of Singapore, Singapore
PROUST Gwénaëlle	University of Sydney, Australia
REGNIER Gilles	Arts & Métiers ENSAM Paris, France
SERRA Roger	INSA Val de Loire, France
SI LARBI Amir	ENISE, France
TRAN Minh Tung	Ton Duc Thang University, Vietnam
VU Xuan Hong	University of Lyon 1, France
YVONNET Julien	University of Paris Est Marne-la-Vallée, France

## SSC - Smart and sustainable cities

BUTTON Cat	University of Newcastle, UK
CHAN Tak-Ming	Hong Kong Polytechnic University, Hong Kong
DERRIBLE Sybil	University of Illinois at Chicago, USA
NGUYEN Hong Quan	Vietnam National University - Ho Chi Minh city, Vietnam
HSU Mark Shu-Chien	Hong Kong Polytechnic University, Hong Kong
LE Hai Vu	Monash University, Australia
NGHIEM Duc Long	University of Technology Sydney, Australia
NGUYEN Chuong	CSIRO - Data61, Australia
NGUYEN Xuan Thinh	TU Dortmund University, Germany
QUAN LUNA Byron	DNV GL, Norway
TRINH Toan	University of California, USA

## UPTE - Urban Planning, Transport and Environment

DANG Thuc Trang	Scene Plus Co.Ltd., Vietnam
DO Thuan An	Thuy Loi University, Vietnam
HO Chinh	The University of Sydney, Australia
LECARON Jacques-Emile	Lecaron architect, France
NGUYEN Frédéric	University of Liège, France
NGUYEN Van-Thanh-Van	Mc Gill University, Canada
RILETT Laurence	Nebraska transportation center and the mid-america transportation center, USA

## Organizing Committee

Chairs	Honorary Chair
HA Minh Cuong ENS Paris-Saclay & Director of Civil and Mechanical Engineering Network, AVSE Global	ADELI Hojjat Ohio State University & Editor in Chief of Computer-Aided Civil and Infrastructure Engineering
DAO Van Dong Rector of UTT, Vietnam	

## International members

BUI NGUYEN Hoang	AVSE-Global & EDF, United Kingdom
DANG Thuc Trang	Scene Plus Co.Ltd., Vietnam
DINH Van Nguyen	ANTS & University College Cork, Ireland
DO Tuan Anh	Sorbonne University, France
HUYNH Dat Vu Khoa	Norwegian Geotechnical Institute, Norway
LE Thi Xiu	ENPC, France
LE Van Nhat	EGIS, France
NGUYEN Giang	University of Adelaide, Australia
NGUYEN Hai Nam	ENS Paris-Saclay, France
NGUYEN Quang Huy	INSA Rennes, France
NGUYEN Thuong Anh	Geodynamique et Structure, France

NGUYEN Tien Long	Tractebel, France
NGUYEN Van Minh	Tractebel, France
PHAM Cao Hung	University of Sydney, Australia
PHAM Van Hung	University of Paris-Est Marne-la-Vallée, France
TA Ngoc Binh	Institute of construction economics, Vietnam
TANG Anh Minh	AVSE-Global & ENPC, France
VU Xuan Hong	University Lyon 1, France

## Local members (UTT)

VU Ngoc Khiem	Vice-rector of UTT
NGUYEN Hoang Long	Vice-rector of UTT
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LE Nguyen Khuong	Faculty of Civil Engineering
LE Thanh Hai	Department of Science, Technology & International Cooperation
LY Hai Bang	Faculty of Civil Engineering
NGO Quoc Trinh	Head of Science & Technology
NGO Thi Thanh Huong	Head of faculty of Civil Engineering
NGUYEN Long Khanh	Department of Science, Technology & International Cooperation
NGUYEN Nam Hai	Faculty of Information Technology
NGUYEN Thi Thu Hien	Department of Science, Technology & International Cooperation
PHAM Thai Binh	Faculty of Civil Engineering
PHI Luong Van	Department of Science, Technology & International Cooperation
TRAN Trung Hieu	Department of Science, Technology & International Cooperation
HOANG Vu	Department of Science, Technology & International Cooperation
TRUONG Thi My Thanh	Department of Economy of Transportation
VU Duy Tung	Center of Technology of Communication
VU Trung Hieu	Department of Science, Technology & International Cooperation

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## Conference Schedule Details

(Thursday, October 31, 2019)

TIME	EVENT
07:30 onwards	CIGOS Registration
08:30 – 09:30	<b>Welcome ceremony</b> <b>Venue: 2<sup>nd</sup> floor</b> Music: Traditional drum performance Speeches: UTT, AVSE Global, MOT Honorary Doctorate Awarding Ceremony (and group photo)
09:30 – 10:10	<b>Plenary Session 1</b> <b>Venue: 2<sup>nd</sup> floor</b> Chairs: Rolf Katzenbach & Dong Van Dao
09:30 – 10:10	<b>Keynote 1:</b> Machine Learning – An Increasingly ubiquitous Technology in the 21st Century - <i>Hojjat Adeli</i> , Ohio State University, USA
10:10 – 10:40	Coffee break <b>Venue: 2<sup>nd</sup> floor</b>
10:40 – 12:00	<b>Plenary Session 2</b> <b>Venue: 2<sup>nd</sup> floor</b> Chairs: Laurence Rilett & Anh Minh Tang
10:40 – 11:20	<b>Keynote 2:</b> Using Simulation to Estimate and Forecast Transportation Metrics: Lessons Learned - <i>Laurence Rilett</i> , the Nebraska Transportation Center and the Mid-America Transportation Center, USA
11:20 – 12:00	<b>Keynote 3:</b> Austenitic and Lean Duplex Stainless Steel Bolted Connections at Elevated Temperatures - <i>Ben Young</i> , The Hong Kong Polytechnic University, China
12:00 – 13:30	Lunch <b>Venue: 1<sup>st</sup> floor</b>
13:45 – 15:35	<b>Parallel Session 1A</b> <b>Venue: 505 – 5<sup>th</sup> floor</b> Topic: Advanced Modeling and Characterization of Structures Chairs: Ben Young & Khuong Le Nguyen
13:45 – 13:57	> The inadequacies of the existing Structural Health Monitoring systems for cable stayed bridges in Vietnam - <i>Minh Chinh Luong</i> <sup>(*)</sup> , <sup>(*)</sup> Thuy Loi University, Vietnam
13:57 – 14:09	> Assessment of methods of riprap size selections as scour countermeasures at bridge abutments and approach embankments - <i>Quang Huy Mai</i> <sup>(*)</sup> , Thi Noi Doan, <sup>(*)</sup> The University of Transport and Communications, Vietnam
14:09 – 14:21	> Numerical investigation of derailment loading on composite fibre transoms for implementation in the Sydney Harbour Bridge - <i>Olivia Mirza</i> <sup>(*)</sup> , Micah Fountain, Maryam Hosseini, <sup>(*)</sup> Western Sydney University, Australia
14:21 – 14:33	> The study on the behavior of the simply supported beam steel bridge structure without the intermediate bracing system in the construction stage - <i>Van Nam Le, Anh Rin Nguyen</i> <sup>(*)</sup> , Lien Thuc Pham, Ngoc Thi Huynh, <sup>(*)</sup> Vietnam National University Ho Chi Minh City - University Of Technology, Vietnam

14:33 – 14:45	> Effects of Random Road Unevenness on Dynamic Impact Factor of multi-span Super T Girder Bridge with Link Slab due to Moving Vehicles - <i>Xuan-Toan Nguyen, Duy-Thao Nguyen</i> <sup>(*)</sup> , <sup>(*)</sup> The University of Danang - University of Science and Technology, Vietnam
14:45 – 14:57	> Fracture analysis of crack propagation on the diaphragm of steel bridge structures - <i>The Truyen Tran</i> <sup>(*)</sup> , Tung Bui, Hieu Nguyen, Quoc Doan, Anh Nguyen, <sup>(*)</sup> University of Transport and Communications, Vietnam
14:57 – 15:09	> Flexural Capacity Accounting for SBHS500 Steel of Composite Bridge Girders - <i>Viet Duc Dang</i> <sup>(*)</sup> , Yoshiaki Okui, <sup>(*)</sup> Thuy Loi University, Vietnam
15:09 – 15:21	> A current-state-of-the-art on design rules vs test resistance of Cross Laminated Timber members subjected to transverse loading - <i>Xin Li, Mahbube Subhani, Mahmud Ashraf</i> <sup>(*)</sup> , Bidur Kafle, Paul Kremer, <sup>(*)</sup> Deakin University, Australia
15:21 – 15:33	> A review on protection methods against debris accumulation for bridge in mountain areas - <i>Quang Huy Mai</i> <sup>(*)</sup> , Dang Phong Nguyen, <sup>(*)</sup> The University of Transport and Communications, Vietnam
13:45 – 15:35	<b>Parallel Session 1B</b> <b>Venue: 508 – 5<sup>th</sup> floor</b> Topic: Sustainable Construction Materials and Technologies Chairs: Jonathan Page & Quang Huy Nguyen
13:45 – 13:57	> Mechanical properties of fly ash based geopolymers concrete using only steel slag as aggregate - <i>Van Dong Dad</i> <sup>(*)</sup> , Hoang Son Trinh, <sup>(*)</sup> University of Transport Technology, Vietnam
13:57 – 14:09	> Effect of fly ash on the mechanical properties and drying shrinkage of the cement treated aggregate crushed stone - <i>Van Quan Ha</i> <sup>(*)</sup> , Van Tuoi Nguyen, V. Chau Nguyen, <sup>(*)</sup> The University of Danang - University of Technology and Education, Vietnam
14:09 – 14:21	> Experimental Study on Effect of Ground Granulated Blast Furnace Slag of Strength and Durability of Sand Concrete - <i>Thanh Sang Nguyen, Khoa Nguyen</i> <sup>(*)</sup> , <sup>(*)</sup> Dong A University, Vietnam
14:21 – 14:33	> Strength of Granulated Blast Furnace Slag during Hydration Reaction Process - <i>Thanh Nhan Tran</i> <sup>(*)</sup> , Matsuda Hiroshi, Thach Tran Xuan, Vien Nguyen Dai, Thanh Ho Trung, <sup>(*)</sup> University of Sciences, Hue University, Vietnam
14:33 – 14:45	> Effect of Ground Granulate Blast Furnace Slag in Replacement of Cement in Ternary Binder on Performance of Sand Concrete - <i>Thanh Sang Nguyen</i> <sup>(*)</sup> , <sup>(*)</sup> University of Transport and Communications, Vietnam
14:45 – 14:57	> Evaluation of Macro-Synthetic Fibre Reinforced Concrete as a Sustainable Alternative for Railway Sleepers - <i>Christophe Camille</i> <sup>(*)</sup> , Kahagala Hewage Dayani Nayantha, Olivia Mirza, Fidelis Mashiri, Brendan Kirkland, Todd Clarke, <sup>(*)</sup> Western Sydney University, Australia
14:57 – 15:09	> Use of coal ash of thermal power plant for highway embankment construction - <i>Tung Hoang</i> <sup>(*)</sup> , Viet-Phuong Nguyen, Hong-Nam Thai, <sup>(*)</sup> National University of Civil Engineering
15:09 – 15:21	> A model of local kinetics of sorption to understand the water transport in bio-based materials - <i>Nicolas Reuge, Florence Collet, Sylvie Pretot, Sophie Moissette, Marjorie Bart, Christophe Lanos</i> <sup>(*)</sup> , <sup>(*)</sup> Laboratoire de Génie Civil et Génie Mécanique (LGCGM), France
15:21 – 15:33	> Analysis of strain measurements in large span soil-steel bridge structure - <i>Adam Czerepak</i> <sup>(*)</sup> , <sup>(*)</sup> ViaCon SP. Z O.O., Poland

<b>13:45 – 15:35</b>	<b>Parallel Session 1C</b> Topic: Geotechnics for Environment and Energy Chairs: Rolf Katzenbach & Van Hung Nguyen	<b>Venue: 502 – 5<sup>th</sup> floor</b>
13:45 – 13:57	> Modeling on Cuttings Transport in Inclined and Horizontal Well Drilling - <i>Quang Khanh Do, Trong Tuan Dat Truong, Phuc Kieu<sup>(*)</sup>, Thi Mai Huong Tran, Trong Quang Hoang, <sup>(*)</sup>HoChiMinh City University of Technology (HCMUT), Vietnam National University - HoChiMinh City (VNU-HCM), Vietnam</i>	
13:57 – 14:09	> Enhanced Oil Production in the lower Miocene reservoir by Multistage Fracturing, Offshore Viet Nam - <i>Huu Truong Nguyen<sup>(*)</sup>, <sup>(*)</sup>Petrovietnam University, Vietnam</i>	
14:09 – 14:21	> A mathematical model for fault activation by water injection - <i>Son Nguyen<sup>(*)</sup>, Jonny Rutqvist, Bastian Graupner, Yves Guglielmi, <sup>(*)</sup>Canadian Nuclear Safety Commission, Canada</i>	
14:21 – 14:33	> Abnormal pore pressure and fracture pressure prediction for Miocene reservoir reservoir, field X in Vietnam - <i>Van Hung Nguyen<sup>(*)</sup>, <sup>(*)</sup>Petrovietnam University, Vietnam</i>	
14:33 – 14:45	> Modeling Stress Distribution Around Boreholes - <i>Quang Khanh Do, Thi Tam Thanh Nguyen, Phuc Kieu<sup>(*)</sup>, Huynh Nhan Vo, Trong Quang Hoang, <sup>(*)</sup>HoChiMinh City University of Technology (HCMUT), Vietnam National University - HoChiMinh City (VNU-HCM), Vietnam</i>	
14:45 – 14:57	> The failure envelope of new shaped cross-plates foundation for deepwater soft soils - <i>Emilio Nicolini<sup>(*)</sup>, Alessandro Alberio, Matteo Castelletti, <sup>(*)</sup>Cathie, France</i>	
14:57 – 15:09	> Full-scale Pullout Testing of Ground Anchors to Evaluate the Applicability of French Design Practice TA95 for Vietnam - <i>Ngoc Thanh Nguyen<sup>(*)</sup>, Nguyen Phuong Duy, <sup>(*)</sup>Hanoi Architecture University, Vietnam</i>	
15:09 – 15:21	> Application of Steel Pipe Piles with Wings installed in Soil Cement Column for Building Structure in Vietnam - <i>Hoang Kien Pham<sup>(*)</sup>, Daisuke Ito, <sup>(*)</sup>University of Transport and Communications - UTC, Vietnam</i>	
15:21 – 15:33	> Shape effects in the dynamical response of flints/boulders during pile driving – a numerical study. - <i>Emilio Nicolini<sup>(*)</sup>, Ivan Terribile, <sup>(*)</sup>Cathie, France</i>	
<b>13:45 – 15:35</b>	<b>Parallel Session 1D</b> Topic: Urban Planning, Transport and Environment Chairs: Yoshinori Fukubayashi & Hong Quan Nguyen	<b>Venue: 503 – 5<sup>th</sup> floor</b>
13:45 – 13:57	> Application of WIN-TR55 for calculating designed flood in small watersheds in mountainous region of vietnam - <i>Thi Noi Doan<sup>(*)</sup>, <sup>(*)</sup>The University of Transport and Communications (UTC), Vietnam</i>	
13:57 – 14:09	> Green infrastructure modelling for assessment of urban flood reduction in Ho Chi Minh city - <i>Hong Quan Nguyen<sup>(*)</sup>, Hieu Nguyen, Thu Tran, Matthew Buchanan, Canh Nguyen, Mariana Santos, Luan Pham, Hoang Tran, Phung Huynh, Canh Khuu, Mitchel Smith, <sup>(*)</sup>Institute for Computational Science and Technology, Ho Chi Minh City, Center of Water Management and Climate Change (WACC), Vietnam National University – Ho Chi Minh City (VNU-HCM), Vietnam</i>	
14:09 – 14:21	> Climate Change Impact on Urban Flooding in Quynhon City, Vietnam - <i>Duc Phuoc Vo<sup>(*)</sup>, Bhuian Muhammed, Ngoc Duong Vo, <sup>(*)</sup>University of Science and Technology, The</i>	

	<i>University of Danang, Vietnam; School of Engineering, RMIT University, Melbourne, Australia</i>	
14:21 – 14:33	> The impacts of urbanization on urban flooding in Danang City, Vietnam - <i>Thuy Nga To, Huy Cong Vu<sup>(*)</sup>, Hung Le, <sup>(*)</sup>The University of Danang, University of Science and Technology, Vietnam</i>	
14:33 – 14:45	> Low Impact Development, a novel technique for cutting down urban flooding in Quynhon city, Vietnam - <i>Duc Phuoc Vo<sup>(*)</sup>, A. Bhuian Muhammed, Ngoc Duong Vo, <sup>(*)</sup>University of Science and Technology, The University of Danang, Vietnam; School of Engineering, RMIT University, Melbourne, Australia</i>	
14:45 – 14:57	> Typhoon Wave Modelling For Viet Nam Central Region. - <i>Ngoc Duong Vo<sup>(*)</sup>, Quang Binh Nguyen, Cong Phong Nguyen, <sup>(*)</sup>Da Nang University of Technology, Vietnam</i>	
14:57 – 15:09	> Remote sensing application for evaluating the impact of land cover change on Danang city's land surface temperature. - <i>Ngoc Duong Vo<sup>(*)</sup>, Quang Binh Nguyen, <sup>(*)</sup>Da Nang University of Technology, Vietnam</i>	
15:09 – 15:21	> Research on application of flowforms in combination with planted constructed wetland for improving water quality of urban polluted lakes - <i>Thi Thuy Ha Ung<sup>(*)</sup>, Tuan Hung Pham, Tho Bach Leu, Thi Hien Hoa Tran, Hong Nhung Chu, <sup>(*)</sup>National University of Civil Engineering, Hanoi, Vietnam</i>	
15:21 – 15:33	> Using HCM Method in estimation the highway capacity and recommendation traffic management for a section of national highway #5 - VietNam - <i>Trung Hieu Tran<sup>(*)</sup>, <sup>(*)</sup>University of Transport Technology, Vietnam</i>	
<b>15:35 – 16:35</b>	<b>Poster Session &amp; Coffee Break</b>	<b>Venue: 5<sup>th</sup> floor</b>
<b>16:35 – 18:35</b>	<b>Parallel Session 2A</b> Topic: Advanced Modeling and Characterization of Structures Chairs: Mahmud Ashraf & The Truyen Tran	<b>Venue: 505 – 5<sup>th</sup> floor</b>
16:35 – 16:47	> Investigation into the response variability of a higher-order beam resting on a foundation using a stochastic finite element method - <i>Duy Hien Ta, Hang Do Thi<sup>(*)</sup>, Tien Thanh Bui, Ngoc Long Nguyen, Van Thuan Nguyen, <sup>(*)</sup>University of Transport and Communications, Ha Noi, Vietnam</i>	
16:47 – 16:59	> Improved rigid-plastic method for predicting the ultimate strength of concrete walls restrained on three sides - <i>Jeung-Hwan Doh, Nhat Minh Ho<sup>(*)</sup>, Tim Peters, <sup>(*)</sup>EDGE Consulting Engineers</i>	
16:59 – 17:11	> Design proposal and behavior simulation of prestressed concrete slab track at highway-railway grade crossings - <i>Van Hung Pham<sup>(*)</sup>, The Truyen Tran, Anh Dung Tran, Bao Quoc Doan, Hai Ha Le, Hong Phong Nguyen, <sup>(*)</sup>University of Paris-Est – Marne-la-Vallée, France</i>	
17:11 – 17:23	> Numerical modeling of thermo-mechanical performance of small-scale CFRP reinforced concrete specimen using near surface mounted reinforcement method - <i>Phi Long Nguyen<sup>(*)</sup>, Xuan Hong Vu, Emmanuel Ferrier, <sup>(*)</sup>Ho Chi Minh City University of Transport, Vietnam</i>	

17:23 - 17:35	› Non-linear deformational analysis of reinforced concrete frame - <i>Thi Thuy Van Tran<sup>(*)</sup>, Quyen Vu Thi Bich, <sup>(*)</sup>Hanoi Architectural University, Vietnam</i>
17:35 - 17:47	› Finite Element Analysis of Reinforced Concrete beams subjected to combined actions - <i>Tuan-Anh Nguyen<sup>(*)</sup>, Quang-Huy Nguyen, Hugues Somja, <sup>(*)</sup>University of Transport and Communications - UTC, Vietnam; Institut National des Sciences Appliquées - Rennes, France</i>
17:47 - 17:59	› Finite Element Modelling for Axially Loaded Concrete-Filled Steel Circular Tubes - <i>Duc-Duy Pham<sup>(*)</sup>, Phu-Cuong Nguyen, <sup>(*)</sup>Ho Chi Minh City Open University, Vietnam</i>
17:59 - 18:11	› Reliability Evaluation of Eurocode 4 for Concrete-Filled Steel Tubular Columns - <i>Huu Tai Thai<sup>(*)</sup>, Son Thai, <sup>(*)</sup>The University of Melbourne, Australia</i>
18:11 - 18:23	› Investigation and potential modelling of composite truss beams - <i>Jan Bujnak<sup>(*)</sup>, Peter Michalek, <sup>(*)</sup>University of Žilina, Slovakia</i>
18:23 - 18:35	› Riding comfort assessment of high-speed trains based on vibration analysis - <i>Van Nguyen Dinh, Ki-Du Kim, Tuan Hai Dinh<sup>(*)</sup>, <sup>(*)</sup>Hanoi Architectural University, Vietnam</i>
<b>16:35 - 18:35</b>	<b>Parallel Session 2B</b> Topic: Sustainable Construction Materials and Technologies Chairs: <i>Sung-Sik Park &amp; Cuong Ha-Minh</i> <b>Venue: 508 – 5<sup>th</sup> floor</b>
16:35 - 16:47	› Fatigue characterization of conventional and high rutting resistance asphalt mixtures using the cyclic indirect tensile test - <i>H.T. Tai Nguyen<sup>(*)</sup>, Anh-Thang Le, Vu-Tu Tran, Duy-Liem Nguyen, <sup>(*)</sup>Ho Chi Minh City University of Technology and Education, BMT Construction Investment J.S.C., Vietnam</i>
16:47 - 16:59	› Evaluating the change in the properties of bitumen during production, transport and construction of hot mix asphalt in the conditions of Vietnam - <i>K.H. Quang Trinh, T. Nhan Tran, H.T. Tai Nguyen<sup>(*)</sup>, <sup>(*)</sup>Ho Chi Minh City University of Technology and Education, BMT Construction Investment JSC, Vietnam</i>
16:59 - 17:11	› Creep behavior and rutting resistance of asphalt pavements by experimental testing and Finite Element modelling - <i>Van Bac Nguyen<sup>(*)</sup>, Chau Phuong Ngo, Ngoc Bay Pham, Thanh Phong Nguyen, Van Phuc Le<sup>(*)</sup>, Van Hung Nguyen, <sup>(*)</sup>University of Transport and Communications, Campus in Ho Chi Minh City, Vietnam</i>
17:11 - 17:23	› Application of Asphalt Concrete using Limestone with Cement & Admixture - <i>Hoang Nguyen, Hung Pham, Khanh Tran<sup>(*)</sup>, Huy Nguyen, <sup>(*)</sup>Ho Chi Minh City University of Transport, Vietnam</i>
17:23 - 17:35	› Experimental measurement and modeling of the complex Poisson's ratio of bituminous mixtures - <i>Quang Tuan Nguyen<sup>(*)</sup>, Thi Thanh Nhan Hoang, <sup>(*)</sup>Research and Application Center for Technology in Civil Engineering, University of Transport and Communications, Vietnam</i>
17:35 - 17:47	› Impact of porosity of coarse aggregates on the structuration of paste-aggregate interface: Elementary model study - <i>Duc Long Tran<sup>(*)</sup>, Franck Cassagnabere, Michel Mouret, <sup>(*)</sup>LMDC, University of Toulouse Paul Sabatier, France; University of Technology and Education, the University of Da Nang, Vietnam</i>

17:47 - 17:59	› Comparison between Critical Path Method (CPM) and Last Planners System (LPS) for Planning and Scheduling METRO Rail Project of Ahmedabad - <i>Viraj Parekh<sup>(*)</sup>, Karan Asnani, Yashraj Bhatt, Rahul Mulchandani, <sup>(*)</sup>Institute of Technology, Nirma University, India</i>
17:59 - 18:11	› Application of Six Sigma on METRO Rail Construction Project - <i>Viraj Parekh<sup>(*)</sup>, Kushal Solanki, Nishit Prajapati, <sup>(*)</sup>Institute of Technology, Nirma University, Ahmedabad, India</i>
18:11 - 18:23	› Assessment on the performance of EPB-TBM in the construction of pilot metro line in Ho Chi Minh city (Vietnam) - <i>Thu-Hang Tran, Manh-Tuan Hoang<sup>(*)</sup>, <sup>(*)</sup>Shimizu – Maeda Joint Operation, Vietnam</i>
18:23 - 18:35	› Development of optimised underground structures in urban areas - <i>Rolf Katzenbach<sup>(*)</sup>, <sup>(*)</sup>Technische Universität Darmstadt, Germany</i>
<b>16:35 - 18:35</b>	<b>Parallel Session 2C</b> Topic: Geotechnics for Environment and Energy Chairs: <i>Emilio Nicolini &amp; Quoc Bao Bui</i> <b>Venue: 502 – 5<sup>th</sup> floor</b>
16:35 - 16:47	› Experimental Correlations for the Swelling Pressure of Expansive Clays in the City of Tebessa, Algeria - <i>Adel Djellal<sup>(*)</sup>, Behrooz Saghafi, Mohamed Salah Laouar, <sup>(*)</sup>Mining institute, Larbi Tebessi University, Algeria</i>
16:47 - 16:59	› Modelling the hydromechanical behaviour of expansive assembly of clay granules upon hydration using discrete element method - <i>Benjamin Dardé<sup>(*)</sup>, Anh Minh Tang, Jean-Noël Roux, Jean-Michel Pereira, Patrick Dangla, Jean Talandier, Minh Ngoc Vu, <sup>(*)</sup>French National Radioactive Waste Management Agency, Université Paris-Est, Laboratoire Navier, UMR 8205 (Ecole des Ponts ParisTech - Ifsttar - CNRS), France</i>
16:59 - 17:11	› A numerical homogenized law using discrete element method for continuum modelling of boundary value problems - <i>Trung Kien Nguyen<sup>(*)</sup>, Jacques Desrues, Gaël Combe, Duc Hanh Nguyen, <sup>(*)</sup>Laboratoire sols, solides, structures - risques, Grenoble, France; National University of Civil Engineering, Vietnam</i>
17:11 - 17:23	› Non-microbial carbonate precipitation as an improvement technique of sand. - <i>Sung-Sik Park, Trung-Tri Le<sup>(*)</sup>, Seong-Heon Kim, Zhenzhen Nong, <sup>(*)</sup>Kyungpook National University, South Korea</i>
17:23 - 17:35	› Solving the stability problem of vertical slope according to the effective stress field - <i>Thang Do<sup>(*)</sup>, <sup>(*)</sup>Thuyloi University, Vietnam</i>
17:35 - 17:47	› Granular flows through a model-scale forest: Influence of tree density and implications for landslide mitigation - <i>Hang Luong<sup>(*)</sup>, James Baker, Itai Einav, <sup>(*)</sup>Hanoi Architectural University, Vietnam</i>
17:47 - 17:59	› Finite Element Simulation of water content-influenced progressive failure of sensitive clays - <i>Nhat-Phi Doan<sup>(*)</sup>, Seung-Wook Woo, Yao-Long Hou, Sung-Sik Park, <sup>(*)</sup>School of Architectural, Civil, Environmental, and Energy Engineering, Kyungpook National University, South Korea</i>
17:59 - 18:11	› Application of Box-Behnken Design in Optimization of Fracture Treatment Design for Lower Oligocene Reservoir, Offshore Viet Nam - <i>Huu Truong Nguyen<sup>(*)</sup>, <sup>(*)</sup>Petrovietnam University, Vietnam</i>

18:11 - 18:23	› Study on Cement-Treated Soil with RoadCem Additive in Construction of Rural Traffic Road: A Case Study in Viet Nam - <i>Thao Vu Ba, Dung Nguyen Quoc, Huong Ngo Thi Thanh<sup>(*)</sup>, Lanh Ho Si, <sup>(*)</sup>University of Transport Technology, Vietnam</i>
18:23 - 18:35	› In-plane seismic behaviour of rammed earth walls: a numerical investigation with time history analysis - <i>Quoc-Bao Bui<sup>(*)</sup>, Tan-Trung Bui, <sup>(*)</sup>Ton Duc Thang University, Vietnam</i>
<b>16:35 - 18:35</b>	<b>Parallel Session 2D</b> <b>Venue: 503 – 5<sup>th</sup> floor</b> Topic: Urban Planning, Transport and Environment Chairs: <i>Manfred Boltze &amp; Thi My Thanh Truong</i>
16:35 - 16:47	› Bus signal priority by active signal program (ASP) – A case study in Ho Chi Minh City - <i>Thi Thanh Huong Nguyen<sup>(*)</sup>, <sup>(*)</sup>University of Transport and Communications Campus in Ho Chi Minh City, Vietnam</i>
16:47 - 16:59	› Perspectives of the use of GPS in travel survey: Research on identification of missing trips in a GPS pilot survey in Hanoi - <i>Thanh Tu Nguyen<sup>(*)</sup>, <sup>(*)</sup>University of Transport and Communications, Vietnam</i>
16:59 - 17:11	› Reasons for cyclists denying new-built bicycle lanes - <i>Duc-Nghiem Nguyen<sup>(*)</sup>, <sup>(*)</sup>National University of Civil Engineer, Vietnam; Saitama Univers. Japan</i>
17:11 - 17:23	› Review of Unmanned Aerial Vehicles (UAVs) Operation and Data Collection for Driving Behavior Analysis - <i>Huong Q. Pham<sup>(*)</sup>, M. Camey, K.D. Pham, K.V. Pham, Laurence Rillet, <sup>(*)</sup>University of Nebraska at Lincoln - Prem S. Paul Center, USA</i>
17:23 - 17:35	› A Study on Motorcycles Overturning due to Strong Wind and its Warning System - <i>Duy Hung Vo<sup>(*)</sup>, Anh Vu Do, <sup>(*)</sup>The University of DaNang – University of Science and Technology, Vietnam</i>
17:35 - 17:47	› Analysis of Tourist Travel Behavior and Recommendation for Active Transport Encouragement Strategies, the Case of Hue City - <i>Thi My Thanh Truong<sup>(*)</sup>, Van Dong Dao, Hai Bang Ly, <sup>(*)</sup>University of Transport Technology, Vietnam</i>
17:47 - 17:59	› Travel behavior change patterns under adverse weather conditions - A case study from Ho Chi Minh City, Vietnam - <i>Anh Tuan Vu, Thi Thanh Huong Nguyen<sup>(*)</sup>, <sup>(*)</sup>University of Transport and Communications Campus in Ho Chi Minh City, Vietnam</i>
17:59 - 18:11	› Health impacts of traffic-related air pollution: Cause-effect relationships and mitigating measures - <i>Thi Huong Le<sup>(*)</sup>, <sup>(*)</sup>Vietnamese-German Transport Research Center, Vietnamese-German University, Transport Planning and Traffic Engineering, Technische Universität Darmstadt, Germany</i>
18:11 - 18:23	› Sustainable and Health-Oriented Transport Planning and Urban Planning - <i>Karin Menges<sup>(*)</sup>, Manfred Boltze, <sup>(*)</sup>Technische Universität Darmstadt, Germany</i>
18:23 - 18:35	› Smart monitoring for urban biodiversity preservation - <i>Thi Hai Yen Pham<sup>(*)</sup>, Isam Shahrour, Ammar Aljer, Alain Lepretre, Céline Pernin, Sana Ounaies, <sup>(*)</sup>Université de Lille, France</i>
<b>19:00 - 22:00</b>	<b>Gala Dinner</b> <b>Venue: Athen 1, 29<sup>th</sup> floor</b>

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## Conference Schedule Details

(Friday, November 1, 2019)

TIME	EVENT
07:00 onwards	<b>CIGOS Registration</b>
<b>07:30 - 09:30</b>	<b>Parallel Session 3A</b> <b>Venue: 505 – 5<sup>th</sup> floor</b> Topic: Advanced Modeling and Characterization of Structures Chairs: <i>Jan Bujnak &amp; Huu Tai Thai</i>
07:30 - 07:42	› The Behaviour of Cold-formed Channel Sections with Elongated Web Holes in Shear - <i>Duy Khanh Pham<sup>(*)</sup>, Cao Hung Pham, Song Hong Pham, Gregory Hancock, <sup>(*)</sup>School of Civil Engineering, The University of Sydney, Australia</i>
07:42 - 07:54	› Numerical Simulation of Cold-Rolled Aluminium Alloy 5052 Columns Subjected to Distortional Buckling - <i>Le Anh Thi Huynh<sup>(*)</sup>, Cao Hung Pham, Kim J.R. Rasmussen, <sup>(*)</sup>The University of Sydney, Australia</i>
07:54 - 08:06	› Blind source separation technique for operational modal analysis in presence of harmonic excitation - <i>Van-Dong Do<sup>(*)</sup>, Thien-Phu Le, Alexis Beakou, <sup>(*)</sup>Université Clermont Auvergne, CNRS, SIGMA Clermont, Institut Pascal, France</i>
08:06 - 08:18	› FE modelling of RC frames with Link Column Frame System under in-plane loading - <i>Joel Shelton Joseph<sup>(*)</sup>, Hemalatha Gladston, Venkatesh Vellapandi, <sup>(*)</sup>RGM College of Engineering and Technology, India</i>
08:18 - 08:30	› Numerical analysis of double layered asphalt pavement behavior taking into account interface bonding conditions - <i>Minh Tu Le<sup>(*)</sup>, Quang-Huy Nguyen, Mai-Lan Nguyen, <sup>(*)</sup>Institut National des Sciences Appliquées - Rennes (France), University of Transport Technology (Vietnam)</i>
08:30 - 08:42	› Mechanical behaviour of four-leg base configuration on cold-formed steel lattice column - <i>Mohd Syahrul Hisyam Mohd San<sup>(*)</sup>, Fadluhartini Muftah, <sup>(*)</sup>Universiti Teknologi Mara Cawangan Pahang, Malaysia</i>
08:42 - 08:54	› Elastic Buckling Solution for Perforated Thin-walled Channel Sections in Shear with an Aspect Ratio of 2.0 - <i>Cao Hung Pham<sup>(*)</sup>, Duy Khanh Pham, Gregory Hancock, School of Civil Engineering, <sup>(*)</sup>The University of Sydney, Australia</i>
08:54 - 09:06	› Finite Element Simulation of Member Buckling of Cold-rolled Aluminium Alloy 5052 Channel Columns - <i>Ngoc Hieu Pham<sup>(*)</sup>, Cao Hung Pham, Kim J.R. Rasmussen, <sup>(*)</sup>School of Civil Engineering, The University of Sydney, Australia</i>
09:06 - 09:18	› Lateral Buckling Tests of Cold-rolled Aluminium Alloy 5052 Zee Beams - <i>Ngoc Hieu Pham<sup>(*)</sup>, Cao Hung Pham, Kim J.R. Rasmussen, <sup>(*)</sup>School of Civil Engineering, The University of Sydney, Australia</i>
09:18 - 09:30	› Advanced Analysis Software for Steel Frames - <i>Phu-Cuong Nguyen<sup>(*)</sup>, Nghia Nguyen, Minh-Hoang Le, <sup>(*)</sup>Ho Chi Minh City Open University, Vietnam</i>
<b>07:30 - 09:30</b>	<b>Parallel Session 3B</b> <b>Venue: 508 – 5<sup>th</sup> floor</b> Topic: Sustainable Construction Materials and Technologies Chairs: <i>Alexis Beakou &amp; Hai Bang Ly</i>
07:30 - 07:42	› A non-paraffinic PCM modified textile reinforced concrete sandwich panel - <i>Zakaria Ilyes Djama<sup>(*)</sup>, Amir Si Larbi, Ferdinando Salvatore, <sup>(*)</sup>Ecole Nationale d'Ingénieurs de Saint Etienne, France</i>



07:42 - 07:54	> A Study on Behavior of Reinforcement Concrete Beam using the Recycled Concrete - <i>Anh-Thang Lê<sup>(*)</sup></i> , T. Hung Nguyen, C.V. Duc Phan, <sup>(*)</sup> Hochiminh City University of Technology and Education, Vietnam
07:54 - 08:06	> Experimental study of thermomechanical behavior of the carbon textile reinforced refractory concrete subjected to the constant load and temperature heating - <i>Manh Tien Tran<sup>(*)</sup></i> , Xuan Hong Vu, Emmanuel Ferrier, <sup>(*)</sup> University Lyon 1, Laboratory of Composite Materials for Construction (LMC2), France
08:06 - 08:18	> Experimental investigation of loading rate effects on the shear capacity of reinforced concrete deep beams - <i>Vanny Lê<sup>(*)</sup></i> , Kenichiro Nakarai, Halwan Alfisa Saifullah, Asuka Mizobe, <sup>(*)</sup> Graduate School of Engineering, Hiroshima University, Japan
08:18 - 08:30	> Air permeability of cover concrete quality of precast box culverts affected by casting direction - <i>Huu Nguyen May<sup>(*)</sup></i> , Kenichiro Nakarai, Saeko Kajitar, <sup>(*)</sup> University Of Transport Technology, Vietnam
08:30 - 08:42	> Air permeability coefficients of expansive concrete confined by rebars - <i>Anh Lê<sup>(*)</sup></i> , Kenichiro Nakarai, May Nguyen Huu, Yasutaka Kubori, Toshikazu Matsuyama, Hajime Kawakane, Shintaro Tani, <sup>(*)</sup> University Of Transport Technology, Vietnam
08:42 - 08:54	> Assessment of Design Guidelines for Fiber-Reinforced Polymer Shear Contribution of Prestressed Concrete Beams Strengthened by Fiber-Reinforced Polymer Sheets - <i>Le Dien Vă<sup>(*)</sup></i> , <sup>(*)</sup> Ho Chi Minh city University of Technology, Vietnam
08:54 - 09:06	> The repairing effects of lithium silicate based material to the surface of hardened concrete - <i>Xuan Tung Nguyen<sup>(*)</sup></i> , <sup>(*)</sup> University of Transport and Communications, Vietnam
09:06 - 09:18	> Real-time detection of asymmetric surface deformation and field stress in concrete-filled circular steel tubes via multi-vision method - <i>Yunchao Tang<sup>(*)</sup></i> , Kuangyu Huang, Lijuan Li, Xiangjun Zou, Wenxian Feng, <sup>(*)</sup> College of Urban and Rural Construction, Zhongkai University of Agriculture and Engineering, China
<b>07:30 - 09:30</b>	<b>Parallel Session 3C</b> Topic: Urban Planning, Transport and Environment Chairs: Laurence Rilett & Thanh Tu Nguyen <b>Venue: 503 – 5<sup>th</sup> floor</b>
07:30 - 07:42	> A Framework for Last Planner System implementation in Egypt - <i>Eyad Aboseif<sup>(*)</sup></i> , Rana Khallaf, <sup>(*)</sup> Cairo University, Egypt
07:42 - 07:54	> New cooperative approach between universities and enterprises, towards a reality urban planning. Lesson learnt from Nhon Ly, Quy Nhon city - <i>Huyen Nguyen<sup>(*)</sup></i> , Trang Dang, <sup>(*)</sup> Institute of International Training and Cooperation-Hanoi Architectural University, Vietnam
07:54 - 08:06	> Evaluation of the effects of traffic management at school areas - <i>Minh Ngoc An<sup>(*)</sup></i> , Viet Hung Khuat, <sup>(*)</sup> University of Transport and Communications, Vietnam
08:06 - 08:18	> Solutions to use capital efficiently for maintenance in the road traffic infrastructure development in vietnam - <i>Dung Nguyen Thi Tuyet<sup>(*)</sup></i> , Sang Nguyen Quynh, <sup>(*)</sup> Hanoi Architectural University, Vietnam
08:18 - 08:30	> Policy Implications from Traffic Accident Analysis: A Study Case from Vietnam - <i>Minh Ngoc An<sup>(*)</sup></i> , Thi My Thanh Truong, <sup>(*)</sup> University of Transport and Communications, Vietnam

08:30 - 08:42	> Integrated transport planning for sustainable urban development – Singapore' approach and lessons for Vietnam - <i>Toan Trinh Dinh<sup>(*)</sup></i> , <sup>(*)</sup> Thuy Loi University, Vietnam
08:42 - 08:54	> Transitioning Different Stages of Transport Planning in Urban Areas: Experiences of Singapore and Vietnam - <i>Maria Cecilia Rojas Lopez, Toan Trinh Dinh<sup>(*)</sup></i> , Yiik Diew Wong, <sup>(*)</sup> Thuy Loi University, Hanoi, Vietnam
08:54 - 09:06	> A landscape structure proposal for a sustainable development – Quy Nhon City - <i>Rute Sousa Matos, Huyen Nguyen<sup>(*)</sup></i> , Tho Phan, Thuy Phan, <sup>(*)</sup> Quy Nhon University, Vietnam
09:06 - 09:18	> Sustainable Measures to Achieve Better River-Crossing Access in the Rural Areas of Developing Countries - <i>Yoshinori Fukubayashi<sup>(*)</sup></i> , Makoto Kimura, <sup>(*)</sup> University of Miyazaki, Japan
09:18 - 09:00	> Development of Disaster Resilient and Sustainable University Framework : Case of Bandung Institute of Technology (ITB) - <i>Krishna Suryanto Pribadi, Rahma Hanifa, Eliya Hanafi, Giovanni Pradipta<sup>(*)</sup></i> , <sup>(*)</sup> Research Center for Disaster Mitigation, Bandung Institute of Technology, Indonesia
<b>07:30 - 09:30</b>	<b>Parallel Session 3D</b> Topic: Building Information Modeling Chairs: Adam Matthews & Ngoc Binh Ta <b>Venue: 502 – 5<sup>th</sup> floor</b>
07:30 - 07:42	> The contextual influence on Building Information Modelling implementation: A cross-case analysis of infrastructure projects in Vietnam and Norway - <i>Nam Bu<sup>(*)</sup></i> , <sup>(*)</sup> Oslo Metropolitan University
07:42 - 07:54	> BIM-based innovative bridge maintenance system using augmented reality technology - <i>Ngoc Son Dang<sup>(*)</sup></i> , Chang-Su Shim, <sup>(*)</sup> Chung-Ang University, South Korea
07:54 - 08:06	> BIM Adoption in Construction Projects Funded with State-managed Capital in Vietnam: Legal Issues and Proposed Solutions - <i>Thuy-Ninh Dad<sup>(*)</sup></i> , The-Quan Nguyen, Po-Han Chen, <sup>(*)</sup> National Taiwan University, Taiwan; National University of Civil Engineering, Hanoi, Vietnam
08:06 - 08:18	> Application of BIM tools in technician training, a case of Ho Chi Minh City Construction College, Vietnam - <i>Tung Lam Nguyen, Thi Xuan Nguyen<sup>(*)</sup></i> , <sup>(*)</sup> Ho Chi Minh City Construction College, Vietnam
08:18 - 08:30	> Building information modeling based optimization of steel single plate shear connections using differential evolution algorithm - <i>Tran-Hieu Nguyen<sup>(*)</sup></i> , Anh-Tuan Vu, <sup>(*)</sup> National University of Civil Engineering, Vietnam
08:30 - 08:42	> Perspectives on BIM Profession of BIM Specialists and Non-BIM Specialists: Case Study in Vietnam - <i>Ngoc Quyet Le, Michael Er, Shankar Sankaran, Ngoc Binh Ta<sup>(*)</sup></i> , <sup>(*)</sup> Institute of Construction Economics, Vietnam
08:42 - 08:54	> BIM application for the design consultant on the irrigation and hydropower projects in Vietnam - <i>Van Toan Tran<sup>(*)</sup></i> , Huu Hue Nguyen, <sup>(*)</sup> Thuyloi university, Vietnam
08:54 - 09:06	> Bridge assessment for PSC Girder Bridge using Digital Twin Model - <i>Ngoc Son Dang<sup>(*)</sup></i> , Chang-Su Shim, ChungAng University, <sup>(*)</sup> South Korea
09:06 - 09:18	> Selection of Construction Design: A Knowledge-Based System Method - <i>Phan Nghiem Vu, Le Tuan Vu<sup>(*)</sup></i> , <sup>(*)</sup> Huế University - Quang Tri Branch, Vietnam

09:30 - 10:00	Coffee Break	Venue: 5 <sup>th</sup> floor
10:00 - 12:00	<b>Parallel Session 4A</b> Topic: Advanced modeling and characterization of structures Chairs: Christophe Lanos & Thien Phu Le	Venue: 505 – 5 <sup>th</sup> floor
10:00 - 10:12	> Experimental characterization of multi-full-culm bamboo to steel connection - <i>Nischal Prasad Nhuchhe Pradhar<sup>(*)</sup></i> , Themelina S. Paraskeva, Elias G. Dimitrakopoulos, <sup>(*)</sup> The Hong Kong University of Science and Technology, Hong Kong	
10:12 - 10:24	> Analysis of Two-Directional Seismic Deterioration of Steel Box Columns - <i>Tuan Nam Tran<sup>(*)</sup></i> , <sup>(*)</sup> Ho Chi Minh City University of Technology (HUTECH), Ho Chi Minh, Vietnam	
10:24 - 10:36	> Fatigue analysis of jack-up leg structures in transit condition - <i>Chinh Vu Dan<sup>(*)</sup></i> , Quang Cuong Dinh, <sup>(*)</sup> Institute of Construction for Offshore Engineering, Vietnam	
10:36 - 10:48	> Use of Kriging metamodells for seismic fragility analysis of structures - Cong Thuat Dang, Thanh Tran, Duy-My Nguyen <sup>(*)</sup> , My Pham, Thien-Phu Le, <sup>(*)</sup> University of Science and Technology - The University of Danang, Vietnam	
10:48 - 11:00	> Stress-dependent permeability of the fractured rock masses: numerical simulation based on the Embedded Fracture Continuum approach - <i>Hong Lam Dang<sup>(*)</sup></i> , Duc Phi Do, Dashnor Hoxha, <sup>(*)</sup> University of Transport and Communications, Vietnam	
11:00 - 11:12	> Finite element modeling of the TECCO protection system for rock-fall under impact loading - <i>Van Dang Tran<sup>(*)</sup></i> , Dong Tran, Dannis Gross, <sup>(*)</sup> Thuyloi University, Vietnam	
11:12 - 11:24	> Parametric numerical study on a novel energy harvester using iron-gallium alloy and strain response - <i>Tuan Minh Ha<sup>(*)</sup></i> , Saiji Fukada, Toshiyuki Ueno, <sup>(*)</sup> Ho Chi Minh City University of Technology (HUTECH), Vietnam	
11:24 - 11:36	> A further study on stayed-cable galloping in dry weather condition - <i>Duy Hung Vo<sup>(*)</sup></i> , Duy-Thao Nguyen, <sup>(*)</sup> The University of DaNang – University of Science and Technology, Vietnam	
11:36 - 11:48	> A Study on Combination of Two Friction Dampers to Control Stayed-cable Vibration under considering its Bending Stiffness - <i>Duy-Thao Nguyen<sup>(*)</sup></i> , Duy Hung Vo, <sup>(*)</sup> The University of DaNang – University of Science and Technology, Vietnam	
11:48 - 12:00	> Advanced Design Software for Steel Cable-Stayed Bridges Using Nonlinear Inelastic Analysis - <i>Viet-Hung Truong<sup>(*)</sup></i> , Seung-Eock Kim, <sup>(*)</sup> Thuyloi university, Vietnam	
10:00 - 12:00	<b>Parallel Session 4B</b> Topic: Sustainable Construction Materials and Technologies Chairs: José Turmo & Tien Long Nguyen	Venue: 508 – 5 <sup>th</sup> floor
10:00 - 10:12	> Preparation of low cement ultra-high performance concrete - <i>Norzaiereen Azmeed<sup>(*)</sup></i> , Nasir Shafiq, <sup>(*)</sup> Universiti Teknologi PETRONAS	
10:12 - 10:24	> The effect of mineral admixture on the properties of the binder towards using in making pervious concrete - <i>Van Dong Nguyen<sup>(*)</sup></i> , <sup>(*)</sup> National University of Civil Engineering, Vietnam	
10:24 - 10:36	> Experimental study on the valorisation of poplar by-products in cement-based materials - <i>Chafika Djelal, Jonathan Page<sup>(*)</sup></i> , Yannick Vanhove, Hassina Kada, <sup>(*)</sup> Laboratoire de Génie Civil et Géo-Environnement, France	

10:36 - 10:48	> Strength and engineering properties of cementless paste produced by GGBFS and MgO - <i>Chao-Lung Hwang, Duy-Hai Vo<sup>(*)</sup></i> , Thi Khanh-Dung Tran, Damtie Yehualaw Mitiku, <sup>(*)</sup> University of Technology and Education, The University of Danang, Vietnam	
10:48 - 11:00	> Effects of amounts and moisture states of clay-brick waste as coarse aggregate on slump and compressive strength of concrete - <i>Phuong Trinh Bui, Xuan Nam Nguyen, My Ngoc Tang<sup>(*)</sup></i> , Yuko Ogawa, Kenji Kawai, <sup>(*)</sup> Ho Chi Minh City University of Technology, VNU-HCM, Vietnam	
11:00 - 11:12	> Geochemical modelling for prediction of chloride diffusion in concrete exposed to seawater - <i>Hoang Long Nguyen, Van Quan Tran<sup>(*)</sup></i> , Long Khanh Nguyen, Tuan Anh Pham, Quoc Trinh Ngo, Van Loi Giap, <sup>(*)</sup> University of Transport Technology, Vietnam	
11:12 - 11:24	> Experimental Investigation of a Self-powered Magnetorheological Damper for Seismic Mitigation - <i>Daniel Cruze<sup>(*)</sup></i> , Hemalatha Gladston, Sarala Loganathan, Tensing Dharmaraj, S Sundar Manoharan, Xian-Xu Bai, <sup>(*)</sup> Karunya Institute of Technology and Sciences, India	
10:00 - 12:00	<b>Parallel Session 4C</b> Topic: Geotechnics for Environment and Energy Chairs: Suzanne Lacasse & Hoang Kien Pham	Venue: 502 – 5 <sup>th</sup> floor
10:00 - 10:12	> Reusability of muds dredging at urban lakes in Hanoi from geotechnical engineering characteristics - <i>Thuc Pham Trf<sup>(*)</sup></i> , Dong Phan Huy, <sup>(*)</sup> Military Academy of Logistics, Vietnam	
10:12 - 10:24	> Investigating the properties of geopolymer modified sludge designed by Taguchi method - <i>Minh Chien Vu<sup>(*)</sup></i> , Tomoaki Satomi, Hiroshi Takahashi, <sup>(*)</sup> Tohoku university, Japan	
10:24 - 10:36	> Rheological and Microfabric Characteristics of Gold Tailings Stabilized With Fly Ash - <i>Joon Kyu Lee<sup>(*)</sup></i> , <sup>(*)</sup> University of Seoul, South Korea	
10:36 - 10:48	> Numerical model of hydro-mechanical coupling DEM-PFV and application for simulation of settlement of soil saturated in embankments due to static loading - <i>Anh Tuan Tong<sup>(*)</sup></i> , Nguyen Hoang Phuong Luong, <sup>(*)</sup> University of Transport and Communications, Vietnam	
10:48 - 11:00	> Evaluation of the At-Rest Lateral Earth Pressure Coefficient of Fibre Reinforced Load Transfer Platform and Columns Supported Embankments - <i>Cong Chi Dang<sup>(*)</sup></i> , Liet Chi Dang, <sup>(*)</sup> Ho Chi Minh City University of Technology, Vietnam	
11:00 - 11:12	> A Case Study on Slope Stabilization by Bio-engineering in Taiwan – National Chi-Nan University - <i>Tai-Yi Liu<sup>(*)</sup></i> , Nelson N.S. Chou, Po-Han Chen, <sup>(*)</sup> New Asia Construction and Development Corporation, Taiwan	
11:12 - 11:24	> Analyses on drainage capacity and sliding resistance of large diameter vertical wells for deep-seated landslide stabilization - <i>Ba Thao Vu<sup>(*)</sup></i> , Van Minh Pham, Quoc Dung Nguyen, Huy Vuong Nguyen, Hydraulic Construction Institute, <sup>(*)</sup> Vietnam Academy for Water Resources, Vietnam; College of Civil Engineering, Tongji University, China	
11:24 - 11:36	> Influence of Compaction Factor on the mechanical behavior of the soils used for the earth dams in the North Central region, Vietnam - <i>Van Toan Tran<sup>(*)</sup></i> , Van Hien Tran, <sup>(*)</sup> Thuyloi University, Vietnam	
11:36 - 11:48	> Durability Evaluation of a Geothermal Grout - <i>Pascal Monnot, Philippe Blanc, Amandine Rojo, Laurent Molez, Christophe Land<sup>(*)</sup></i> s, <sup>(*)</sup> Laboratoire de Génie Civil et Génie Mécanique (LGCGM), France	

11:48 - 12:00	> A model for soil-structure interaction - Application to small modular reactors - <i>Liang Cui, Mamadou Fall, Nebojsa Orbovic, Son Nguyen</i> , <sup>(*)</sup> Canadian Nuclear Safety Commission, Canada	
10:00 - 12:00	<b>Parallel Session 4D</b> Topic: Data Mining & Machine Learning Chairs: Sybil Derrible & Thai Binh Pham	<b>Venue: 503 – 5<sup>th</sup> floor</b>
10:00 - 10:12	> Machine learning based tool for cleaning up CAD to GIS converted data - <i>Mohamed Badhrudeen, Nalin Naranjo, Ali Movahedi, Sybil Derrible</i> , <sup>(*)</sup> Complex and Sustainable Urban Networks (CSUN) Lab, Department of Civil and Materials Engineering University of Illinois at Chicago, USA	
10:12 - 10:24	> An Image Mosaicking Method Base on The Curvature of Cost Curve for Tunnel Lining Inspection - <i>Kim Cuong Nguyen</i> , <sup>(*)</sup> Kei Kawamura, Masando Shiozaki, Amir Tarighat, <sup>(*)</sup> Mien Trung of civil engineering, Vietnam	
10:24 - 10:36	> A Deep Learning-Based Procedure for Safety Evaluation of Steel Frames Using Advanced Analysis - <i>Manh-Hung Ha, Quang-Viet Vu</i> , <sup>(*)</sup> Viet-Hung Truong, <sup>(*)</sup> Sejong University	
10:36 - 10:48	> Prediction of buckling coefficient of stiffened plate girders using deep learning algorithm - <i>George Papazafeiropoulos</i> , <sup>(*)</sup> Quang-Viet Vu, Viet-Hung Truong, Minh-Chinh Luong, Van-Trung Pham, <sup>(*)</sup> School of Civil Engineering, National Technical University of Athens, Greece	
10:48 - 11:00	> Development of Artificial Neural Networks for Prediction of Compression Coefficient of Soft Soil - <i>Binh Thai Pham</i> , <sup>(*)</sup> Manh Duc Nguyen, Hai Bang Ly, Tuan Anh Pham, Vu Hoang, Hiep Van Le, Tien-Thinh Le, Hung Quang Nguyen, Gia Linh Bui, <sup>(*)</sup> University of Transport Technology, Vietnam	
11:00 - 11:12	> A Possibility of AI Application on Mode-choice Prediction of Transport Users in Hanoi - <i>Thi My Thanh Truong</i> , <sup>(*)</sup> Hai Bang Ly, Thai Binh Pham, <sup>(*)</sup> University of Transport Technology, Vietnam	
11:12 - 11:24	> Development of 48-hour Precipitation Forecasting Model using Nonlinear Autoregressive Neural Network - <i>Tien-Thinh Le, Binh Thai Pham</i> , <sup>(*)</sup> Hai Bang Ly, Ataollah Shirzadi, Lu Minh Le, <sup>(*)</sup> University of Transport Technology, Vietnam	
11:24 - 11:36	> Monitoring Pedestrian Flow on Campus with Multiple Cameras using Computer Vision and Deep Learning Techniques - <i>Kok-Yiu Wong</i> , <sup>(*)</sup> Chin-Pang Cheng, <sup>(*)</sup> Hong Kong University of Science and Technology, Hong Kong	
11:36 - 11:48	> Machine Learning-based Models to Forecast Energy Consumption in Residential Buildings - <i>Jui-Sheng Chou, Dinh-Nhat Truong</i> , <sup>(*)</sup> Duc-Son Tran, <sup>(*)</sup> National Taiwan University of Science and Technology, Taiwan	
11:48 - 12:00	> A Daily Work Report Based Approach for Schedule Risk Analysis - <i>Chau Le</i> , <sup>(*)</sup> H. David Jeong, <sup>(*)</sup> Texas A&M University [College Station], USA	
12:00 - 13:30	<b>Lunch</b>	<b>Venue: 1<sup>st</sup> floor</b>
13:30 - 14:10	<b>Plenary Session 3</b> Chairs: Olivia Mirza & Cao Hung Pham	<b>Venue: 2<sup>nd</sup> floor</b>

13:30 - 14:10	<b>Keynote 5:</b> eHighway - An Infrastructure for Sustainable Road Freight Transport - <i>Manfred Boltze</i> , Technische Universität Darmstadt, Institute for Transport Planning and Traffic Engineering, Germany	
14:10 - 14:50	<b>Keynote 6:</b> Industrialized construction of medium span concrete bridges using movable false work - <i>José Turmo</i> , Technical University of Catalonia BarcelonaTech (UPC), Spain	
14:50 - 15:50	<b>Poster Session &amp; Coffee break</b>	<b>Venue: 5<sup>th</sup> floor</b>
15:50 - 16:30	<b>Plenary Session 4</b> Chairs: Sybil Derrible & Thanh Son Nguyen	<b>Venue: 2<sup>nd</sup> floor</b>
15:50 - 16:30	<b>Keynote 7:</b> Ensuring success with 3D printing applications in construction - <i>Mirosław J. Skibniewski</i> , University of Maryland, USA	
16:30 - 17:10	<b>Keynote 8:</b> Applying a national BIM model to Vietnam's National Implementation of BIM: Lessons learned from the UK-Vietnam collaboration for the Industry - <i>Adam Matthews</i> , International for the UK Government's Building Information Modelling, UK	
17:10 - 17:30	<b>Closing session</b>	<b>Venue: 2<sup>nd</sup> floor</b>

## Poster sessions

TIME	
Day 1 (Oct. 31)	<b>Advanced modeling and characterization of structures</b>
15:35 – 16:35 5 <sup>th</sup> floor	<ol style="list-style-type: none"> <li>Application of weighted Latin hypercube sampling in stochastic modelling of shear strength of RC beams - <i>Le Nguyen Khuong</i></li> </ol>
and	<b>Sustainable Construction Materials and Technologies</b>
Day 2 (Nov. 1)	
14:50 – 15:50 5 <sup>th</sup> floor	<ol style="list-style-type: none"> <li>Performance of Recycled Coarse Aggregate Concrete with Different Nylon Fiber Content - <i>Lee Seungtae, Chu Youngkyu, Ha Sangwook, Kim Yong, Jeong Jaehong</i></li> <li>Study and propose the size of cement concrete slabs for airport road surface in Vietnam conditions - <i>Viet Nguyen Vu</i></li> <li>Investigation of the use of reclaimed asphalt pavement as aggregates in roller compacted concrete for road base pavement in Vietnam - <i>Nguyen Giang, Nguyen Lan, Bui Cay, Tran Trung Hieu, Dao Dong, Nguyen Dung</i></li> <li>Research on fabricating flowforms from ultra-high performance concrete with local admixtures for use in processing contaminated water - <i>Ung Thi Thuy Ha, Pham Tuan Hung, Leu Tho Bach</i></li> <li>Horizontal response of base-isolated buildings supported to high damping rubber bearings - <i>Nguyen Dung, Le Phong, Tran Minh</i></li> <li>Design of a Drinking Water Disinfection Systems using Ultraviolet Irradiation and Electrolysis Cell - <i>Tuan Phan Anh, Tan Nguyen Minh</i></li> <li>Application of Fluidized Power Coating for Propellers - <i>Tuan Phan Anh, Huong Pham Thi Thanh</i></li> </ol>
	<b>Geotechnics for Environment and Energy</b>
	<ol style="list-style-type: none"> <li>Stochastic site response analysis in consideration with various probability distributions of geotechnical properties - <i>Tran Tuan, Nguyen Phu-Cuong, Han Seung-Ryong, Kim Dookie</i></li> <li>Rheological and Microfabric Characteristics of Gold Tailings Stabilized With Fly Ash - <i>Lee Joon Kyu</i></li> <li>Numerical study of pile reinforced slope-A case at Khe Cham coal preparation construction site project (Vietnam) - <i>Dung Nguyen, Hung Nguyen, Do Tan</i></li> <li>Formation of Rust Scales on Mild Steel Pile in Brackish Water of Phu My Port – Vietnam - <i>Vuong Vinh-Dat, Vu Anh Quang, Katayama Eiji, Usami Shunsuke, Le Thang Van, Thao Nguyen Danh</i></li> <li>Study the influence of adherence edge to steel strip and soil interaction in Mechanically Stabilized Earth Wall with a self-made strip - <i>Linh Chau Truong, Ha Nguyen Thu</i></li> <li>Overview of Geomechanics and its applications to petroleum industry - a case study for minimum overbalance pressure calculation - <i>Nguyen Van Hung</i></li> <li>Enhanced oil recovery: A selection technique for the energy and recovery of Bach Ho field in Vietnam - <i>Nguyen Van Hung, Minh Quy Nguyen, Long Hoang, Quoc Trung Le, Le Vu Quan</i></li> </ol>

- Influence of heterogeneous fractured fault damage zones on shear failure onset during fluid injection - *Nguyen Trung Kien, Rohmer Jeremy, Vu Ba Thao*
- Experimental and numerical assessments of seepage effect on embankment behaviours by the time - *Nguyen Thanh Quang, Chau Truong-Linh, Nguyen The Hung*
- Dynamic properties of loose sand using numerical analysis-A case at Hong Thai Tay coal transportation road project (Vietnam)- *Hung Nguyen, Dung Nguyen, Do Tan*
- Nonlinear Behavior Analysis of SFRC Foundation Considering Homogeneous and Inhomogeneous Soil Interactions - *Radim Cajka, Nguyen Phu-Cuong, Tran Tuan*

## Urban Planning, Transport and Environment

- Flood risk assessment in the planning of new urban in Quangnam province, Vietnam - *To Thuy Nga, Le Hung, Vu Huy Cong*
- Modeling and applying heuristics for optimization of solid waste collection under consideration of vehicle capacity - *Dinh Hai Dung*
- Modeling land use change based on remote sensing, GIS and algorithm cellular automata decision support system for urban sustainability planning in Quy Nhon, Binh Dinh province central Vietnam - *Phan Van Tho, Ngo Anh Tu, Dang Thuc Trang, Matos Rute Sousa, Nguyen Thi Huyen*
- Analysis of Mode Choice Behavior under Adverse Weather Conditions Using RA and SP Surveys - A case study from Ho Chi Minh City, Vietnam - *Vu Anh Tuan, Nguyen Thi Thanh Huong*
- Factors influencing the choice of Bike Sharing System: An investigation of visitors and local people in Vietnam - *Nguyen Thanh Tu, Le Thu Huyen*
- Vehicle usage/ownership control for a Sustainable Transport system in the Motorcycle Dependent Cities - *Le Thu Huyen, Nguyen Thanh Tu*

## Building Information Modeling

- Application of Building Information Modelling, Extended tracking technique and Augmented Reality in Building Operating Management - *Tran Anh Binh*



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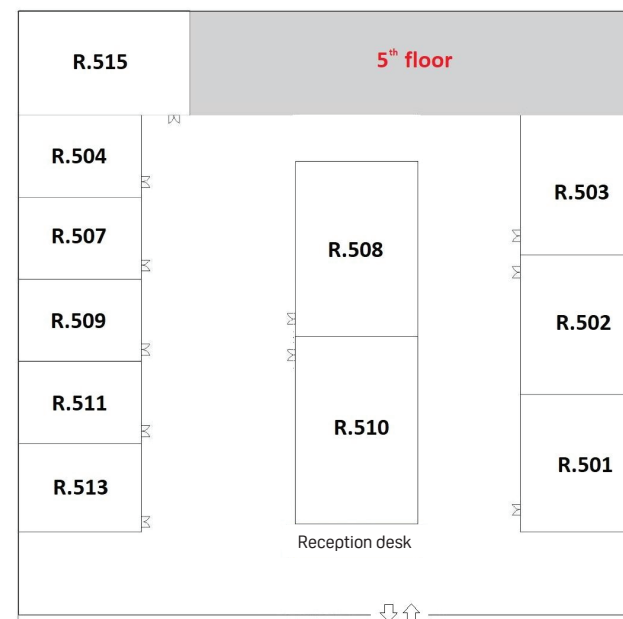


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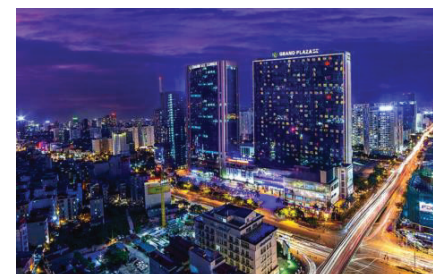
## Room map



## Wifi Free

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## Conference Venue Information



## Hanoi Grand Plaza Hotel

117 Trần Duy Hưng, Trung Hoà, Cầu Giấy, Hà Nội  
Tel: 024 3555 1000

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