

Day1(4/16) 14:00 - 15:30

Day1(4/16) 14:00 - 15:30		
TS6-15-1 Chair: William E. Kelly <i>(ASCE)</i>	TS7-3 Chair: Ken Kawamoto <i>(Saitama University)</i>	TS6-8-1 Chairs: Akira Kashida <i>(Kajima Corp.)</i>
ASCE's support for sustainable infrastructure education and practice William E. Kelly <i>(ASCE)</i>	Management of landfills reclaimed with construction and demolition wastes - Strength characterization for stability assessment Purbashree Sarmah <i>(Kyoto University)</i>	Automated construction in Oita-gawa dam project Takayuki Kambe <i>(Kajima Corp.)</i>
Transforming civil engineering education and practice to achieve the United Nations sustainable development goals: Where we are - Indian perspective Ajit Sabnis <i>(InCiCon AG)</i>	Measures taken in Construction and Demolition Waste (CDW) recycling in Japan Fumiaki Jikihara <i>(Ministry of Land, Infrastructure, Transport and Tourism)</i>	Applying computer vision technology to inclination monitoring of a drainage gallery in a landslide I-Hui Chen <i>(National Chung Hsing University)</i>
Status of Bangladesh in educating future civil engineers and practitioners on sustainable infrastructure practices Mohammad Ali Ashraf <i>(Southern University Bangladesh)</i>	Sources, barriers and good practices to reduce construction waste Lilliana Abarca-Guerreo <i>(Instituto Tecnológico de Costa Rica)</i>	As-built management using the execution history of construction machines in pavement construction Genzaburo Matsuura <i>(Tokyo City University)</i>

Day1(4/16) 14:00 - 15:30

<p>New Zealand's provision for sustainable infrastructure education and practice April J. Lander (<i>ASCE</i>)</p>	<p>Opportunities and challenges of construction and demolition waste utilization: case of concrete waste utilization in Bangkok Metropolitan Region, Thailand Vilas Nitivattananon (<i>Asian Institute of</i></p>	<p>Development of new road pavement condition visualization technology utilizing smartphone Hiroshi Sasaki (Fujitsu Traffic & Road Data Service Ltd.)</p>
<p>Sustainability practice in the Philippine Infrastructure Design and Construction Ernesto S. de Castro (<i>ESCA Inc./ PICE</i>)</p>	<p>Current situation and new regulations on construction and demolition waste management in Vietnam Nguyen Hoang Giang (<i>National University of Civil Engineering</i>)</p>	<p>Novotel Hotel extension project - planning, design and construction of a seismic isolated structure above an underground metro station Shih-Pu Kuo (Sinotech Engineer Consultants Ltd.)</p>
<p>Continual Learning Center in Nepal for Sustainable Infrastructure Practices Dhrub Rai Thapa (<i>Nepal Engineeres' Association</i>)</p>		

Day1(4/16) 14:00 - 15:30

Day1(4/16) 14:00 - 15:30		
TS6-14-1 Chair: Kuniyoshi Takeuchi (<i>University of Yamanashi</i>)	TS4-3 Chair: Akimasa Fujiwara (<i>Hiroshima University</i>)	TS6-12 Chair: Nobuyoshi Yabuki (<i>Osaka University</i>)
Transdisciplinary approach for scientific-knowledge based decision making for building societal resilience to disasters Kuniyoshi Takeuchi (<i>University of Yamanashi</i>)	An evaluation of traffic and safety efficiency of Single Point Urban (SPUI) and Diverging Diamond Interchange (DDI) interchange. Amir Masoud Rahimi (<i>University of Zanjan</i>)	Stereo vision based framework for on-site tracking of multiple workers Man-Woo Park (<i>Myongji University</i>)
Transdisciplinary approach in the preparedness phase of a debris flow prone village in Taiwan Ting-Chi Tsao (<i>Sinotech Engineering Consultants, Inc.</i>)	Potential and challenges of big data for transportation planning and management in the context of developing nations Arnab Jana (Indian Institute of Technology Bombay)	Image sensing of traffic flow characteristics and its application for traffic safety Albert Y. Chen (<i>Taiwan National University</i>)
Trans-disciplinary approach for enhancing resilience of business communities: learning from Padang city Harkunti Pertiwi Rahayu (<i>Institute Technology of Bandung</i>)	The effectiveness of collected travel-time data on travel time saving in a shared autonomous taxi system Zhiguang Liu (<i>Nagoya University</i>)	Productivity improvements in the field of construction by ICT Masahiko Takeda (<i>Japan Construction Information Center</i>)

Day1(4/16) 14:00 - 15:30

<p>Institutional structure for incorporating science into decision-making - Building the new-settlement of Tacloban city of the Philippines - Senro Kuraoka (<i>Nippon Koei Co., Ltd.</i>)</p>	<p>An analysis of trucks' tour pattern using GPS trajectory data of freight vehicles in the Tokyo Metropolitan Area Hideki Oka (<i>The Institute of Behavioral Sciences</i>)</p>	<p>Efforts for the practical use of BIM/CIM in Japan Hiroataka Sekiya (<i>Ministry of Land, Infrastructure, Transport and Tourism</i>)</p>
<p>Status of Vietnam coastal erosion and proposed policies for protection Kien Hoang Pham (<i>University of Transport and Communications</i>)</p>	<p>An analysis of traffic accident factors using ETC2.0 data Canh Xuan Do (<i>Hiroshima University</i>)</p>	<p>Efforts to improve productivity practiced by construction companies Fumihiro Ojima (<i>Tokyu Construction Co., Ltd.</i>)</p>
<p>Restoration of housings in Nepal after the Gorkha earthquake, April 25th, 2015 in the light of trans disciplinary approach Masashi Inoue (<i>Eight-Japan Engineering Consultants, Inc.</i>)</p>		
<p>Good reconstruction practices in Pakistan after the Kashmir earthquake Sarosh H. Lodi (<i>NED University of Engineering & Technology, Pakistan</i>)</p>		

Day1(4/16) 14:00 - 15:30		
Relocation and land-use regulation following the Great East Japan Earthquake: How can scientific knowledge be incorporated into recovery? Mikio Ishiwatari (<i>Japan International Cooperation Agency</i>)		
Trans disciplinary approach for restoration of Kumamoto castle after the earthquakes in 2016 Masaru Arakida (<i>Asian Disaster Reduction Center</i>)		

Day1(4/16) 14:00 - 15:30

<p>TS2-2 Chair: Osamu Kiyomiya <i>(Waseda University)</i></p>		<p>TS2-7 Chairs: Hiroyasu Kawai <i>(Port and Airport Research Institute), Wen-Son Chiang</i> <i>(National Cheng Kung University)</i></p>
<p>Technical standards development, the present state of technical standards and technical cooperation in the ports and harbors field in Japan Masafumi Miyata <i>(National Institute of Land and Infrastructure Management, MLIT)</i></p>		<p>Characteristics of coastal disasters due to swell overtopping in Japan Katsuya Hirayama <i>(Port and Airport Research Institute)</i></p>
<p>Development of design code for port and harbor facilities in Asian countries by university side Osamu Kiyomiya <i>(Waseda University)</i></p>		<p>Impact of wave height and sea level increasing on shoreline recession Wen-Son Chiang <i>(National Cheng Kung University)</i></p>
<p>Development of quality port infrastructure through the establishment of the national technical regulations and standards Hau Duc Nguyen <i>(Institute of Transport Science and Technology)</i></p>		<p>Introduction to the new web-based wave information system of Korea Sang-Ho Oh <i>(Korea Institute of Ocean Science and Technology)</i></p>

Day1(4/16) 14:00 - 15:30

<p>High quality infrastructure initiatives through the establishment of the national technical standard for port facilities</p> <p>Sinya Mori (<i>Ministry of Land, Infrastructure, Transport and Tourism</i>)</p>		<p>Flow characteristics of undular bore propagating over sloping beach</p> <p>Chang Lin (<i>National Chung Hsing University</i>)</p>
<p>The Cambodia ports and terminals management including the development of national technical standards and regulation for ports construction and operations</p> <p>Ros Sophornna (<i>Ministry of Public Works and</i></p>		<p>Current status and challenges of wave observation for ports and harbours in Japan</p> <p>Takashi Fujiki (<i>Port and Airport Research Institute</i>)</p>
		<p>Investigation of tropical depression characteristics and its associated surge along the coast of Bangladesh</p> <p>Md Abdul Al Mohit (<i>Kvushu University</i>)</p>

Day1(4/16) 16:00 - 17:30		
TS6-15-2 Chair: William E. Kelly <i>(ASCE)</i>	TS3-1 Chair: Chiwan W. Hsieh <i>(National Pingtung University of Science and Technology)</i>	TS6-8-2 Chairs: Akira Ooka <i>(Taisei Corp.)</i>
Next steps to ensure civil engineers in the U.S. can support achievement of the SDGs William E. Kelly <i>(ASCE)</i>	RECP installation effect on vegetation growth, soil erosion and Manning coefficient in channel flow Motsa Thabo <i>(National Pingtung University of Science and Technology)</i>	Design and construction of linkway with underpinning and SCL tunnels with ground freezing crossing underneath existing MRT live tunnels for Thomson-East Coast Line Marina Bay Station in Singapore
Next steps to ensure civil engineers in Japan can support achievement of the SDGs Yoshinori Fukubayashi <i>(University of Miyazaki)</i>	Model tests on geosynthetic-reinforced soil foundation subjected to normal faulting Jung Chiang <i>(National Taiwan University)</i>	Design and construction of the tunnel with artificial ground freezing for the 100m passenger adit of MTR West Island Line C704 in Hong Kong Teijiro Saito <i>(Nishimatsu)</i>
Technical cooperation and its contribution to the realization of the SDGs' "Data Revolution" Hiroshi Takeuchi <i>(Japan International Cooperation Agency)</i>	Applications of geosynthetics for countermeasures against nuclide contamination Takeshi Katsumi <i>(Kyoto University)</i>	On the volume restriction operation of artificially frozen ground for suppression of frost heaving by warm-water piping around frozen ground Hiroshi Ogura <i>(Seiken Co., Ltd.)</i>

Day1(4/16) 16:00 - 17:30		
	<p>Analysis of model test results on combined use of EPS and geogrid to improve seismic stability of bridge abutments</p> <p>Junichi Koseki (<i>The University of Tokyo</i>)</p>	<p>Prediction of ground deformation and freezing earth pressure with anisotropy of frost heave in artificial ground freezing method</p> <p>Masato Oishi (Seiken Co., Ltd.)</p>
	<p>Investigation of geosynthetic reinforced soil embankments</p> <p>Tomohiro Fujita (<i>Public Works Research Institute</i>)</p>	<p>The first and largest membrane-based water treatment plant in the Philippines</p> <p>Ronaldo C. Padua (Maynilad Water Services, Inc.)</p>
	<p>Lateral shear resistance of triangular geogrid-reinforced aggregate layer overlaying poorly-graded sand layer</p> <p>Jiro Kuwano (<i>Saitama University</i>)</p>	
	<p>Application of vertical drains for the construction of embankment</p> <p>Ying-Kung Wang (<i>Sinotech Engineering Consultants, Ltd.</i>)</p>	

Day1(4/16) 16:00 - 17:30		
TS6-14-2 Chair: Kuniyoshi Takeuchi (<i>University of</i> ACECC TC21's Efforts Toward Building Societal Resilience to Disasters through Transdisciplinary Approach (TDA) Yoshihiro Katsuhama (<i>Nippon Koei Co., Ltd.</i>)	TS6-6 Chair: Sang-Ho Lee (<i>Yonsei University</i>) The BIM application of Danjiang Bridge Project, Taiwan Ting Far Teng (<i>Sinotech</i> <i>Engineering Consultants,</i> <i>Ltd.</i>)	TS3-2 Chair: Shinichi Akutagawa (<i>Kobe University</i>) On-Site visualization for advanced safety management and maintenance for tunnels Shinichi Akutagawa (<i>Kobe</i> <i>University</i>)
Transdisciplinary Approach for Building Social Resilience to Disasters –The 21st Technical Committee Activity- Kenichi Tsukahara (<i>Kyushu University</i>)	Planning of the Infra BIM implementation for construction site offices Hee Won Park (<i>TAESUNG</i> <i>SNI Singapore</i>)	Case study on recovery of over-deformed metro tunnel in Shanghai by soil grouting Dongming Zhang (<i>Tongji</i> <i>University</i>)
	Now and future of Infra BIM mandate and projects Yoshihiko Fukuchi (<i>Autodesk Inc.</i>)	Consideration for supporting creation of 3-D model of underground structure Takeshi Okamoto (<i>Takenaka</i> <i>Civil Engineering &</i> <i>Construction Co., Ltd.</i>)
	Development of BIM-based information management system for railway infrastructure projects Sung-Hoon Kim (<i>TAESUNG SNI</i>)	Construction challenges and characteristic considerations for a metamorphic rock tunnel in Taiwan Zong-Han Wu (<i>CECI</i> <i>Engineering Consultants, Inc.</i>)

Day1(4/16) 16:00 - 17:30

	Development of BIM based standard technology for railway infrastructure Sang-Ho Lee (<i>Yonsei University</i>)	
--	--	--

Day1(4/16) 16:00 - 17:30

		TS2-1 Chair: Yoshimitsu Tajima <i>(The University of Tokyo)</i>
		Integration of remote sensing and GIS to study erosion and accretion at estuaries and coastal zone in Thua Thien Hue province Hung Thanh Nguyen <i>(Vietnam Academy for Water Resources)</i>
		Investigation of dynamic morphological changes around the potential cross-dams sites at the north-eastern part of the Meghna Estuary of Bangladesh Mohammad Asad Hussain <i>(Bangladesh University of Engineering and Technology)</i>
		Development of economic evaluation framework for adaptation to future beach loss Keiko Udo <i>(Tohoku University)</i>

		Potential use of discharge channel for beach recovery in Pamanukan - Subang Regency, Indonesia Takayuki Suzuki (<i>Yokohama National University</i>)
		Thailand's economic and adaptation assessment to future beach loss due to sea level rise Chatuphorn Somphong (<i>Tohoku University</i>)

Day2 (4/17) 09:00 - 10:30

Day2 (4/17) 09:00 - 10:30		
<p>TS4-1 Chair: Masaaki Okada <i>(Kindai University)</i></p>	<p>TS6-9 Chairs: Tsunemi Watanabe <i>(Kochi University of Technology),</i> Hai Luong Nguyen <i>(University of Transport and Communications)</i></p>	<p>TS6-8-3 Chairs: Akira Kashida <i>(Kajima Corp.)</i></p>
<p>Redesign of historical structures for succession and to create a story of bridges and people Yoh Sasaki <i>(Waseda University)</i></p>	<p>Investigation of users' viewpoints in post appraisal of ODA infrastructure projects: the case of Vietnam Hai Luong Nguyen <i>(University of Transport and Communications)</i></p>	<p>Construction of a sharp-curved balanced cantilever bridge over a highway in Jakarta Mass Rapid Transit Project Koushi Seki (Tokyu Constructin Co., Ltd.)</p>
<p>An actual proof of Tokushima's Museum of Bridges Shuichi Takeichi <i>(Tokushima Prefecture Land Development Public Corporation)</i></p>	<p>Evaluation approaches to improve efficiency of Japan's development assistance projects Satoshi Yamaoka <i>(Utsunomiya University)</i></p>	<p>Post-pile cap static axial loading test Muhammad Rizal (WIKA Engineering and Research Institute)</p>
<p>The importance of autonomous management by a local community for sustainable use of traditional water infrastructure: a case study in Gujo Hachiman Seiya Inomata <i>(School of the Water in Gujo-hachiman, Specified Nonprofit Corporation)</i></p>	<p>Introduction of users' viewpoint into post evaluation for ODA infrastructure projects focusing on appropriate technology Junji Yokokura <i>(Yachiyo Engineering Co., Ltd.)</i></p>	<p>Historic Franklin Avenue Bridge rehabilitation Stephen Kaldenbach <i>(Kraemer North America)</i></p>

Day2 (4/17) 09:00 - 10:30

<p>The new guide map of bridges gain much more interests of high school students</p> <p>Kei Suzuki (<i>Nihon University</i>)</p>	<p>Competitiveness of China's large international contractors in 2017</p> <p>Shuangliang Tai (<i>Harbin Institute of Technology</i>)</p>	<p>Design and construction of 6m diameter segmental tunnel in NIPE Contract C4, Singapore</p> <p>Ong Ai Bin (Penta Ocean Construction Co., Ltd.)</p>
	<p>Lesson learned and direction for performance improvement of ODA infrastructure project in Indonesia</p> <p>Dewi Larasati (<i>Institute of Teknologi Bandung</i>)</p>	<p>Tokyo Outer Ring Road, Main Line Tunnel Project (Tomei-North)</p> <p>Masami Moriguchi (Kajima Corp.)</p>
	<p>Estimation method to measure effectiveness of consulting engineers for public works in Japan</p> <p>Takashi Goso (<i>Tokyo City University</i>)</p>	
	<p>Motivation of construction engineers and users' satisfaction in infrastructure projects</p> <p>Tsunemi Watanabe (<i>Kochi University of</i></p>	

Day2 (4/17) 09:00 - 10:30

Day2 (4/17) 09:00 - 10:30		
TS4-6 & TS6-3 Chairs: Tamon Ueda <i>(Hokkaido University), Koki Hirota</i> <i>(Saitama University)</i>	TS2-6 Chairs: Toshio Koike <i>(Public Works Research Institute), Eko Winar Irianto</i> <i>(Research and Development Center for Water Resources, Bandung)</i>	TS4-4 Chair: Shunsuke Kamijo <i>(The University of Tokyo)</i>
Assessing quality of infrastructure in the United States William E. Kelly <i>(ASCE)</i>	Water and disasters - Toward building resilient society under climate change - Toshio Koike <i>(Public Works Research Institute)</i>	Logistics vehicle management system using ETC2.0 probe data Yuji Ikeda <i>(National Institute for Land and Infrastructure Management)</i>
Status and challenges of quality management for infrastructure in Taiwan Wu Te Ko <i>(Cheng Shiu University)</i>	Policy vision on rebuilding flood-conscious societies Hirotsada Matsuki <i>(Ministry of Land, Infrastructure, Transport and Tourism)</i>	Solutions for urban traffic issues using ITS Technologies Shunsuke Kamijo <i>(The University of Tokyo)</i>
Optimised management of aging infrastructure in Australia Paul Louis Mitchell <i>(Centre for Pavement Excellence Asia Pacific Ltd.)</i>	Management system for mitigation of flooding disaster in Tainan Cheng-Lun Shieh <i>(National Cheng Kung University)</i>	Impacts of driver's compliance levels on effectiveness of reactive variable speed limit control under freeway bottleneck congestion Sorawit Narupiti <i>(Chulalongkorn University)</i>

Day2 (4/17) 09:00 - 10:30		
<p>Japanese Private Sector's Contribution to Infrastructure Development in Asia</p> <p>Katsuji Fukumoto (<i>Obayashi Road Corporation</i>)</p>	<p>Integrated flood modelling and monitoring in Indonesia</p> <p>Irfan Sudono (<i>Research and Development Center for Water Resources, Bandung</i>)</p>	<p>Development of mobility as a service in Taiwan</p> <p>Jason Chang (<i>National Taiwan University</i>)</p>
<p>Quality and resilient infrastructure in Asia: How can investment gap be bridged?</p> <p>Koki Hirota (<i>Saitama University</i>)</p>	<p>Activities for risk reduction of water-related disasters through the IFI platform in the Philippines</p> <p>Maximo L. Carvajal (<i>Department of Public Works and Highways, the Philippines</i>)</p>	
<p>An analysis of the future demand for urban railways in Asia</p> <p>Hiroshi Takeuchi (<i>Japan International Cooperation Agency</i>)</p>		

Day2 (4/17) 09:00 - 10:30

Day2 (4/17) 09:00 - 10:30		
GS-6-1 Chair: Yoshinori Fukubayashi (<i>Miyazaki University</i>)	GS-1 & GS-5-1 Chair: Yuta Yamada (<i>Nihon University</i>)	TS2-3-1 Chair: Natsuhiko Otsuka (<i>Hokkaido University</i>)
Anti corruption, ethics, sustainable infrastructure and the UN sustainable development goals William E. Kelly (<i>ASCE</i>)	Structural design of the Danjiang Bridge, Taiwan - The largest asymmetric single tower cable stayed bridge Kilian Karius (<i>Leonhardt, Andra und Partner</i>)	Overview of recent shipping activities along the Northern Sea Route Xiaoyang Li (<i>Hokkaido University</i>)
A new engineering management contribution to SDGs in Asia Rikuo Katsumata (<i>Tokyo City University</i>)	Design of Chung Cheng Steel Arch Bridge in Taipei Hsin-Yang Tsai (<i>CECI Engineering Consultants, Inc.</i>)	Characteristics of sea ice condition for safe navigation along the Northern Sea Route Natsuhiko Otsuka (<i>Hokkaido University</i>)
GS-6 challenges and experiences: the professional construction management consultancy service of renovating sports venues for 2017 Taipei Summer Universiade Ting En Wu (<i>Moh &</i>)	A study on the design of experimental DB based on BIM for small and medium-sized aging Concrete bridge Se-Hyun Park (<i>KOCEC CMI</i>)	Estimation of sailing speed through ice covered waters based on the satellite observation along the Northern Sea Route Kazutaka Tateyama (<i>Kitami Institute of Technology</i>)
Risk analysis of PPP urban railway project in Asia Hidetoshi Matsushita (<i>National Graduate Institute for Policy Studies</i>)	Seismic risk assessment of bridges in Indonesia: methodology & case study Mutiara Cripstyani (<i>IUSS Pavia, PT Wiratman</i>)	

Day2 (4/17) 09:00 - 10:30

A Real Options Analysis (ROA) framework for resilient gas station projects Jatupol Siripongvakin (Kasetsart University)		
--	--	--

Day2 (4/17) 11:00 – 12:30

Hold	Day2 (4/17) 11:00 – 12:30	Hold
	TS2-5-1 Chairs: Hitoshi Tanaka <i>(Tohoku University),</i> Il Won Seo <i>(Seoul National University)</i>	
	Probable Maximum Precipitation (PMP) evaluation in Northeast Vietnam region in the context of climate change Thuy Thi Thanh Le <i>(Fukushima University)</i>	
	Levee breaches at the confluence of the Satsunai and Tottabetsu Rivers in Hokkaido, Japan Yoshiaki Ishida <i>(Hokkaido University)</i>	
	Estimating low flows in the flow duration curve of catchments in the humid tropics Chris Leong <i>(Fukushima University)</i>	
	Analysis of rainfall-induced shallow landslide using hydrological-geotechnical model Thapthai Chaithong <i>(Tohoku University)</i>	

Day2 (4/17) 11:00 – 12:30

	Characteristics of the disaster by Northern Kyushu Heavy Rain in July, 2017 Shinichiro Yano (<i>Kyushu University</i>)	
--	--	--

Day2 (4/17) 11:00 - 12:30

Day2 (4/17) 11:00 - 12:30		
TS6-3 & TS6-7 Chair: Koki Hirota (Saitama University), Tamon Ueda (<i>Hokkaido University</i>)	TS4-7 Chairs: Shinya Hanaoka (Tokyo Institute of Technology), Rubel Das (<i>Nippon Koei Co., Ltd.</i>)	TS6-16 Chair: Yoh Sasaki (<i>Waseda University</i>)
Estimating demand for flood protection infrastructure Mikio Ishiwatari (<i>Japan International Cooperation Agency</i>)	The role of urban planning in building disaster resilient cities and the demonstration case of Denpasar city in ASEAN Region Kien To (<i>Eight-Japan Engineering Consultants, Inc.</i>)	The role and challenges of girl's class in civil engineering - Kanto Gakuin University Sachiko Oyama (<i>Kojimagumi Co., Ltd.</i>)
Unlocking the spillover effect of Infrastructure and improving quality of life: new insights for private sector investment in developing countries in Asia Ke Seetha Ram (<i>Asian Development Bank</i>)	On the progress and prospect for promoting sponge city in Taiwan Shen-Hsien Chen (<i>Sinotech Engineering Consultants Inc.</i>)	SWCE's influence and expectations in Japanese construction industry Kiko Yamada Kawai (<i>Tokyo Institute of Technology</i>)
Discussion: policies of infrastructure development in Jakarta Sutanto Soehodho (<i>Jakarta Local Government; University of Indonesia</i>)	The key learned from the leaders in regional revitalization Shu Takahashi (<i>Nippon Koei Co., Ltd.</i>)	Women in civil engineering: attracting and retaining Robin A. Kemper (<i>ASCE</i>)

Day2 (4/17) 11:00 - 12:30

<p>Disaster risk reduction through resilient public infrastructure</p> <p>Maria Catalina E. Cabral <i>(Philippine Institute of Civil Engineers, Inc.)</i></p>	<p>Regeneration of urban functions by improving underground pedestrian network of The Otemachi-Marunouchi- Yurakucho districts</p> <p>Isao Muto <i>(Mitsubishi Jisho Sekkei Inc.)</i></p>	<p>Diversity & inclusion management supporting women's active participation - introduction of Pacific Consultant's actions-</p> <p>Ayako Okawa <i>(Pacific Consultants Co., Ltd.)</i></p>
<p>MLIT's initiative for promoting infrastructure investment</p> <p>Okumura Yasuhiro <i>(Ministry of Infrastructure, Land, Transport and Tourism)</i></p>	<p>The study on drainage and sewerage improvement project in Phnom Penh metropolitan area</p> <p>Kazuhiro Nakamura <i>(CTI Engineering Co., Ltd.)</i></p>	<p>Civil engineering: career prospects for women in the Middle East</p> <p>Dima Jawad <i>(Notre Dame University)</i></p>
	<p>Development of tidal embankment and area management after the Typhoon Yolanda in Philippines</p> <p>Masaaki Chida <i>(Pacific Consultants Co., Ltd.)</i></p>	<p>Women in (Australian) civil engineering leadership</p> <p>Rebecca J. Gravina <i>(RMIT University)</i></p>

Day2 (4/17) 11:00 - 12:30

Day2 (4/17) 11:00 - 12:30		
GS-6-2 & GS-3 Chair: Moonkyung Chung <i>(Korea Institute of Construction Engineering)</i>	GS-1 & GS-5-3 Chair: Hikari Nakamura <i>(Nagoya University)</i>	TS2-3-2 Chair: Natsuhiko Otsuka <i>(Hokkaido University)</i>
Basic study on efficiency improvement of road degradation analysis using floating car data and mobile mapping system Kunihiro Ishii <i>(Aisa Air Survey Co., Ltd.)</i>	Design of steel beams strengthened using low modulus carbon fiber reinforced polymers Mahendrakumar Madhavan <i>(Indian Institute of Technology Hyderabad)</i>	Sailing route optimization for the NSR to minimize the fuel consumption Hajime Yamaguchi <i>(The University of Tokyo)</i>
Applying time domain reflectometry technology to measure slope deformation in landslides I-Hui Chen <i>(National</i>	Effect of crack path on shear load carrying mechanism of RC beams Yuta Yamada <i>(Nihon University)</i>	A semi-supervised sea ice SAR image segmentation strategy based on WGANs Yu-Huan Zhao <i>(Fudan University)</i>
Network of large scale testing facilities in Korea established by KOCED program Gyeongjung Kim <i>(KOCED CMI)</i>	Shear strengthening of RC beams reinforced by FRP grid-PCM Rui Guo <i>(Southwest Jiaotong University)</i>	Route search system in ice sea using dynamic window approach Toshiyuki Takagi <i>(National Institute of Technology, Kushiro)</i>
Standardization of test procedures in construction field of Korea Taehyeong Kim <i>(KOCED CMI)</i>	Elimination of transverse reinforcement in new RC beam-column joints by using highly flowable strain hardening fiber reinforced concrete (HF-SHFRC) Wen-Cheng Liao <i>(National Taiwan University)</i>	

Day2 (4/17) 11:00 - 12:30

	Investigation of axial force effect on the seismic response of RC piers using real-time hybrid simulation Minseok Park (<i>Myongji University</i>)	
	A novel analysis method of SDOF dynamic structure response considering soil structure interaction by soil impedance function Chiehcheng Chen (<i>National Taipei University of Technology</i>)	

Day2 (4/17) 14:00 - 15:30

Day2 (4/17) 14:00 - 15:30		
<p>TS1-1 Chairs: Dong Soo Kim <i>(Korea Advanced Institute of Science and Technology)</i>, Riki Honda <i>(The University of Tokyo)</i></p>	<p>TS2-5-2 Chairs: Hitoshi Tanaka <i>(Tohoku University)</i>, Il Won Seo <i>(Seoul National University)</i></p>	<p>TS6-4 Chairs: Hironori Kato <i>(The University of Tokyo)</i>, Le Binh Phan <i>(Vietnam Japan University)</i></p>
<p>Evaluation of seismic coefficients for pseudo static analysis of gravity type quay wall by centrifuge tests Dong Soo Kim <i>(Korea Advanced Institute of Science and Technology)</i></p>	<p>Evaluation of landuse cover change and climate change impact to hazard area in Laos PDR Sengphrachanh Phrakonkham <i>(Tohoku University)</i></p>	<p>Engineering education for civil engineers in Asia: lessons from International Engineering Program of the University of Tokyo, Japan Hironori Kato <i>(The University of Tokyo)</i></p>
<p>Seismic design methods for resilience against intense earthquake in Chile Victor Diaz <i>(Ministry of Public Works)</i></p>	<p>Drone-based tracer tests for observing the spatio-temporal distributions of pollutant spilled into river Donghae Baek <i>(Seoul National University)</i></p>	<p>Engineering education for civil engineers in Vietnam Japan University toward a sustainable development Le Binh Phan <i>(Vietnam Japan University)</i></p>
<p>Implementation and new approach for resilience design against extreme events: seismic design of highway bridges in Japan Shojiro Kataoka <i>(National Institute for Land and Infrastructure Management)</i></p>	<p>Feasibility of velocity-based method for transverse mixing coefficients of 2D mixing analysis in natural rivers Sung Hyun Jung <i>(Seoul National University)</i></p>	<p>AUN/SEED-Net to develop educational program among developing countries with Japanese university Tamon Ueda <i>(Hokkaido University)</i></p>

Day2 (4/17) 14:00 - 15:30

Strong ground motions to be employed during the design and performance analysis of building type of structures according to the New Turkish Seismic Code Beyza Taskin (<i>Istanbul Technical University</i>)	Study of flow and mixing characteristics in open channel flow with rigid vegetation Il Won Seo (<i>Seoul National University</i>)	Some challenges in designing an educational curriculum in civil engineering Sudhir Misra (<i>Indian Institute of Technology</i>)
Overview of the state of the art in performance-based design of port waterfront structures Stephen E. Dickenson (<i>New Albion Geotechnical, Inc.</i>)	Analysis of regional characteristics of natural disasters in the Philippines Keisuke Ono (<i>CTI Engineering Internatinal Co., Ltd.</i>)	Building blocks for quality in engineering education Paul Louis Mitchell (<i>Centre for Pavement Excellence Aisa Pacific Ltd.</i>)

Day2 (4/17) 14:00 - 15:30

Day2 (4/17) 14:00 - 15:30		
Hold	GS-1 & GS-5-2 Chair: Kolluru V.L. Subramaniam (I.I.T. Hyderabad)	Hold
	Alkali-activated cements: overview on current robustness of the technology Joonho Seo (<i>Korea Advanced Institute of Science and Technology</i>)	
	Evaluation of concrete frost damage depth using thermography Yutaka Takashina (<i>Kobe City College of Technology</i>)	
	Early age behavior of crack movement in RCC base of HMA-RCC composite pavement Tetsya Sok (<i>Gangneung- Wonju National University</i>)	

Day2 (4/17) 14:00 - 15:30

Performance of exposed
aggregate concrete pavement
Jae Hoon Kim (*Gangneung-
Wonju National University*)

Da3 (4/18) 11:00 - 12:30

Da3 (4/18) 11:00 - 12:30		
<p>TS7-2 Chair: Tomohito Yamada <i>(Hokkaido University)</i></p>	<p>TS5-1 Chair: Tetsuya Ishida <i>(The University of Tokyo)</i></p>	<p>TS2-4 Chair: Shinji Yamaguchi <i>(National Institute for Land and Infrastructure Management, MLIT)</i></p>
<p>A decision support system for highway infrastructure protection planning against sea level rise Jinwoo Lee <i>(The Hong Kong Polytechnic University)</i></p>	<p>Potential utilizations of off-standard fly ashes Somnuk Tangtermsirikul <i>(Thammasat University)</i></p>	<p>Climate change and countermeasures against sediment disaster in Japan Taro Uchida <i>(National Institute for Land and Infrastructure Management, MLIT)</i></p>
<p>The analysis of future flood risk in Hokkaido, northern Japan, using database for policy decision making for future climate change (d4PDF) Tomohito Yamada <i>(Hokkaido University)</i></p>	<p>Application of fly ash and bottom ash from coal fired thermal power plants in Sri Lanka S. M. A. Nanayakkara <i>(University of Moratuwa)</i></p>	<p>Overview of current landslide hazard zonation mapping methodology utilize in Sri Lanka M.A.K. Kumari <i>(National Building Research Organisation)</i></p>
<p>Climate change adaptation in water sensitive urban design strategies Paul Louis Mitchell <i>(Centre for Pavement Excellence Asia Pacific Ltd.)</i></p>	<p>High-volume utilization of supplementary cementitious materials in concrete buildings toward sustainability Takafumi Noguchi <i>(The University of Tokyo)</i></p>	<p>Hazard mitigation and preparedness of potential deep-seated landslide and debris flow torrent in Taiwan: introduction of recent government actions Ching-Ying Tsou <i>(Hiroasaki University)</i></p>

Da3 (4/18) 11:00 - 12:30

<p>The analysis of future heavy rainfall in Hokkaido, northern Japan, using database for Policy Decision making for Future climate change (d4PDF)</p> <p>Tsuyoshi Hoshino</p>	<p>Efficient production of alkali-activated geopolymers from low-calcium fly ash</p> <p>Kolluru V.L. Subramaniam (<i>Indian Institute of Technology</i>)</p>	<p>Prompt maximum damage estimation against sediment disaster based on sediment movement magnitude</p> <p>Shinichiro Hayashi (<i>Hokkaido University</i>)</p>
	<p>Application of mineral admixtures in hot weather conditions</p> <p>Shingo Asamoto (<i>Saitama University</i>)</p>	<p>Estimating end of life for Sabo dams</p> <p>Kihwan Lee (<i>University of Yeungnam</i>)</p>
	<p>Current situation on the utilization of industrial by-products for construction in Vietnam</p> <p>TBA</p>	<p>The megadisaster of the mountain region of the Rio de Janeiro State, Brazil, and advances of knowledge about debris flows in Brazil</p> <p>Ingrid Ferreira Lima (<i>Federal University of Rio de Janeiro</i>)</p>
	<p>Multiphase model for predicting temperature-dependent pozzolanic reaction of low-calcium fly ash in cement systems</p> <p>Tetsuya Ishida (<i>The University of Tokyo</i>)</p>	

Day3 (4/18) 11:00 - 12:30

Day3 (4/18) 11:00 - 12:30		
TS6-5 Chairs: Mitsuyasu Iwanami (<i>Tokyo Institute of Technology</i>) Thomas W. Smith, III (<i>ASCE</i>)	GS-2 Chairs: Akiyuki Kawasaki (<i>The University of Tokyo</i>), Jinwoo Lee (<i>The Hong Kong Polytechnic University</i>)	GS-4-1 Chairs: Kuniaki Sasaki (<i>Waseda University</i>), Arnab Jana (<i>Indian Institute of Technology Bombay</i>)
Enhancing citizens' understanding on importance of infrastructure based on Infrastructure Health Report Mitsuyasu Iwanami (<i>Tokyo Institute of Technology</i>)	Computational calculations of different heavy metal binding onto magnetic cored dendrimer Jae-Woo Park (<i>Hanyang University</i>)	Analysis of basic characteristics of ETC2.0 probe data Toshikazu Mathushima (<i>Chuo Fukken Consultants Co., Ltd. </i>)
Trial version of Infrastructure Health Report on river sector Yuji Toda (<i>Nogoya University</i>)	Forest fire severity in the 2017 Kamaishi Forest Fire using remote sensing and post-fire observations Grace Puyang Emang (<i>Tohoku University</i>)	The impact of truck lane on vehicular flow along an arterial road in Metro Manila Alexis Morales Fillone (<i>De La Salle University</i>)
Enhancing citizens' understanding on importance of infrastructure based on Infrastructure Health Report Thomas W. Smith III (<i>ASCE</i>)	Model design of concentrator photovoltaic with thermal and waste heat recovery system Chi Xu (<i>University of Florida</i>)	Analysis of vehicle behavior under heavy snowfall using commercial vehicle probe data Hiroshi Inagaki (<i>Fujitsu Traffic & Road Data Service Ltd.</i>)

Day3 (4/18) 11:00 - 12:30

<p>Infrastructure Health Report of JSCE Hikaru Nakamura (<i>Nagoya University</i>)</p>	<p>Dependence of drag coefficient on sea spray, raindrop and wave state Hiroki Okachi (<i>Hokkaido University</i>)</p>	<p>Analysis of requirements of data used for grasping the situation of urban spaces and aging of population Takato Uehara (<i>Tokyo City University</i>)</p>
<p>Australian infrastructure development Shalendra Ram (<i>AECOM, EA</i>)</p>	<p>Heat storage in salinity aquaculture ponds observed in the tropics Akinori Ozaki (<i>Institute of Tropical Agriculture, Kyushu University</i>)</p>	

Day3 (4/18) 11:00 -	Day3 (4/18) 14:00 - 15:30	
GS-6-3 Chair: Kazuyoshi Tateyama (<i>Ritsumeikan University</i>)	TS7-4 Chair: Minoru Yoneda (<i>Kyoto University</i>)	TS5-2 Chairs: Tadashi Hara (<i>Kochi University</i>), Rihong Zhang (<i>Ningbo University</i>)
Next step of worksite model utilizing ICRT Hiroshi Yamamoto (<i>Komatsu Ltd.</i>)	Quantifying the environmental impacts of structural elements of standard bidge designs Andres Winston C. Oreta (<i>PICE</i>)	Wood utilization in civil engineering Tadashi Hara (<i>Kochi University</i>)
Initatives for the use field robots and AI in infrastructure management Yasushi Nitta (<i>Public Works Research Institute</i>)	Role of civil engineering in mitigation of climate change - proposal from Japan Society of Civil Engineers - Minoru Yoneda (<i>Kyoto University</i>)	Development of timber guardrail using round logs of Japanese cedar Rihong Zhang (<i>Ningbo University</i>)
An study on understanding the behavioral phenomenon of transportation engineering by implementation of AI: an apporach to provide effective solutions of a complex problem in transportation engineering Rafiur Rahman Khan (<i>European University of Bangladesh</i>)	Carbon footprint assessment for resilient Infrastructure construction using discrete-event simulation Jakkawarn Somboonpisan (<i>Kasesart University</i>)	Climate change mitigation potential of wood use in civil engineering in Japan through 2050 Chihiro Kayo (<i>Tokyo University of Agricultura and Technology</i>)

Day3 (4/18) 11:00 -	Day3 (4/18) 14:00 - 15:30	
<p>Basic study on prepararion method of road map using three-dimensional data of I-Construction results</p> <p>Minori Yamada (<i>Tokyo City University</i>)</p>	<p>A fundamental study on development of construction standard code considering 4th industrial revolution technology</p> <p>Yeonggyeong Ju (<i>Korea Institute of Civil Engineering and Building Technology</i>)</p>	<p>Working principles and future prospects of timber pile dykes for alluvial river management</p> <p>Hao Zhang (<i>Kochi University</i>)</p>
	<p>Role of civil engineering in mitigation of climate change - the infrastructure of renewable energy resources</p> <p>Barry Ronald Tonkin (<i>EA</i>)</p>	<p>Study on liquefaction countermeasure technique using logs based on field investigation and shaking table test</p> <p>Masaho Yoshida (<i>National Institue of Technology</i>)</p>
		<p>An application example of log piling method for liquefaction mitigation and carbon stock</p> <p>Atsunori Numata (<i>Tobishima Corp.</i>)</p>
		<p>Future perspectives of sustainable bioenergy development in Japan with local woody biomass</p> <p>Chun Sheng Goh (<i>Institute for the Advanced Study of Sustainability, United Nations Univeristy</i>)</p>

Day3 (4/18) 14:00 - 15:30

Day3 (4/18) 14:00 - 15:30			
TS6-13 Chair: Hiromasa Iwai <i>(Nagoya Institute of Technology)</i>	GS-7 Chairs: Tetsuya Ikeda <i>(ICHARM), Chjeng-Lun Shieh</i> <i>(National Cheng Kung University)</i>	GS-4-2 Chairs: Kuniaki Sasaki <i>(Waseda University), Arnab Jana</i> <i>(Indian Institute of Technology)</i>	GS-6-4 Chairs: Satoshi Kubota <i>(Kansai University)</i>
Study of failure on civil engineering Hiromasa Iwai <i>(Nagoya Institute of Technology)</i>	Hydrological frequency analysis introducing confidence interval based on probability limit method test Keita Shimizu <i>(Chuo University)</i>	Determining high risk road segments using spatial statistical analysis case study: Mount Lebanon Francesco Rouhana <i>(Notre Dame University)</i>	Using text-mining skills to establish concept maps for construction fatality assessment and control applications Shang-Hsien Hsieh <i>(National Taiwan University)</i>
Study of failures in civil engineering - a Pakistani perspective Hiba Nuzhat Lodi <i>(The Institution of Engineers, Pakistan)</i>	Establishment of smart drainage toolbox for Taoyuan City Hsuan Yu Lin <i>(Sinotech Engineering Consultants, Ltd.)</i>	Street resilience modeling for Beirut disaster Dima Jawad <i>(Notre Dame University)</i>	Basic study on measurement of empirical knowledge of skilled workers in concrete placement Takuya Yokota <i>(Tokyo City University)</i>
	Sampling downscaling using pattern recognition: A case for Baiu rainfall over northern Kyushu Dzung Nguyen-Le <i>(Hokkaido University)</i>	Optimal inspection, maintenance, and reconstruction policies for pavement system under model uncertainty Jinwoo Lee <i>(The Hong Kong Polytechnic University)</i>	Visualization system of suspended load area for crane operator Masaya Nakahara <i>(Kansai University)</i>
	Rainfall-runoff analysis considering uncertain conditions based on stochastic process theory Daiwei Cheng <i>(Chuo University)</i>	Cable protecting system using DAS (Distributed Acoustic Sensing) and FOC(Fiber Optic Cable) Ahri Lee <i>(AP Technologies)</i>	Underwater unmanned construction machine system for port and airport Muneo Yoshie <i>(Port and Airport Research Institute)</i>

Day3 (4/18) 14:00 - 15:30

	Application of SEC-HY21 Model on tsunami simulations generated by underwater volcanic explosions or landslides Arthur T.H. Perng <i>(Sinotech Engineering Consultants, Ltd.)</i>		On exploring optimal route about bulldozer spreading work using deep learning reinforcement learning with bulldozer spreading simulator Daisuke Tajima <i>(Kajima Corp.)</i>
--	---	--	--