

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

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

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

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

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<p>Institutional structure for incorporating science into decision-making - Building the new-settlement of Tacloban city of the Philippines -  <b>Senro Kuraoka</b> (<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  <b>Hideki Oka</b> (<i>The Institute of Behavioral Sciences</i>)</p>	<p>Efforts for the practical use of BIM/CIM in Japan  <b>Hiroataka Sekiya</b> (<i>Ministry of Land, Infrastructure, Transport and Tourism</i>)</p>
<p>Status of Vietnam coastal erosion and proposed policies for protection  <b>Kien Hoang Pham</b> (<i>University of Transport and Communications</i>)</p>	<p>An analysis of traffic accident factors using ETC2.0 data  <b>Canh Xuan Do</b> (<i>Hiroshima University</i>)</p>	<p>Efforts to improve productivity practiced by construction companies  <b>Fumihiro Ojima</b> (<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  <b>Masashi Inoue</b> (<i>Eight-Japan Engineering Consultants, Inc.</i>)</p>		
<p>Good reconstruction practices in Pakistan after the Kashmir earthquake  <b>Sarosh H. Lodi</b> (<i>NED University of Engineering &amp; Technology, Pakistan</i>)</p>		

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

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

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<p>High quality infrastructure initiatives through the establishment of the national technical standard for port facilities</p> <p><b>Sinya Mori</b> (<i>Ministry of Land, Infrastructure, Transport and Tourism</i>)</p>		<p>Flow characteristics of undular bore propagating over sloping beach</p> <p><b>Chang Lin</b> (<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><b>Ros Sophornna</b> (<i>Ministry of Public Works and</i></p>		<p>Current status and challenges of wave observation for ports and harbours in Japan</p> <p><b>Takashi Fujiki</b> (<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><b>Md Abdul Al Mohit</b> (<i>Kyushu University</i>)</p>

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



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	<p>Analysis of model test results on combined use of EPS and geogrid to improve seismic stability of bridge abutments <b>Junichi Koseki</b> (<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 <b>Masato Oishi</b> (Seiken Co., Ltd.)</p>
	<p>Investigation of geosynthetic reinforced soil embankments <b>Tomohiro Fujita</b> (<i>Public Works Research Institute</i>)</p>	<p>The first and largest membrane-based water treatment plant in the Philippines <b>Ronaldo C. Padua</b> (Maynilad Water Services, Inc. )</p>
	<p>Lateral shear resistance of triangular geogrid-reinforced aggregate layer overlaying poorly-graded sand layer <b>Jiro Kuwano</b> (<i>Saitama University</i>)</p>	<p>Design and construction of 6m diameter segmental tunnel in NIPE Contract C4, Singapore <b>Ong Ai Bin</b> (Penta Ocean Construction Co., Ltd.)</p>
	<p>Application of vertical drains for the construction of embankment <b>Li-Sheng Tseng</b> (<i>Sinotech Engineering Consultants, Ltd.</i>)</p>	

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

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Development of BIM based  
standard technology for  
railway infrastructure  
**Sang-Ho Lee** (*Yonsei  
University*)

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		<b>TS2-1</b> <b>Chair: Yoshimitsu Tajima</b> <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 <b>Hung Thanh Nguyen</b> <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 <b>Mohammad Asad Hussain</b> <i>(Bangladesh University of Engineering and Technology)</i>
		Development of economic evaluation framework for adaptation to future beach loss <b>Keiko Udo</b> <i>(Tohoku University)</i>

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

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

<p><b>TS4-1</b>  <b>Chair: Masaaki Okada</b>  <i>(Kindai University)</i></p>	<p><b>TS6-9</b>  <b>Chairs: Tsunemi Watanabe</b> <i>(Kochi University of Technology),</i>  <b>Hai Luong Nguyen</b>  <i>(University of Transport and Communications)</i></p>	<p><b>TS6-8-3</b>  <b>Chairs: Akira Kashida</b>  <i>(Kajima Corp.)</i></p>
<p>Redesign of historical structures for succession and to create a story of bridges and people  <b>Yoh Sasaki</b> <i>(Waseda University)</i></p>	<p>Investigation of users' viewpoints in post appraisal of ODA infrastructure projects: the case of Vietnam  <b>Luong Hai Nguyen</b>  <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  <b>Koushi Seki</b> (Tokyu Constructin Co., Ltd.)</p>
<p>An actual proof of Tokushima's Museum of Bridges  <b>Shuichi Takeichi</b>  <i>(Tokushima Prefecture Land Development Public Corporation)</i></p>	<p>Evaluation approaches to improve efficiency of Japan's development assistance projects  <b>Satoshi Yamaoka</b>  <i>(Utsunomiya University)</i></p>	<p>Post-pile cap static axial loading test  <b>Muhammad Rizal</b> (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  <b>Seiya Inomata</b> <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  <b>Junji Yokokura</b> <i>(Yachiyo Engineering Co., Ltd.)</i></p>	<p>Historic Franklin Avenue Bridge rehabilitation  <b>Stephen Kaldenbach</b>  <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><b>Kei Suzuki</b> (<i>Nihon University</i>)</p>	<p>Competitiveness of China's large international contractors in 2017</p> <p><b>Shuangliang Tai</b> (<i>Harbin Institute of Technology</i>)</p>	<p>Construction of Bang Pa-in-Korat Section 28-31 Project (Thailand )</p> <p><b>Piyadit Atsavasirisuk</b> (The Civil Engineering Co., Ltd.)</p>
	<p>Lesson learned and direction for performance improvement of ODA infrastructure project in Indonesia</p> <p><b>Dewi Larasati</b> (<i>Institute of Teknologi Bandung</i>)</p>	<p>Tokyo Outer Ring Road, Main Line Tunnel Project (Tomei-North)</p> <p><b>Masami Moriguchi</b> (Kajima Corp.)</p>
	<p>Estimation method to measure effectiveness of consulting engineers for public works in Japan</p> <p><b>Takashi Goso</b> (<i>Tokyo City University</i>)</p>	
	<p>Motivation of construction engineers and users' satisfaction in infrastructure projects</p> <p><b>Tsunemi Watanabe</b> (<i>Kochi University of</i></p>	

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

<p><b>TS4-6 &amp; TS6-3</b>  <b>Chairs: Koki Hirota</b>  <i>(Saitama University),</i>  <b>Tamon Ueda</b> <i>(Hokkaido University)</i></p>	<p><b>TS2-6</b>  <b>Chairs: Toshio Koike</b>  <i>(Public Works Research Institute),</i> <b>Eko Winar Irianto</b> <i>(Research and Development Center for Water Resources, Bandung)</i></p>	<p><b>TS4-4</b>  <b>Chair: Shunsuke Kamijo</b>  <i>(National Institute for Land and Infrastructure Management, MLIT)</i></p>
<p>Estimating demand for flood protection infrastructure  <b>Mikio Ishiwatari</b> <i>(Japan International Cooperation Agency)</i></p>	<p>Water and disasters - Toward building resilient society under climate change -  <b>Toshio Koike</b> <i>(Public Works Research Institute)</i></p>	<p>Logistics vehicle management system using ETC2.0 probe data  <b>Yuji Ikeda</b> <i>(National Institute for Land and Infrastructure Management)</i></p>
<p>Quality and resilient infrastructure in Asia: How can investment gap be bridged?  <b>Koki Hirota</b> <i>(Saitama University)</i></p>	<p>Policy vision on rebuilding flood-conscious societies  <b>Hirotsada Matsuki</b> <i>(Ministry of Land, Infrastructure, Transport and Tourism)</i></p>	<p>Solutions for urban traffic issues using ITS Technologies  <b>Shunsuke Kamijo</b> <i>(National Institute for Land and Infrastructure Management, MLIT)</i></p>
<p>An analysis of the future demand for urban railways in Asia  <b>Hiroshi Takeuchi</b> <i>(Japan International Cooperation Agency)</i></p>	<p>Management system for mitigation of flooding disaster in Tainan  <b>Cheng-Lun Shieh</b> <i>(National Cheng Kung University)</i></p>	<p>Impacts of driver's compliance levels on effectiveness of reactive variable speed limit control under freeway bottleneck congestion  <b>Sorawit Narupiti</b> <i>(Chulalongkorn University)</i></p>



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

<p>Unlocking the spillover effect of Infrastructure and improving quality of life: new insights for private sector investment in developing countries in Asia</p> <p><b>Ke Seetha Ram</b> (<i>Asian Development Bank Institute</i>)</p>	<p>Integrated flood modelling and monitoring in Indonesia</p> <p><b>Eko Winar Irianto</b> (<i>Research and Development Center for Water Resources, Bandung</i>)</p>	<p>Development of mobility as a service in Taiwan</p> <p><b>Jason Chang</b> (<i>National Taiwan University</i>)</p>
<p>The economics of investment in flood risk reduction in developing countries: an application to the Rocha River Basin, Bolivia</p> <p><b>David Corderi Novoa</b> (<i>Natural Resources and Disaster Risk Management Division</i>)</p>	<p>Activities for risk reduction of water-related disasters through the IFI platform in the Philippines</p> <p><b>Maximo L. Carvajal</b> (<i>Department of Public Works and Highways, the Philippines</i>)</p>	
<p>Status and challenges of quality management for infrastructure in Taiwan</p> <p><b>Wu Te Ko</b> (<i>Cheng Shiu University</i>)</p>		

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

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

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

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**Day2 (4/17) 11:00 – 12:30**

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

**Day2 (4/17) 11:00 – 12:30**

	<p>Characteristics of the disaster by Northern Kyushu Heavy Rain in July, 2017 <b>Shinichiro Yano</b> (<i>Kyushu University</i>)</p>	
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**Day2 (4/17) 11:00 - 12:30**

<p><b>TS6-3 &amp; TS6-7</b>  <b>Chair: Tamon Ueda</b>  <i>(Hokkaido University)</i></p>	<p><b>TS4-7</b>  <b>Chairs: Shinya Hanaoka</b>  <i>(Tokyo Institute of Technology), Rubel Das</i>  <i>(Nippon Koei Co., Ltd.)</i></p>	<p><b>TS6-16</b>  <b>Chair: Yoh Sasaki</b>  <i>(Waseda University)</i></p>
<p>Assessing quality of infrastructure in the United States  <b>William E. Kelly</b> <i>(ASCE)</i></p>	<p>The role of urban planning in building disaster resilient cities and the demonstration case of Denpasar city in ASEAN Region  <b>Kien To</b> <i>(Eight-Japan Engineering Consultants, Inc.)</i></p>	<p>The role and challenges of girl's class in civil engineering - Kanto Gakuin University  <b>Sachiko Oyama</b>  <i>(Kojimagumi Co., Ltd.)</i></p>
<p>Optimised management of aging infrastructure in Australia  <b>Paul Louis Mitchell</b>  <i>(Centre for Pavement Excellence Asia Pacific Ltd.)</i></p>	<p>On the progress and prospect for promoting sponge city in Taiwan  <b>Shen-Hsien Chen</b>  <i>(Sinotech Engineering Consultants Inc.)</i></p>	<p>SWCE's influence and expectations in Japanese construction industry  <b>Kiko Yamada Kawai</b>  <i>(Tokyo Institute of Technology)</i></p>
<p><b>TBA</b>  <b>Katsuji Fukumoto</b>  <i>(Obayashi Road Corporation)</i></p>	<p>The key learned from the leaders in regional revitalization  <b>Shu Takahashi</b> <i>(Nippon Koei Co., Ltd.)</i></p>	<p>Women in civil engineering: attracting and retaining  <b>Robin A. Kemper</b> <i>(ASCE)</i></p>

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

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

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

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



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

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

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

<p><b>TS1-1</b>  <b>Chairs: Dong Soo Kim</b>  <i>(Korea Advanced Institute of Science and Technology), Riki Honda</i>  <i>(The University of Tokyo)</i></p>	<p><b>TS2-5-2</b>  <b>Chairs: Hitoshi Tanaka</b>  <i>(Tohoku University), Il Won Seo</i>  <i>(Seoul National University)</i></p>	<p><b>TS6-4</b>  <b>Chairs: Hironori Kato</b>  <i>(The University of Tokyo), Le Binh Phan</i>  <i>(Vietnam Japan University)</i></p>
<p>Evaluation of seismic coefficients for pseudo static analysis of gravity type quay wall by centrifuge tests  <b>Dong Soo Kim</b> <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  <b>Sengphrachanh Phrakonkham</b> <i>(Tohoku University)</i></p>	<p>Engineering education for civil engineers in Asia: lessons from International Engineering Program of the University of Tokyo, Japan  <b>Hironori Kato</b> <i>(The University of Tokyo)</i></p>
<p>Seismic design methods for resilience against intense earthquake in Chile  <b>Victor Diaz</b> <i>(Ministry of Public Works)</i></p>	<p>Drone-based tracer tests for observing the spatio-temporal distributions of pollutant spilled into river  <b>Donghae Baek</b> <i>(Seoul National University)</i></p>	<p>Engineering education for civil engineers in Vietnam Japan University toward a sustainable development  <b>Le Binh Phan</b> <i>(Vietnam Japan University)</i></p>
<p>Implementation and new approach for resilience design against extreme events: seismic design of highway bridges in Japan  <b>Shojiro Kataoka</b>  <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  <b>Sung Hyun Jung</b> <i>(Seoul National University)</i></p>	<p>AUN/SEED-Net to develop educational program among developing countries with Japanese university  <b>Tamon Ueda</b> <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 <b>Beyza Taskin</b> ( <i>Istanbul Technical University</i> )	Study of flow and mixing characteristics in open channel flow with rigid vegetation <b>Il Won Seo</b> ( <i>Seoul National University</i> )	Some challenges in designing an educational curriculum in civil engineering <b>Sudhir Misra</b> ( <i>Indian Institute of Technology</i> )
Overview of the state of the art in performance-based design of port waterfront structures <b>Stephen E. Dickenson</b> ( <i>New Albion Geotechnical, Inc.</i> )	Analysis of regional characteristics of natural disasters in the Philippines <b>Keisuke Ono</b> ( <i>CTI Engineering International Co., Ltd.</i> )	Building blocks for quality in engineering education <b>Paul Louis Mitchell</b> ( <i>Centre for Pavement Excellence Aisa Pacific Ltd.</i> )

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

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

<p><b>TS7-2</b>  <b>Chair: Tomohito Yamada</b>  <i>(Hokkaido University)</i></p>	<p><b>TS5-1</b>  <b>Chair: Tetsuya Ishida</b>  <i>(The University of Tokyo)</i></p>	<p><b>TS2-4</b>  <b>Chair: Shinji Yamaguchi</b>  <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  <b>Jinwoo Lee</b> <i>(The Hong Kong Polytechnic University)</i></p>	<p>Potential utilizations of off-standard fly ashes  <b>Somnuk Tangtermsirikul</b>  <i>(Thammasat University)</i></p>	<p>Climate change and countermeasures against sediment disaster in Japan  <b>Taro Uchida</b> <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)  <b>Tomohito Yamada</b>  <i>(Hokkaido University)</i></p>	<p>Application of fly ash and bottom ash from coal fired thermal power plants in Sri Lanka  <b>S. M. A. Nanayakkara</b>  <i>(University of Moratuwa)</i></p>	<p>Overview of current landslide hazard zonation mapping methodology utilize in Sri Lanka  <b>M.A.K. Kumari</b> <i>(National Building Research Organisation )</i></p>
<p>Climate change adaptation in water sensitive urban design strategies  <b>Paul Louis Mitchell</b>  <i>(Centre for Pavement Excellence Asia Pacific Ltd.)</i></p>	<p>High-volume utilization of supplementary cementitious materials in concrete buildings toward sustainability  <b>Takafumi Noguchi</b> <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  <b>Ching-Ying Tsou</b> <i>(Hirosaki 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><b>Tsuyoshi Hoshino</b></p>	<p>Efficient production of alkali-activated geopolymers from low-calcium fly ash</p> <p><b>Kolluru V.L. Subramaniam</b> (<i>Indian Institute of Technology</i>)</p>	<p>Prompt maximum damage estimation against sediment disaster based on sediment movement magnitude</p> <p><b>Shinichiro Hayashi</b> (<i>Hokkaido University</i>)</p>
	<p>Application of mineral admixtures in hot weather conditions</p> <p><b>Shingo Asamoto</b> (<i>Saitama University</i>)</p>	<p>Estimating end of life for Sabo dams</p> <p><b>Kihwan Lee</b> (<i>University of Yeungnam</i>)</p>
	<p>Current situation on the utilization of industrial by-products for construction in Vietnam</p> <p><b>TBA</b></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><b>Ingrid Ferreira Lima</b> (<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><b>Tetsuya Ishida</b> (<i>The University of Tokyo</i>)</p>	

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

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



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

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

Day3 (4/18) 11:00 -	Day3 (4/18) 14:00 - 15:30	
<b>GS-6-3</b> <b>Chair: Kazuyoshi Tateyama</b> ( <i>Ritsumeikan University</i> )	<b>TS7-4</b> <b>Chair: Minoru Yoneda</b> ( <i>Kyoto University</i> )	<b>TS5-2</b> <b>Chairs: Tadashi Hara</b> ( <i>Kochi University</i> ), <b>Rihong Zhang</b> ( <i>Ningbo University</i> )
Next step of worksite model utilizing ICRT <b>Hiroshi Yamamoto</b> ( <i>Komatsu Ltd.</i> )	Quantifying the environmental impacts of structural elements of standard bidge designs <b>Andres Winston C. Oreta</b> ( <i>PICE</i> )	Wood utilization in civil engineering <b>Tadashi Hara</b> ( <i>Kochi University</i> )
Initatives for the use field robots and AI in infrastructure management <b>Yasushi Nitta</b> ( <i>Public Works Research Institute</i> )	Role of civil engineering in mitigation of climate change - proposal from Japan Society of Civil Engineers - <b>Minoru Yoneda</b> ( <i>Kyoto University</i> )	Development of timber guardrail using round logs of Japanese cedar <b>Rihong Zhang</b> ( <i>Ningbo University</i> )
An study on understanding the behavioral phenomenon of transportation engineering by implementation of AI: an approach to provide effective solutions of a complex problem in transportation engineering <b>Rafiur Rahman Khan</b> ( <i>European University of Bangladesh</i> )	Carbon footprint assessment for resilient Infrastructure construction using discrete-event simulation <b>Jakkawarn Somboonpisan</b> ( <i>Kasesart University</i> )	Climate change mitigation potential of wood use in civil engineering in Japan through 2050 <b>Chihiro Kayo</b> ( <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><b>Minori Yamada</b> (<i>Tokyo City University</i>)</p>	<p>A fundamental study on development of construction standard code considering 4th industrial revolution technology</p> <p><b>Yeonggyeong Ju</b> (<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><b>Hao Zhang</b> (<i>Kochi University</i>)</p>
	<p>Role of civil engineering in mitigation of climate change - the infrastructure of renewable energy resources</p> <p><b>Barry Ronald Tonkin</b> (<i>EA</i>)</p>	<p>Study on liquefaction countermeasure technique using logs based on field investigation and shaking table test</p> <p><b>Masaho Yoshida</b> (<i>National Institue of Technology</i>)</p>
		<p>An application example of log piling method for liquefaction mitigation and carbon stock</p> <p><b>Atsunori Numata</b> (<i>Tobishima Corp.</i>)</p>
		<p>Future perspectives of sustainable bioenergy development in Japan with local woody biomass</p> <p><b>Chun Sheng Goh</b> (<i>Institute for the Advanced Study of Sustainability, United Nations Univeristy</i>)</p>

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

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

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

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