

2nd World Congress on Civil, Structural, and Environmental Engineering (CSEE'17)

The congress consists of:

ICGRE'17	2nd International Conference on Geotechnical Research and Engineering
ICSENM'17	2nd International Conference on Structural Engineering, New Technology and Methods
ICESDP'17	2nd International Conference on Environmental Sustainability, Development, and Protection
AWSPT'17	2nd International Conference on Air, Water, and Soil Pollution and Treatment
ICTE'17	2nd International Conference on Traffic Engineering

*Registrants from the five conferences are permitted, and even encouraged,
to attend sessions from any of the five conferences.*

Sunday

April 2, 2017

3:00 PM - 5:00 PM **Registration**

Monday

April 3, 2017

8:00 AM - 9:00 AM **Registration**

Monday

April 3, 2017

ROOM 1

9:00 AM - 9:15 AM **Official Opening of the Congress**

Dr. Hany El Naggar & Dr. Mohamed Shahin

9:15 AM - 10:00 AM **KEYNOTE LECTURE**

Session Chair

Dr. Mohamed Shahin

Soil-Structure Interaction of Integral Abutment Bridges

*Dr. Hany El Naggar
Dalhousie University, Canada*

PARALLEL SESSION - ROOM 1

10:00 AM - 10:45 AM **KEYNOTE LECTURE**

Session Chair

Dr. Mohamed Shahin

**Performance of RC Beams with or without FRP Strengthening
Subjected to Impact Loading**

*Dr. Hong Hao
Curtin University Australia, Australia*

PARALLEL SESSION - ROOM 2

10:00 AM - 10:45 AM **KEYNOTE LECTURE**

Session Chair

Dr. Simona Schwarz

**Selection of Cyanobacteria Grown in Wastewater Treatment
Systems for Metabolites Production**

*Dr. Joan García
Universitat Politècnica de Catalunya-BarcelonaTech, Spain*

10:45 AM - 11:05 AM **COFFEE BREAK**

PARALLEL SESSION - ROOM 1

11:05 AM - 12:55 PM **SESSION CHAIRS:** Dr. Chien-Yuan Chen & Dr. Djamalddine Boumezerane

Geotechnical Structure

ICGRE 107

11:05 - 11:25

**Effect of Cavities on the Behaviour of Model Pile under Axial Loading in
Sand**

*Ali Al-Jazaairry, Tahsin TomaSabbagh
University of Salford, United Kingdom*

Monday

April 3, 2017

ICGRE 117 **Different Loading Systems for Reinforced Earth Walls under Strip Footing Load**
11:25 - 11:45

Hamzeh Ahmadi, Adam Bezuijen
Ghent University, Belgium

ICGRE 157 **Load-deformation Analysis of a Pile in Expansive Soil Upon Infiltration**
11:45 - 12:05

Yunlong Liu, Sai K. Vanapalli, Amina W. BA
University of Ottawa, Canada

ICGRE 184 **Iterative Design Approach for Soldier Pile Walls Based on Nonlinear Horizontal Subgrade Modulus**
12:05 - 12:15

Stefan Jung
Dr. Jung + Lang Ingenieure, Germany

ICGRE 178 **Volume Change Control of High Plasticity Clay by the Stabilization of Fine-grained Cements**
12:15 - 12:35

Murat Mollamahmutoğlu, Eyubhan Avci, Altan Erdem
Hitit University, Turkey

ICGRE 186 **Stabilization of 16 m Deep Excavation in Loose Fill Using Soil Nail Wall**
12:35 - 12:55

Mohammad Ali Mojtahedi, Ebrahim Ebrahimnezhad Sadigh
Larzeh Sakht Savalan Consulting Engineers Co., Iran

PARALLEL SESSION - ROOM 2

11:05 AM - 12:45 PM **SESSION CHAIRS:** Dr. Simona Schwarz & Abhijna Neramballi

Environmental Risk Management and Other Related Topics

ICESDP 153 **Community Empowerment and Sustainability of a Common Forest: the case of Cherán, Mexico**
11:05 - 11:15

Aldo Gonzalez, Maria Claudia Lopez
Michigan State University, USA

ICESDP 104 **Consideration Regarding Environmentally-friendly in Manufacturing Field**
11:15 - 11:35

Ikuo Tanabe
Nagaoka University of Technology, Japan

Monday

April 3, 2017

ICESDP 172 **Farmer Engagement in Conservation through Tile Drain Water Quality
Monitoring in Southeastern Michigan**
11:35 - 11:45

Alaina Nunn, Jon Bartholic, John Kerr
Michigan State University, USA

ICESDP 159 **Impacts of Agricultural Poultry Farming on Water and Sediment Qualities**
11:45 - 12:05

Adewale M. Taiwo, Toyin A. Arowolo
Federal University of Agriculture, Nigeria

ICESDP 169 **Prediction of Breach Peak Outflow and Failure Time Using Artificial Neural
Network Approach**
12:05 - 12:25

Mohammed T. Mahmoud, Ahmed H. Bukhary, Ahmed G. Ramadan, Muhammad A.
Al-Zahrani
King Fahd University of Petroleum and Minerals, Saudi Arabia

ICESDP 157 **An Integrated Sustainability Assessment Tool Framework**

12:25 - 12:45 *Sherif Mahmoud*, Tarek Zayed
University of Concordia, Canada

PARALLEL SESSION - ROOM 3

11:05 AM - 1:05 PM **SESSION CHAIRS:** Dr. Hong Hao

New Technologies in Structural Design and Construction I

ICSENM 130 **Origami Applications in Structural Engineering:
A Look at Temporary Shelters**
11:05 - 11:25

Monica Norman, Kaveh Arjomandi,
University of New Brunswick, Canada

ICSENM 118 **Long-Term Structural Behaviour of Composite Sandwich Panels**
11:25 - 11:45

Harry Far, Claire Far
University of Technology Sydney, Australia

ICSENM 122 **Utilization of Precast Concrete Panels for Fast Construction of Outer Wall
of LNG Storage Tanks**
11:45 - 11:55

Hyeon Cheol Jo, Jun Hwi Kim, Seul Kee Lee, Kang Won Lee, Seung Hyun Oh, Yun
Mook Lim
University of Yonsei, South Korea

Monday

April 3, 2017

ICSENM 108 **Effect of Soil Amplification on the Response of Base-Isolated Buildings under Near-Fault Earthquakes**
11:55 - 12:15

Sinan Sargin, Hatice Gazi, *Cenk Alhan*, Sadik Oztoprak
İstanbul University, Turkey

ICSENM 129 **A Bolted Moment Connection Model for Precast Column-Beam Joint**
12:15 - 12:35

Selim Pul, *Mehmet Şentürk*
Karadeniz Technical University, Turkey

ICSENM 117 **The Prototype of a Software Application for Laser and Image-based Surface Damage Detection**
12:35 - 12:55

Burcu Guldur Erkal
Hacettepe University, Turkey

ICSENM 123 **Dynamic Behaviour of Shallow Foundation Using Macro-Element Approach**
12:55 - 1:05

Abdulsamee Halahla, Francesco Calvetti
Fahad Bin Sultan University, Saudi Arabia

12:55 PM - 1:55 PM LUNCH

PARALLEL SESSION - ROOM 1

1:55 PM - 3:45 PM **SESSION CHAIRS:** Dr. Chien-Yuan Chen & Mehrdad Sadeghi

Soil and Rock Mechanics and Characterization I

ICGRE 174 **Water Diversion Capacity of Shallow Land Waste Repository Covered by Capillary Barrier of Soil**
1:55 - 2:15

Toshihiro Morii, Kazunobu Matsumoto, Kaoru Kobayashi
Niigata University, Japan

ICGRE 171 **Extension of Log-Spiral-Rankine (LSR) Model for Earth Pressure Analysis to a Sloping Backfill**
2:15 - 2:25

Shi-Yu Xu, Abiodun Ismail Lawal
City University of Hong Kong, Hong Kong

ICGRE 115 **The Effect of Backfill Grout Hardening on Impact-Echo Signal –Numerical Analysis**
2:25 - 2:45

Ju-Young Choi, Kyung-Yul Kim, Ki-Il Song
University of Inha, South Korea

Monday

April 3, 2017

ICGRE 127 **Effect of Cyclic Load on California Bearing Ratio of Soaked Clay**

2:45 - 3:05

Robert Nini

University of Balamand, Lebanon

ICGRE 110 **A Laboratory Investigation for Shear Modulus of Silty Sand Soils**

3:05 - 3:25

Mehmet Inanc Onur

Anadolu University, Turkey

ICGRE 104 **Characterisation and Index Properties Correlations for Marlstone and Marly Limestone of Saudi Arabia**

3:25 - 3:45

YassirM.Mustafa, *Hamzah M. Al-Hashemi*, AhmedH.Bukhary

King Fahd University of Petroleum and Minerals, Saudi Arabia

PARALLEL SESSION - ROOM 2

1:55 PM - 3:15 PM **SESSION CHAIR:** Dr. Gulen Gullu

Water Pollution and Treatment

AWSPT 106 **Merging of “MnM” and BallTech Technologies to Create a Unique Manganese Removal Filtration System**

1:55 - 2:05

Roy Elkayam, Ilan Kessler, Ovadia Lev

Hebrew University of Jerusalem, Israel

AWSPT 117 **Optimization of Operating Ozone-Activated Carbon on Advanced Water Treatment Processes**

2:05 - 2:15

Seongtae Park, Hoe-Suk Jung, Ihnsup Han, Jungyeol Eom, Heekyong Oh

University of Seoul, South Korea

AWSPT 119 **Investigation of Accreditation Status of Environmental Parameters in Turkey**

2:15 - 2:25

Perihan Akan, Ozlem Muge Aydin Testik

Hacettepe University, Turkey

AWSPT 158 **Decentralized Treatment of Grey Water by Natural Coagulants in the Presence of Coagulation Aid**

2:25 - 2:45

Roopika Nautiyal, Shivangi Uliana, Ishant Raj, Brij Shah, Kavish Rathore, Anantha Singh

Pandit Deendayal Petroleum University, India

Monday

April 3, 2017

AWSPT 160 **Comparative Study of Different Natural Coagulants for the Treatment of Grey Water with Conventional Alum**
2:45 - 2:55

Shivangi Uliana, Brij Shah, Ishant Raj, Kavish Rathore, Roopika Nautiyal, Anantha Singh

Pandit Deendayal Petroleum University, India

AWSPT 156 **From the problem of Ground Water Salinity towards Sustainable Prosperity in Agricultural Sector in coastal region of Gujarat, India**
2:55 - 3:05

Niraj Kathrani, Anurag Kandya, Iris Koekkoek, Tess Op Den Kelder, Purvesh Rajpurohit

Pandit Deendayal Petroleum University, India

AWSPT 108 **Removal of Heavy Metals in Water with Adsorbents Derived from Pig Manure**
3:05 - 3:15

Jens Maggen, Robert Carleer, Jan Yperman, Sonja Schreurs

Hasselt University, Belgium

PARALLEL SESSION - ROOM 3

1:55 PM - 2:40 PM **KEYNOTE LECTURE**

Session Chair **Principles of a Sustainable Traffic Management**

Dr. Hany El Naggar

Dr. Manfred Boltze

Technische Universität Darmstadt, Germany

2:40 PM - 3:40 PM **SESSION CHAIR:** Dr. Manfred Boltze

Intelligent Transport Systems

ICTE 107 **Ultralight Last Mile Vehicles on Public Walkways for Sustainable Traffic Chains**
2:40 - 3:00

Oliver Zirn, Konrad Sagert, Markus Rüther

University of Applied Sciences Esslingen, Germany

ICTE 110 **Vehicle Detection Using Imaging Technologies and its Applications under Varying Environments: A Review**
3:00 - 3:20

Zi Yang, Lilian Pun

The Hong Kong Polytechnic University, Hong Kong

ICTE 111 **A Study on Developing Image Processing for Smart Traffic Supporting System based on AR**
3:20 - 3:40

Byeong-Wook Nam, Kyung-Ho Lee, Jung-Min Lee

Inha University, South Korea

Monday

April 3, 2017

3:50 PM - 4:10 PM COFFEE BREAK

PARALLEL SESSION - ROOM 1

4:10 PM - 6:00 PM **SESSION CHAIRS:** Dr. Mehmet Inanc Onur & Dr. Rajeshwar Goodary

Modelling and Design

ICGRE 130 **Rocking and Uplift of a Shallow Wind Turbine Foundation**
4:10 - 4:20
Rose Hawkswood, Helen Mitrani, Mohamed Rouainia, Andrew Brennan
Newcastle University, United Kingdom

ICGRE 163 **Displacements in a Column-Reinforced Granular Medium; A Probabilistic Approach**
4:20 - 4:40
Djamalddine Boumezerane, Meryem Lahbiben
Norwegian University of Science and Technology, Norway

ICGRE 188 **A New and Reusable Foundation Solution for Onshore Wind Turbines**
4:40 - 4:50
Wael Mohamed, Per-Erik Austrell, Ola Dahlblom
Lund University, Sweden

ICGRE 194 **Extending Ground Penetrating Radar Imaging Capabilities Through Signal Processing**
4:50 - 5:10
Roger Tilley, Hamid Sadjadpour, Farid Dowla
University of California, Santa Cruz, USA

ICGRE 151 **Response Analysis for Pile Subjected to Vertical Direction of Seismic Shaking**
5:10 - 5:20
Chien-Yuan Chen, Ming-Jin Wu
National Chiayi University, Taiwan

ICGRE 175 **Effect of Different Category of Geogrid and Sand Layer on Pull-out Behaviour**
5:20 - 5:40
Mojtaba Firoozi Nezamabadi, S. Hamid Lajevardi, Mehrdad Sadeghi
Shahab Danesh University, Iran

ICGRE 123 **Energy Efficiency of Standard Penetration Test Hammers & Bearing Capacity Evaluation in Sands**
5:40 - 6:00
Indrasenan Thusyanthan, Bassim A Nawaz
Saudi Aramco, Saudi Arabia

Monday

April 3, 2017

PARALLEL SESSION - ROOM 2

4:10 PM - 6:15 PM **SESSION CHAIRS:** Dr. K. van Breugel & Hamedreza Javadian

Global Warming: Causes and Consequences

ICESDP 108 **Evaluation of Building Energy Savings According to the Thermal Performance Experiment of PCM Floor Heating System**
4:10 - 4:30

*In Sung Kang, Sang Hoon Baek, Jin Chul Park
Chung-Ang University, South Korea*

ICESDP 109 **Simulation Analysis of Thermal Insulation Performance of PCM for Mitigating Urban Heat Island Effect**
4:30 - 4:50

*Hyo Eun Lee, Young Kwon Yang, Min-Hee Chung, Jin Chul Park
Chung-Ang University, South Korea*

ICESDP 176 **A Comprehensive Literature Review of Green Supply Chain Management**
4:50 - 5:10

*Abhijna Neramballi, Movin Sequeira, Martin Rydell, Alexander Vestin, Maria Ibarra
Jönköping University, Sweden*

AWSPT 155 **Adaptive Policy Responses to Climate Change Scenarios in the Musi Catchment, India**
5:10 - 5:30

*Brian Davidson, Biju George, Hector Malano, Petra Hellegers
University of Melbourne, Australia*

ICESDP 158 **A Sustainable Electricity Supply Chain Based on Distributed Renewable Energy**
5:30 - 5:40

*Taeho Park, Tianqin Shi, Tongdan Jin
San Jose State University, USA*

ICESDP 112 **Double Exposure Vulnerability of Agriculture in Southwest Jamaica**
5:40 - 5:55

*Douglas W. Gamble, Scott Curtis, Jeff Popke
University of North Carolina Wilmington, USA*

ICESDP 180 **Vegetation Impact on Microclimate in Hot Climate Zones**
5:55 - 6:15

*Abeer Manneh, Hanan Taleb
The British University in Dubai, UAE*

Monday

April 3, 2017

PARALLEL SESSION - ROOM 3

4:10 PM - 6:20 PM **SESSION CHAIRS:** Dr. Samy Mahmoud & Sofia Storozhenko

Transportation Planning, Optimization, and Safety I

ICTE 122 **Transport Planning, Organisation and Management**
4:10 - 4:30 *Elżbieta Macioszek, Grzegorz Sierpiński, Marcin Staniek, Ireneusz Celiński*
Silesian University of Technology, Poland

ICTE 121 **Standardisation of Travel Planners and Use of a Return Channel**
4:30 - 4:40 *Grzegorz Sierpiński, Marcin Staniek, Elżbieta Macioszek*
Silesian University of Technology, Poland

ICTE 105 **Efficient Real-time Allocation of Patrol Cars in Traffic Management**
4:40 - 5:00 *Hussain Al-Harthei, Viktor Toth, Atef Garib, Samy Mahmoud*
Carleton University, Canada

ICTE 123 **Travel Planning Concept Taking Road Infrastructure Condition into Account**
5:00 - 5:20 *Marcin Staniek, Elżbieta Macioszek, Grzegorz Sierpiński*
Silesian University of Technology, Poland

ICTE 113 **Relationship between Socio-Demographic of Drivers and Traffic Violations and Crashes Involvements**
5:20 - 5:40 *Mohamed Shawky Ahmed, Yousef Al-badi, Abudullah Al-Ghafli*
Abu Dhabi Police & Ain Shams University, Egypt

ICTE 117 **Predicting Speed-Related Traffic Violations on Rural Highways**
5:40 - 6:00 *Iyad Sahoona, Mohamed Shawky, Ahmed Al-Zaidy*
Abu Dhabi Police & Tatweer, UAE

ICTE 125 **Impact of Exclusive Bus Lanes on Traffic Performance in Urban Areas**
6:00 - 6:20 *Akmal Abdelfatah, Amro Abdulwahid*
American University of Sharjah, UAE

Tuesday

April 4, 2017

ROOM 1

9:00 AM - 9:45 AM **KEYNOTE LECTURE**

Session Chair
Dr. Hany El Naggar

Innovative Solutions for Problematic Soils in Civil Infrastructure

Dr. Mohamed Shahin
Curtin University, Australia

PARALLEL SESSION - ROOM 1

9:45 AM - 10:30 AM **KEYNOTE LECTURE**

Session Chair
Dr. Hany El Naggar

Ageing Infrastructure and Circular Economy: Challenges and Risks

Dr. K. van Breugel
Delft University of Technology, Netherlands

PARALLEL SESSION - ROOM 2

9:45 AM - 10:30 AM **KEYNOTE LECTURE**

Session Chair
Dr. Gulen Gullu

Chitosan- A New Natural Adsorber Material

Dr. Simona Schwarz
Leibniz Institut für Polymerforschung Dresden, Germany

10:30 AM - 10:50 AM **COFFEE BREAK**

10:30 AM - 12:00 PM **Poster Session**

ICGRE 105 **Estimation of Deformation Modulus of Soil in Field from Laboratory Tests**

Yeowon Yoon, Jungho Ki, Ki-il Song
Inha University, South Korea

ICGRE 136 **Main Influence Factors for Penetration Rate in Tunnelling**

Kyoung-yul Kim, Hee-hwan Ryu, Dae-soo Lee
KEPCO Research Institute, South Korea

ICGRE 189 **New Site Classification System of Korea and 2016 Gyeongju Earthquakes**

Hyung-Ik Cho, Han-Saem Kim, Chang-Guk Sun, Dong-Soo Kim
Korea Institute of Geoscience and Mineral Resources, South Korea

ICGRE 173 **Analysis of Soil Arching in Pipeline Installation Subjected to Uplift**

Yuri Costa, Lucas Moraes, Carina Costa
Federal University of Rio Grande do Norte, Brazil

Tuesday

April 4, 2017

ICGRE 191 **Dimension Effect on Plate Load Test Results**

Duílio Araújo, *Carina Costa*, Yuri Costa
Federal University Rural do Semi-Árido, Brazil

ICSENM 101 **Mathematical Algorithms of Patterns for Free-Form Panels**

Seunghyun Son, Heni Fitriani, Jeong Tai Kim, Seongseok Go, *Sunkuk Kim*
Kyung Hee University, South Korea

ICSENM 110 **Seismic Fragilities of Curved Concrete Bridges via Bayesian Parameter Estimation Method**

Jong-Su Jeon, Taehyo Park
Andong National University, South Korea

ICSENM 116 **Inelastic Analysis of Circular Dampers under in-Plane Loading**

Yen-Po Wang, Chien-Liang Lee, Shih-Chiao Huang, Min-Che Tu
National Chiao-Tung University, Taiwan

ICSENM 131 **Seismic Performance Evaluation of the Existing RC Frames Reinforced by Chevron Bracing System**

Keunyeong Oh, Heonjun Ha, Byeonghyun Jo, Kangmin Lee
Chungnam National University, South Korea

ICSENM 126 **Analysis of Epoxy Interface Subjected to Sustained Loading and Temperature**

Yoseok Jeong, WooSeok Kim
Chungnam National University, South Korea

ICESDP 175 **Assessment of Fluoride Levels in Locally Produced and Imported Bottled Water**

Mohamed Yehia Abouleish
American University of Sharjah, UAE

ICESDP 111 **Satellite Detection of Wildland Fire in South America**

Benjamin Leonardo Alves White
Federal University of Sergipe, Brazil

ICESDP 181 **Vermicomposting: An Effective Alternative for Organic Solid Waste Management**

Anmol Grewal, Swarndeep Singh Hundal, Sandeep Sharma
Punjab Agricultural University, India

Tuesday

April 4, 2017

ICESDP 184 **Silica Coated Hollow α -Fe₂O₃ Derived from Fe-MIL-88A Metal Organic Framework (MOF) as an Efficient Catalyst for Enhanced Selective Catalytic Reduction (SCR) of NO with NH₃**

*Junhyung Lee, Daeyeon Won, Junho Chung, Seung-Yeop Kwak
Seoul National University, South Korea*

AWSPT 101 **Nitrate Adsorption and Potential Nitrate Leaching Under Partial Root Zone Drying Irrigation**

*Feizollah Shams Govarchingala, Sina Besharat
Urmia University, Iran*

AWSPT 105 **Characterization of Biosurfactants Enhancing Kerosene Degradation**

*Dilan Camille Aydin, Bulent Icgen
Middle East Technical University, Turkey*

AWSPT 146 **Investigation of the Charge Behavior of PAA Copolymers by Means of Poly-electrolyte Titration**

*Simona Schwarz, Christine Steinbach, Dana Schwarz, Gudrun Petzold, Evgenia Romanova, Marina Oelmann
Leibniz-Institut für Polymerforschung Dresden, Germany*

AWSPT 112 **Sorption Of Pb (II) From Aqueous Solution By Nio/Activated Carbon Nanocomposite**

*Hamedreza Javadian, Montserrat Ruiz, Ana Maria Sastre
Universitat Politècnica de Catalunya, Spain*

AWSPT 111 **The Stability of Ecosystems Cryolithozone in the Extraction Hydrocarbon Feedstock**

*Yana Legostaeva, Marta Ksenofontova, Anna Gololobova
M. K. Ammosov North-Eastern Federal University, Russia*

PARALLEL SESSION - ROOM 1

10:50 AM - 12:20 AM **SESSION CHAIRS:** Dr. Ahmed Fahmy & Matias Lazcano

Soil and Rock Mechanics and Characterization II

ICGRE 168 **3D Particle Shape of Calcareous Sand Conducted by X-Ray Computed Tomography**
10:50 - 11:10

*Pham Huu Ha Giang, Peter Van Impe, William Van Impe, Patrick Menge, Veerle Cnudde, Wim Haegeman
Ghent University, Belgium*

Tuesday

April 4, 2017

ICGRE 158 **Soil Collapse Monitoring with EM Measurements**
11:10 - 11:30
Henok Hailemariam, Ahmed Al-Janabi, Frank Wuttke, Norman Wagner
Kiel University, Germany

ICGRE 183 **Probabilistic Elastic–Plastic Cam Clay Response of Soils**
11:30 - 11:50
Arezoo Sadrinezhad, Kallol Sett
California State University, Fresno, USA

ICGRE 192 **Stabilisation of Volcanic Dark Magnesium Clay using Lime**
11:50 - 12:00
Rajeshwar Goodary, Miraniaina Adriamalala, Roodheer Beeharry, Anoop Aujayeb
Université des Mascareignes, Mauritius

ICGRE 155 **Correlating the Shear Wave Velocity with the Cone Penetration Test**
12:00 - 12:20
Sayed M. Ahmed
Ain Shams University, Egypt

PARALLEL SESSION - ROOM 2

10:50 AM - 12:30 PM **SESSION CHAIR:** Dr. Hong Hao
New Technologies in Structural Design and Construction II

ICSENM 103 **Structural Behavior of HFRP-Steel Double-Lap Joints with FRP Bolts**
10:50 - 11:10
Omnia Abou El-Hamd, *Amr Sweedan*, Khaled El-Sawy
United Arab Emirates University, United Arab Emirates

ICSENM 128 **Strength and Elastic Properties of Low-Fine Self-Compacting Concretes Designed with Nano SiO₂**
11:10 - 11:30
Muhammed Yasin Durgun, *Hakan Nuri Atahan*
Bartın University, Turkey

ICSENM 134 **Effect of Isothermal Curing on the Compressive Strength of High Early-Strength Concrete**
11:30 - 11:50
Marlon L. de la Cruz, Oscar Victor M. Antonio, Jr.
University of the Philippines, Philippines

ICSENM 127 **Effect of Nano SiO₂ Size on Fresh Properties of Self-Compacting Concretes**
11:50 - 12:10
Muhammed Yasin Durgun, Hakan Nuri Atahan
Bartın University, Turkey

ICSENM 142 **Implementing Waste Oils with Reclaimed Asphalt Pavement**
12:10 - 12:30
Peyman Aghazadeh Dokandari, *Derya Kaya*, Burak Sengoz, Ali Topal
Dokuz Eylul University, Turkey

Tuesday

April 4, 2017

PARALLEL SESSION - ROOM 3

10:50 PM - 12:35 PM **SESSION CHAIRS:** Dr. Abdul Azeez Kadar Hamsa & Dr. Hatem Abou-Senna
Transportation Planning, Optimization, and Safety II

ICTE 115 **Collision Types of Motorcycle Accident and Countermeasures**
10:50 - 11:10
Tien-Pen Hsu, *Ku-Lin Wen*
National Taiwan University, Taiwan

ICTE 112 **Warranting a Permissive Left Turn Phase by Time of Day for Flashing Yellow Arrow (FYA) Signals**
11:10 - 11:20
Hatem Abou-Senna, Essam Radwan
University of Central Florida, USA

ICTE 104 **Making Roads Safer: Optimizing De-icing Using Snowmelt Rates and Slope Data**
11:20 - 11:35
Fletcher Chapin, Olufemi Omitaomu, Budhendra L. Bhaduri
Cornell University, USA

ICTE 120 **Air Traffic Flow Forecast in the Period of Major Events Based on Cost Effectiveness Optimization**
11:35 - 11:55
Sofia Storozhenko, Andrey Popov, Vladimir Sikachev
State Scientific Research Institute of Aviation Systems, Russia

ICTE 124 **Residents' Perceptions on the Effectiveness of Road Humps in Improving Malaysian Residential Environments**
11:55 - 12:15
Khairun Sarah Radhiah Bachok, *Abdul Azeez Kadar Hamsa, Mohd Zin Mohamed, Mansor Ibrahim*
International Islamic University Malaysia, Malaysia

ICTE 114 **Estimating PCI Using Vibration Data for Asphalt Concrete Pavements**
12:15 - 12:35
Ufuk Kırbaş, Mustafa Karaşahin
Ondokuz Mayıs University, Turkey, Istanbul University, Turkey

12:35 PM - 12:40 PM CONGRESS PHOTO

12:40 PM - 1:40 PM LUNCH

Tuesday

April 4, 2017

PARALLEL SESSION - ROOM 1

1:40 PM - 3:00 PM **SESSION CHAIRS:** Dr. Mohamed Shahin & Dr. Rajeshwar Goodary

Geotechnical Infrastructure I

ICGRE 113 **Development of a Quality Control Index of Cement Stabilized Road Structures Using Shear Wave Velocity**

1:40 - 2:00

*Susit Chaiprakaikeow, Chitinsee Soponpong, Jiraroth Sukolrat
Kasetsart University, Thailand*

ICGRE 129 **Supervised Learning Technique for Geomechanical Forecasting during Underground Construction**

2:00 - 2:10

*Matías Lazcano, Patricio Cofré
SKAVA Consulting, Chile*

ICGRE 131 **Statistical Analysis on Field Penetration Index in Shield TBM**

2:10 - 2:30

*Hang-Lo Lee, Dae-Soo Lee, Ki-Il Song
Inha University, South Korea*

ICGRE 138 **Uplift and Lateral Performance of Tapered Helical Piles in Sand**

2:30 - 2:40

*Ahmed Fahmy, M. Hesham El Nagggar
The University of Western Ontario, Canada*

ICGRE 141 **Stabilisation of Clay with Fly-Ash Geopolymer Incorporating GGBFS**

2:40 - 3:00

*Hayder H. Abdullah, Mohamed A. Shahin, Prabir Sarker
Curtin University, Australia*

3:00 PM - 3:20 PM **COFFEE BREAK**

3:20 PM - 4:00 PM **SESSION CHAIRS:** Dr. Mohamed Shahin & Dr. Rajeshwar Goodary

Geotechnical Infrastructure II

ICGRE 106 **Uplift Pressure Resistant Approach in Diaphragm Wall Excavation-case Study: Imam Hossein Holy Shrine Development -Karbala- Iraq**

3:20 - 3:40

*Behnam Eslami Ziraki, Vahid Ghasemi
Tarbiat Modares University, Iran*

ICGRE 119 **Numerical Investigation of the Bedding Factor of Concrete Pipes under Deep Soil Fill**

3:40 - 4:00

*Saif Alzabeebee, David N Chapman, Asaad Faramarzi
University of Birmingham, United Kingdom*

Tuesday

April 4, 2017

PARALLEL SESSION - ROOM 2

1:40 PM - 2:20 PM **SESSION CHAIRS:** Dr. Amin Almasri

New Technologies in Structural Design and Construction III

ICSENM 141 **Shear and Flexural Strengthening of Reinforced Concrete Beams
with Titanium Alloy Bars**

1:40 - 1:50

*Christopher Higgins, Jonathan Knudtsen, Deanna Amneus, Laura Barker
Oregon State University, USA*

ICENM 139 **Quasi-static Loading Test of Confined Clay Brick Masonry Walls Retrofitted
with Post-tensioned Tendons**

1:50 - 2:10

*Hang Liu, Shaofeng Hua, Chunguang Lan, Xuezhong Yang
Beijing Building Construction Research Institute, China*

ICENM 149 **Special Emphasis on Seismic Resistant Design of Non-seismically De-
signed Buildings in Hong Kong**

2:10 - 2:20

*Eddie Siu-shu Lam, Zhi-dong Yang, Vivian Wong, Bo Li
The Hong Kong Polytechnic University, China*

2:20 PM - 3:00 PM **SESSION CHAIRS:** Dr. Amr Sweedan & Dr. Cenk Alhan

Modelling and Simulation I

ICSENM 111 **Impact behaviour of RC Beam using Lattice Model with Discrete Represen-
tations of Reinforcements**

2:20 - 2:30

*Pen Hui Tsou, Young Kwang Hwang, Yun Mook Lim
Yonsei University, South Korea*

ICSENM 114 **Displacement Estimation of Prestressed Concrete Girder using Artificial
Neural Network**

2:30 - 2:40

*Tae Min Kim, Hyun Su Moon, Moon Kyum Kim, Yun Mook Lim
Yonsei University, South Korea*

ICSENM 146 **Rigid Body Spring Network Model for Plasticity and Fracture**

2:40 - 3:00

*Christos D. Sofianos, Vlasis. K. Koumouisis
National Technical University of Athens, Greece*

3:00 PM - 3:20 PM **COFFEE BREAK**

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3:20 PM - 4:50 PM **SESSION CHAIRS:** Dr. Amr Sweedan & Dr. Cenk Alhan

Modelling and Simulation II

ICSENM 119 **Analytical Solution of Nonprismatic Reinforced Concrete Cantilever Deflection under Concentrated Load**
3:20 - 3:30

Amin Almasri
Fahad Bin Sultan University, Saudi Arabia

ICSENM 145 **Segmental Elements for the Non-Linear Analysis of Reinforced Concrete Frames**
3:30 - 3:50

José Leone, *Francisco Barrios*, Andrés Salas, Juan Martinez
Universidad del Magdalena, Colombia

ICSENM 138 **Lateral-Torsional Buckling of European Wide Flange I-Section Beams**
3:50 - 4:10

Tolga Yilmaz, Nevzat Kirac, Turab Kilic
Eskisehir Osmangazi University, Turkey

ICSENM 137 **Thermal Simulation for a Room with Solid and One-way Ribbed Slab Using FEM**
4:10 - 4:30

Ahmed Al-Tamimi, Mohammed Al-Osta, Omar Al-Amoudi, Rached Ben-Mansour
King Fahd University of Petroleum & Minerals, Saudi Arabia

ICSENM 115 **Semi-Active Adaptive Fuzzy Sliding Mode Control of Buildings under Earthquake Excitations**
4:30 - 4:50

Amir H. Rabiee, *Amir H.D. Markazi*
Iran University of Science and Technology, Iran

PARALLEL SESSION - ROOM 3

1:40 PM - 3:00 PM **SESSION CHAIRS:** Dr. Joan García

Environmental Pollution and Treatment I

AWSPT 123 **Removal of Trace Metals from Municipal Wastewater by Coagulation-Flocculation**
1:40 - 1:50

Andrew Hargreaves, Peter Vale, Jonathan Whelan, Carlos Constantino, Gabriela Dotro, Pablo Campo
Cranfield University, United Kingdom

AWSPT 145 **Simultaneous Adsorption of Iron and Sulfate Ions with Biopolymers**
1:50 - 2:10

Janek Weißpflog, Christine Steinbach, Dana Schwarz, *Simona Schwarz*
Leibniz-Institut für Polymerchemie Dresden, Germany

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AWSPT 116 **Interest of Miscanthus x Giganteus in Phytomanaging Heavy Metal Contaminated Soils**
2:10 - 2:20

*Karim Al Souki, Brice Louvel, Francis Douay, Bertrand Pourrut
Université de Lille 1 Sciences et Technologies, France*

AWSPT 162 **Study on Numerical Prediction of Supply Water Temperature in the Building**
2:20 - 2:30

*Shizuo Iwamoto
Kanagawa University, Japan*

AWSPT 150 **Platinum Group Elements in Road Environments: A Case Study of Poland**
2:30 - 2:40

*Ewa Adamiec
AGH University of Science and Technology, Poland*

AWSPT 120 **Investigation of Indoor Air Quality at Shooting Range**
2:40 - 2:50

*S. Yeser Aslanoglu, Fatma Ozturk, Gulen Gullu
Hacettepe University, Turkey*

ICESDP 170 **The Akans of Ghana Indigenous Biodiversity Conservation Practices: Implication for Senior High School Curricula**
2:50 - 3:00

*Maxwell Jnr Opoku, Angela James
University of KwaZulu-Natal, South Africa*

3:00 PM - 3:20 PM COFFEE BREAK

3:20 PM - 4:50 PM **SESSION CHAIRS:** Dr. K. van Breugel
Environmental Pollution and Treatment II

AWSPT 127 **Low carbon cooling approach for residences in the UAE: A case study**
3:20 - 3:40

*Basim Touqan, Hanan Taleb, Muna Salameh
British University in Dubai, UAE*

AWSPT 141 **Courtyard as Passive Design Solution for School Buildings in Hot Area**
3:40 - 4:00

*Muna Salameh, Hanan Taleb
British University in Dubai, UAE*

AWSPT 151 **Impact of Cooling Strategies on Energy Reduction**
4:00 - 4:20

*Nadia Al-Badri, Hanan Taleb
University of Sharjah, United Arab Emirates*

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AWSPT 138 **Impacts of Plant Presence on Formaldehyde Levels in an Office**

4:20 - 4:40
Isra Abu Zayed, Bassam Abu Hijleh, Hanan Taleb
American University in the Emirates, UAE

ICESDP 183 **Adaptation to flooding in the Low- income Urban settlements of the Least
Developed Countries**

4:40 - 4:50
Anika Nasra Haque
University of Cambridge, United Kingdom

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8:00 PM - 10:00 PM **Closing Ceremony**