

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

The congress consists of:

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

Sunday

April 2, 2017

2:30 PM - 4:30 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

Soil-Structure Interaction of Integral Abutment Bridges

Dr. Mohamed Shahin

*Dr. Hany El Naggar
Dalhousie University, Canada*

PARALLEL SESSION - ROOM 1

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

Session Chair

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

Dr. Mohamed Shahin

*Dr. Hong Hao
Curtin University Australia, Australia*

PARALLEL SESSION - ROOM 2

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

Session Chair

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

Dr. Ranjith

Pathegama

*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**

*AliAl-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 Mollamahmutoglu, 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 157 **An Integrated Sustainability Assessment Tool Framework**
11:05 - 11:25

Sherif Mahmoud, Tarek Zayed
University of Concordia, Canada

ICESDP 153 **Community Empowerment and Sustainability of a Common Forest: the case of Cherán, Mexico**
11:25 - 11:35

Aldo Gonzalez, Maria Claudia Lopez
Michigan State University, USA

Monday

April 3, 2017

ICESDP 104 **Consideration Regarding Environmentally-friendly in Manufacturing Field**
11:35 - 11:55
Ikuo Tanabe
Nagaoka University of Technology, Japan

ICESDP 172 **Farmer Engagement in Conservation through Tile Drain Water Quality Monitoring in Southeastern Michigan**
11:55 - 12:05
Alaina Nunn, Jon Bartholic, John Kerr
Michigan State University, USA

ICESDP 159 **Impacts of Agricultural Poultry Farming on Water and Sediment Qualities**
12:05 - 12:25
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**
12:25 - 12:45
Mohammed T. Mahmoud, Ahmed H. Bukhary, Ahmed G. Ramadan, Muhammad A. Al-Zahrani
King Fahd University of Petroleum and Minerals, Saudi Arabia

PARALLEL SESSION - ROOM 3

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

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 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 - 1:10

*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**

1:10 - 1:20

*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. Koumousis
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. Simona Schwarz

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*

AWSPT 159 **Characterization and Treatment of Food Fermentation Emissions via Pilot-Scale Anoxic Bioscrubber**
2:50 - 3:00

*Ilker Akmirza, Saadet Etili, Kadir Alp, Mustafa Turker
Istanbul Technical University, Turkey*

3:00 PM - 3:20 PM COFFEE BREAK

3:20 PM - 5:00 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**
3:00 - 3:20

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

AWSPT 141 **Courtyard as Passive Design Solution for School Buildings in Hot Area**
3:20 - 3:40

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

AWSPT 151 **Impact of Cooling Strategies on Energy Reduction**
3:40 - 4:00

*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**

4:00 - 4:20

*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**

4:20 - 4:30

*Anika Nasra Haque
University of Cambridge, United Kingdom*

ICESDP 170 **The Akans of Ghana Indigenous Biodiversity Conservation Practices: Im-
plication for Senior High School Curricula**

4:30 - 4:40

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

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7:00 PM - 9:00 PM **Closing Ceremony**