



Resilient Structures and Sustainable Construction

The Ninth International Structural Engineering and Construction Conference (ISEC-9)

Valencia, Spain July 24 - 29, 2017



Monday, July 24, 2017

19:00 - 21:00

Registration

Parainfo UPV

19:00 - 21:00

Icebreaker & Welcome Reception - Soft drinks, Appetizers, and typical Valencian music group of "Tabalet i Dolçaina" with folk dancers

Parainfo UPV



Tuesday, July 25, 2017

08:00 - 18:15

Registration (*The registration desk will be open during conference hours*)

Building 4G, Foyer

09:00 - 09:30

Conference Briefings/Opening Session

Welcome and Introductions

Eugenio Pellicer, Dean-School of Civil Engineering

Welcoming Remarks

Amarjit Singh, ISEC Society President

Welcome to Universitat Politècnica de València

Francisco J. Mora, Chancellor - Universitat Politècnica de València

Universitat Politècnica de València
School of Civil Engineering
Building 4G, Assembly Hall

09:30 - 10:15

Keynote: Norbert Delatte, Oklahoma State University, Stillwater, USA

FAILURE LITERACY IN STRUCTURAL ENGINEERING

Tea & Coffee Break 10:15 - 11:00 (Building 4G Foyer)



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Technical Session I - Tuesday, July 25, 2017; 11:00 - 13:00

Session Chair: Terje Haukaas Classroom C4 I-1: Building Structures and Durability	Session Chair: Ester Giménez-Carbó Classroom C3 I-2: Composite Structures	Session Chair: Edward Minchin Classroom C2 I-3: Procurement Method and Dispute Management	Session Chair: George H. Berghorn Classroom C1 I-4: Sustainable Construction Process
St-104, EFFECT OF HEIGHT AND ORIENTATION OF INTERFERING BUILDINGS ON WIND LOADS ON TALL BUILDINGS <i>Bharat Chauhan and Ashok Ahuja</i>	St-106, ASSESSING THE BEHAVIOR OF COLUMN-SPLICE CONNECTIONS BETWEEN CFSTS IN AXIAL TENSION <i>Avik Saha, Swapan Sah, Brian Uy, and Dongxu Li</i>	p-4, PREDICTING PERFORMANCE IN DESIGN-BID-BUILD PROJECTS <i>Bryan W. Franz, Keith R. Molenaar, M. Amalia Sanz, and Eugenio Pellicer</i>	Su-24, FINANCIAL AND ECONOMICAL RISKS IMPACTING COST OF LEED CERTIFIED PROJECTS <i>Asli Pelin Gurgun, Gul Polat, Hasan Gokberk Bayhan, and Atilla Damci</i>
St-50, INCREASING ROBUSTNESS OF REINFORCED CONCRETE STRUCTURES UNDER COLUMN LOSS SCENARIO <i>Said Elkholy and Bilal El-Ariss</i>	E-3, COMPARISON OF COOLING AND HEATING REQUIREMENTS BETWEEN BRICK VENEER AND FIBRO CEMENT WALLING SYSTEM <i>Swapan Saha, Dharma Hagare, Jiaqi Zhou, and Md Kamrul Hassan</i>	p-5, AN EXPLORATION OF TEAM INTEGRATION AND GROUP COHESION IN DESIGN-BID-BUILD PROJECTS <i>M. Amalia Sanz, Bryan Franz, Keith Molenaar, Behzad Esmaceli and Eugenio Pellicer</i>	EPE-11, WORKING WITH AVAILABLE RESOURCES TO DEVELOP LOCAL KNOWLEDGE TO SUSTAIN DEVELOPMENT DURING CRISES <i>Enrique Villacis, Maria Lorena Rodriguez, and Cynthia Ayarza</i>
St-86, MEASUREMENT AND COMPARISON OF SNOW DENSITY ON GROUND AND ROOF <i>Zhang Qingwen, Ren Zhicheng, and Wang Shiyu</i>	St-24, EFFECT OF STRAIN-STRESS RELATIONSHIP OF STEEL TUBE ON THE INITIAL STIFFNESS OF SQUARE CFT COLUMNS <i>Ryo Handa, Masae Kido, Mao Liu, and Keigo Tsuda</i>	LDR-3, MULTI-OBJECTIVE OPTIMIZATION FOR CONFLICT RESOLUTION IN CONSTRUCTION PROJECTS <i>Changjun Lee, Seung Heon Han, Woosik Jang, and Wooyong Jung</i>	Su-2, COMPARISON OF BUILDINGS IN ANCIENT EUROPE WITH MODERN GREEN BUILDING PRACTICES <i>Elizabeth Sayer, M.G. Matt Syal, and George Berghorn</i>
H-3, WIND PRESSURE DISTRIBUTION ON NORTH-LIGHT INDUSTRIAL BUILDING ROOF <i>Astha Verma and Ashok Kumar Ahuja</i>	St-92, EXPERIMENTS AND FEM MODELS ON SEMI-COMPOSITE BEHAVIOR OF SRC STRUCTURES <i>Takayuki Matsuta, Mikio Kitajima, and Koji Maegawa</i>	PND-1, PROGRAM-FOR RESULTS: AN ANALYSIS OF PROCUREMENT STRATEGIES <i>Kareem Zahran and A. Samer Ezeldin</i>	Su-22, STRATEGIC ASSESSMENT AND PLANNING FOR SUSTAINABLE DEVELOPMENT <i>Amir Al-Khafaji, Seshadri Guha, and Laith Al-Khafaji</i>
I-3, EFFECTS OF RESIDUAL RUST ON STRENGTH RECOVERY OF CORRODED STEEL PLATE REPAIRED WITH PATCH PLATE <i>Hiroshi Ogami, Katashi Fujii, Ryuichi Yokota, Makoto Kawano, and Hisakazu Horii</i>	St-115, EXPERIMENTAL STUDY ON STRUCTURAL BEHAVIOR OF FIRE PROTECTED DOUBLE CFT COLUMN SUBJECTED TO FIRE LOAD <i>Kyung Soo Chung, Jae Sung Lee, Jong Eun Song, Woo Chul Kim, Heung Youl Kim, and Jong Moon Choi</i>	PND-2, FRAMEWORK OF A DECISION SUPPORT SYSTEM FOR APPLYING PROGRAM-FOR-RESULTS FUNDING MECHANISM <i>Kareem Zahran and A. Samer Ezeldin</i>	Su-23, ACHIEVING REGIONAL SUSTAINABILITY <i>Amir W. Al-Khafaji, Seshadri Guha, and Laith Al-Khafaji</i>
I-4, EFFECT OF FLY ASH CONTENT IN MBC BONDER FOR SUSTAINABLE CFRP RETROFIT <i>Reece Sainsbury, Vasudeva Upadhyaya Raghavendra, T. G. Suntharavadevel, and Kai Duan</i>	M-1, EFFECT OF RECYCLED MATERIALS ON THE TENSILE BEHAVIOR OF STEEL FIBER-REINFORCED CEMENT COMPOSITE <i>Sun-Woo Kim, Wan-Shin Park, Young-Il Jang, Yi-Hyun Nam, Sun-Woong Kim, Jong-Won Lee, and Hyun-Do Yun</i>	LDR-1, PROJECT CONDITIONS JUSTIFYING TIME-AT-LARGE CLAIMS <i>Mohamed-Asem Abdul-Malak and Abed ElKhalek Jaber</i>	RADM-10, RESILIENT COMMUNITIES FOR SAFE CITIES <i>Daniela Ladiana and Michele Di Sivo</i>
St-30, EVALUATION OF APPLIED REMEDIATION WORKS ON HISTORICAL MASONRY WALL EXPOSED TO LONG-TERM DETERIORATION <i>Jan Fořt, Zbyšek Pavlík, Lukáš Balík, and Robert Černý</i>	St-28, TENSILE CHARACTERIZATION OF TEXTILE REINFORCED MORTAR <i>Adel Younis, Usama Ebead, and Kshitij Shrestha</i>	p-7, USE OF PPP IN DIFFERENT COUNTRIES AND REGIONS <i>Asli Pelin Gurgun, Gul Polat, and Hasan Gokberk Bayhan</i>	C-30, FEASIBILITY, VALUE ENGINEERING AND ROCK FILL DAMS CONSTRUCTION: A CASE STUDY <i>Hamed Ahmadi Moghadam, Sahar Ahmadi, and Mir Ahmad Neshaei</i>
AAE-15, THE STUDY OF DEGRADATION CONDITION OF HIGH-RISE BUILDING EXTERIOR WALL <i>Chu-Tsen Liao, Kuang-Jou Chen, Jen-Chun Hsiao, Po-Jui Wu, and You-Zhen Fu</i>	I-16, SPALL REPAIR USING A 3D PRINTER AND EPOXY RESIN ADHESIVE <i>Jaeheum Yeon and Julian Kang</i>	p-8, FACTORS AFFECTING THE SELECTION OF CONTRACTORS IN GREEN BUILDING PROJECTS <i>Asli Pelin Gurgun and Mehmet Egemen Ozbek</i>	C-27, AUTOMATION OF A STEEL WALL FRAMING ASSEMBLY <i>Edgar Tamayo, Michael Bardwell, Ahmed Qureshi, and Mohamed Al-Hussein</i>
St-129, DIAGNOSIS OF BRIDGE BEARINGS IN NORTH JAPAN BASED ON FIELD MEASUREMENTS <i>Naho Shibasaki, Mariko Ikeda and Masahiro Sakano</i>	St-141 - DUCTILITY ENHANCEMENT OF RC BEAMS STRENGTHENED WITH STRAIN HARDENING CEMENTITIOUS COMPOSITES <i>Abdel Hakim Khalil, Emad El Sayed Etman, Ahmed Atta and Mohamed Essam</i>		

Lunch 1: 13:00 - 14:00 (Building 4G Foyer)



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Technical Session II: Tuesday, July 25, 2017; 14:00 - 16:00

Session Chair: Vanissorn Vimonsatit Classroom C4 II-1: Steel Structures	Session Chair: Klaus Holschemacher Classroom C3 II-2: Bridge Structures	Session Chair: John Smallwood Classroom C2 II-3: Procurement Method and Dispute Management	Session Chair: Asli P. Gurgun Classroom C1 II-4: Sustainable Construction
St-119, INTERACTION STRENGTH FOR CHS-TO-LONGITUDINAL PLATE JOINTS UNDER AXIAL LOAD AND IN-PLANE BENDING MOMENT <i>Hee-Du Lee, Swoo-Heon Lee, Da-Som Chu, Hye-Min Shin, Kyung-Jae Shin, Hong-Jin Kim, and Woo-Bum Kim</i>	St-126, ESTIMATION OF VEHICULAR COLLISION FORCE FOR BRIDGE COLUMNS USING COMPUTATIONAL MODELS <i>Nadim Wehbe and Abdullah Boudaqa</i>	CPM-4, USE OF THE ALTERNATIVE TECHNICAL CONCEPTS IN TRANSPORTATION PROJECTS <i>Ali Touran and Firooz Panah</i>	AW-6, SUSTAINABLE NITROGEN REMOVAL USING APPROPRIATE TECHNOLOGIES <i>Krishnanand Maillacheruvu and Derek Hartmann</i>
St-122, EXPERIMENTAL STUDY OF BEAM WITH EMBOSSED WEB <i>Kyung-Jae Shin, Han-Min Park, Wha-Jung Kim, Il-Soo Chae, and Hyung-Seok Kim</i>	St-19, SHRINKAGE AND CREEP EFFECT ANALYSES OF DOUBLE COMPOSITE CONTINUOUS BOX-GIRDER BRIDGE CONSTRUCTED BY PRE-JACKING METHOD <i>Shujin Duan, Bin Wang, Yuanyuan Wwang, and Runming Niu,</i>	C-15, A PRELIMINARY STUDY OF ALTERNATIVE TECHNICAL CONCEPTS IN HIGHWAY PROJECT DELIVERY METHODS IN THE US <i>R. Edward Minchin Jr., Parth Choksi, Linda Konrath, Sid Scott, and Yuanxin Zhang</i>	EPE-10, PRESERVING TRADITIONAL CONSTRUCTION TECHNIQUES AND MATERIALS AS AN ANSWER TO FUTURE ENERGY-FUEL CRISIS <i>Enrique Villacis, Maria Lorena Rodriguez, and Cynthia Ayarza</i>
St-23, MOMENT AMPLIFICATION FACTOR OF BEAM-COLUMNS WITH INITIAL DEFLECTION <i>Haruna Utsunomiya, Masayuki Haraguchi, Masae Kido, and Keigo Tsuda</i>	St-20, EVALUATIONS OF FLEXURAL CAPACITY IMPROVEMENT METHOD FOR RC PIERS AND CISS FOUNDATION CONNECTIONS IN BRIDGES <i>Jung-Kyun Kim and Hak-Eun Lee</i>	PND-3, CHALLENGES OF DESIGN-BUILD METHOD IMPLEMENTATION IN PUBLIC WORKS PROJECT DELIVERY <i>Puti Farida Marzuki and Rizal Zainuddin Tamin</i>	I-5, OPTIMAL BUDGET ALLOCATION MODEL FOR REHABILITATION OF SEWER SYSTEM CONSIDERING SOCIAL AND ENVIRONMENTAL CHANGES <i>Yeonsoo Kim, Woosik Jan, and Seung Heon Han</i>
AW-3, BEHAVIORS OF SLIP-CRITICAL BOLTS IN COMBINATION WITH FILLET WELDS <i>Heui-Yung Chang, Ching-Yu Yeh, and Chia-Yu Chen</i>	St-31, INFLUENCE OF MEMBER CONNECTION MODELING FOR REDUNDANCY ANALYSIS OF TRUSS BRIDGES <i>Keiji Tajima, Naoyuki Oka, Kazuaki Uchiyama, and Toshihiko Aso</i>	Su-16, OPTIMIZING GREEN-BUILDING PROJECT DELIVERY: COMPARATIVE ANALYSIS OF DESIGN-BID-BUILD AND DESIGN-BUILD DELIVERY METHODS USING CASE STUDIES <i>Alessandro Orsi, Eugenio Pellicer, and Ignacio Guillen Guillamon</i>	PND-5, A REVIEW OF CORPORATE SOCIAL RESPONSIBILITY PRACTICES IN DEVELOPING COUNTRIES <i>Ali Alotaibi, Francis Edum-Fotwe, and Andrew Price</i>
St-42, SLIP COEFFICIENT OF BOLTED SLIP-CRITICAL CONNECTIONS <i>Cheng-Chih Chen and Tsung-Cheng Hsieh</i>	St-37, STUDY OF CRITERIA USED TO OBTAIN A SUSTAINABLE BRIDGE <i>Vicent Penadés, Víctor Yepes, Tatiana Garcia-Segura, and Jose-Vicente Martí</i>	C-5, VALIDATION OF A RE-EQUILIBRIUM DECISION SUPPORT SYSTEM FOR PPP CONTRACTS <i>Amira Shalaby, Amr Hassanein, and Atter Hannoura</i>	Su-15, ASSESSMENT OF ADDITIVE AND CONVENTIONAL MANUFACTURING: CASE STUDIES FROM THE AEC INDUSTRY <i>Nataša Mrazovic, Danijel Mocibob, Michael Lepech, and Martin Fischer</i>
C-26 - HEAVYLIFTING OPERATIONS FOR THE ASSEMBLY OF THE ARCH OF BRIDGE REPLACEMENT <i>Juan J. Marti, Alvaro Saenz, Javier Martinez, Jose L. Salamanca, and Salvador Salamanca</i>	St-40, FATIGUE BEHAVIOR AT THE UPPER END OF VERTICAL STIFFENERS CONNECTED WITH SWAY BRACINGS <i>Chihiro Sakamoto, Masahiro Sakano, Hideyuki Konishi, and Masahiro Koyama</i>	CPM-1, ECONOMIC SCORING FORMULAE IN MULTI-ATTRIBUTE CONSTRUCTION AUCTIONS <i>Pablo Ballesteros-Perez, Eugenio Pellicer, and M^a Carmen Gonzalez-Cruz</i>	AAE-3, HEALTH OF GREEN BUILDING OCCUPANTS: BOTH INDOOR AND NEIGHBORHOOD ENVIRONMENTS MATTER <i>Isabelle Y. S. Cha, Anita M. M. Liu, and Felix T. H. Tom</i>
St-80, SEISMIC PERFORMANCE OF SIX-STORY FABRICATED STEEL FRAMES UNDER PSEUDO-DYNAMIC TESTING <i>Cao Zhenggang, Wan Zongshuai, Liu Han, Du Peng, and Fan Feng</i>	St-54, LOCAL CORROSION ENVIRONMENT AROUND CROSS SECTION OF A PLATE GIRDER BRIDGE <i>Kazuto Maruyama, Seiya Kamasaki, Keiji Tajima, and Toshihiko Aso</i>	CPM-15, DESIRED VERSUS REALIZED BENEFITS OF ALTERNATIVE CONTRACTING METHODS ON EXTREME VALUE HIGHWAY PROJECTS <i>Douglas Alleman, Arthur Antoine, Dean Papajohn, and Keith Molenaar</i>	AAE-5, A FINITE ELEMENT ANALYSIS APPROACH TO IMPROVE INTEROPERABILITY FOR THERMAL ENERGY SIMULATIONS <i>Yaowen Ou, Yunus Emre Harmanci, Qian Chen, Borja Garcia de Soto, Vasileios Ntertimanis, and Eleni Chatzi</i>
St-7, SEISMIC BEHAVIOR OF POST-TENSIONED ROCKING COLUMNS WITH RE-PLACEABLE ENERGY DISSIPATERS <i>H. H. Hung, C. W. Huang, and C. R. Jiang</i>	St-79, ESTIMATION OF AIRBORNE SALT LEVEL FOR BRIDGE CONSTRUCTION <i>Makoto Ohya, Masamichi Takebe, Nozomu Hirose, Shota Ajiki, and Toshihiko Aso</i>	LDR-5, DEALING WITH WEATHER-RELATED CLAIMS IN CONSTRUCTION CONTRACTS: A NEW APPROACH <i>Pablo Ballesteros-Pérez, Shabnam Kabiri, Stefan T. Smith, and Will Hughes</i>	M-9, COMPUTATIONAL APPROACH FOR ESTIMATING HYGRIC PROPERTIES OF HETEROGENEOUS MATERIALS IN LONG-TERM ASSESSMENT OF MOISTURE-INDUCED DAMAGE <i>Václav Kočí, Jiří Maděra, and Robert Černý</i>

Tea & Coffee Break 16:00 - 16:30 (Building 4G Foyer)



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Technical Session III: Tuesday, July 25, 2017; 16:30 - 18:15

<p>Session Chair: Víctor Yepes Classroom C4</p> <p>III-1: Structural Analysis, Optimization & Design</p>	<p>Session Chair: Mohd Asem Abdul-Malak Classroom C3</p> <p>III-2: Water and Geotechnical Engineering</p>	<p>Session Chair: Ali Touran Classroom C2</p> <p>III-3: Asset and Transportation Management</p>	<p>Session Chair: Keith Molenaar Classroom C1</p> <p>III-4: Construction Processes, Risk Analysis and Disaster Management</p>
<p>St-103, WIND PRESSURE DISTRIBUTION ON CIRCULAR CANOPY ROOFS</p> <p><i>Neelam Rani and Ashok Kumar Ahuja</i></p>	<p>GFE-11, COASTAL PROTECTION OF GOTVAND RESERVOIR DAM: ELECTRICAL CONDUCTIVITY PERFECTION OF SALTY DOMES</p> <p><i>Ajshin Turk, Bahram Mombeni, Hamidreza Khodabakhshi, Dariush Bahmaei, Mehdi Behdarvandi Askar, and Shabnam Ghanavatizadeh</i></p>	<p>FAM-5, AN ASSET MANAGEMENT FRAMEWORK FOR RAMP METERING SYSTEMS AND ADAPTIVE TRAFFIC CONTROL SYSTEMS</p> <p><i>Song He, Ossama Salem, and Baris Salman</i></p>	<p>C-24, HEAVYLIFTING OPERATIONS FOR THE ASSEMBLY OF A 150 M LONG SIMPLY SUPPORTED BRIDGE DECK</p> <p><i>Juan J. Marti, Javier Martinez, Jose L. Salamanca, Salvador Salamanca, Alvaro Delicado, Alvaro Saenz, and Fernando Espinosa de los Monteros</i></p>
<p>St-33, DESIGN OF STRUCTURAL PARTS BY USING MODERN SIMULATION PROCEDURES</p> <p><i>Boštjan Harl, Jožef Predan, Marko Kegl, And Dejan Dinevski</i></p>	<p>CE-1, BIOLOGIC STEP STIFFNESS SIMULATION OF TANGENCY JOINTS ON SHEET PILE LOAD TRANSFER INTO WATERWAY BED</p> <p><i>Afshin Turk, Pakavach Samani, and Shabnam Ghanavatizadeh</i></p>	<p>H-1, AFFORDABLE HOUSING POLICY IMPLEMENTATION MUNICIPALITIES: A CASE STUDY</p> <p><i>Neetu Sharma and Vishal Sharma</i></p>	<p>CS-3, THE PERFORMANCE OF CONSTRUCTION HEALTH AND SAFETY AGENTS</p> <p><i>John Smallwood and Claire Deacon</i></p>
<p>St-21, ANALYSIS OF SPACE FRAMES WITH GENERALIZED SEMI-RIGID CONNECTIONS</p> <p><i>Shujin Duan, Zhiyue Li, Meixiang Liu, and Xiaofeng Xie</i></p>	<p>GFE-13, ANALYSIS OF EMPIRICAL COMPRESSION INDEX EQUATIONS USING THE WATER CONTENT</p> <p><i>Amir W. Al-Khafaji, Krishnanand Y. Maillacheruvu, and Melissa Hoerber</i></p>	<p>CPM-27, ANALYZING DATABASES IN THE TAIWAN BRIDGE MANAGEMENT SYSTEM USING BIG DATA APPROACHES</p> <p><i>Yu-Han Chuang and Nie-Jia Yau</i></p>	<p>CS-5, INFLUENCE OF BASEBOARD HEIGHT ON WIND FORCE OF SCAFFOLDS AT BUILDING EDGE</p> <p><i>Hiroki Takahashi, Katsutoshi Ohdo, and Kazuo Ohgaki</i></p>
<p>St-25, RELATIONSHIP BETWEEN BATTENED BUILT-UP COLUMNS AND FRAMES ABOUT BUCKLING – BUCKLING STRENGTH BY BLEICH</p> <p><i>Gang Cui, Masae Kido, Keigo Tsuda, and Hideyuki Nakano</i></p>	<p>GFE-14, ANALYSIS OF EMPIRICAL COMPRESSION INDEX EQUATIONS USING THE VOID RATIO</p> <p><i>Amir Al-Khafaji, Krishnanand Maillacheruvu, and Robert Jacobs</i></p>	<p>Q-2, INNOVATION SCENARIOS FOR THE TECHNOLOGICAL DESIGN OF THE OPERATING SUITE: DESIGN CRITERIA AND METHODS</p> <p><i>Michele Di Sivo and Valentina De Paolis</i></p>	<p>O-2, DISASTER IMAGINATION GAME ENHANCED BY MOBILE MAPPING SYSTEM AND ITS APPLICATION</p> <p><i>Osamu Tsujihara, Kyohei Yamaguchi, Hideyuki Ito, Tomoyuki Sato, and Terumasa Okamoto</i></p>
<p>St-81, WIND LOAD PREDICTION OF LARGE-SPAN DRY COAL SHEDS BASED ON GRNN AND ITS APPLICATION</p> <p><i>Ying Sun, Lin Yang, and Yue Wu</i></p>	<p>GFE-15, INNOVATIVE IMPLICIT FINITE DIFFERENCE SOLUTION TO TIME RATE OF SETTLEMENT IN CLAY</p> <p><i>Amir W. Al-Khafaji</i></p>	<p>Su-19, THE IMPORTANCE OF LOCAL FACTORS FOR INVENTORY ANALYSIS</p> <p><i>Saniye Karaman Öztaş and Leyla Tanaçan</i></p>	<p>CS-9, USING EYE MOVEMENTS TO IDENTIFY HAZARDS MISSED BY AT-RISK WORKERS</p> <p><i>Sogand Hasanzadeh, Behzad Esmaeili, Michael D. Dodd, and Eugenio Pellicer</i></p>
<p>AAE-18, SPIRAL PARABOLIC DOME: HISTORICAL STUDIES OF THE IRANIAN ARCHITECTURE</p> <p><i>Afshin Turk, Mohammad Shabani, and Shabnam Ghanavatizadeh</i></p>	<p>AW-4 - EXPERIMENTAL STUDY OF STILLING BASIN MODELS</p> <p><i>H. L. Tiwari and Kamal Singh</i></p>	<p>I-13, INTERFERENCES BY THE APPLICATION FOR THE CHARGES BY USE OF RAIL INFRASTRUCTURE IN EUROPEAN INTEROPERABILITY</p> <p><i>Juan Torres</i></p>	<p>I-10, GROUND-BORNE VIBRATION AND NOISE POLLUTION GENERATED BY VEHICLES CROSSING ROAD BUMPS</p> <p><i>Samo Lubej, Andrej Ivanič, Marjan Lep, and Sebastian Toplak</i></p>
<p>St-123, A METHOD FOR STATIC ANALYSIS OF CABLE-STAYED STRUCTURES SUBJECTED TO IN-PLANE LOADS</p> <p><i>Lai Tuong Nguyen, and Thang Ba Phung</i></p>	<p>GFE-4, FULL-SCALE MODEL TEST FOR PREDICTING COLLAPSE USING INVERSE OF VELOCITY OF SLOPE SURFACE DURING EXCAVATION</p> <p><i>Nobutaka Hiraoka, Naotaka Kikkawa, Katsuo Sasahara, and Kazuya Itoh</i></p>	<p>I-11, ROAD SAFETY AUDIT: A CASE STUDY</p> <p><i>Cumhur Aydin and Nura Balla</i></p>	

End of Day 1 Sessions



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Wednesday, July 26, 2017

08:30 - 18:00

Registration

09:00 - 09:45

Keynote: Keith R. Molenaar, University of Colorado Boulder, USA
EVOLUTION AND APPLICATION OF COST AND SCHEDULE RISK MANAGEMENT ON COMPLEX PROJECTS

Building 4G, Assembly Hall

Tea & Coffee Break 09:45 - 10:15 (Building 4G Foyer)



Technical Session IV: Wednesday, July 26, 2017; 10:15 - 12:15

Session Chair: Swapan Saha Classroom C4 IV-1: Mechanical Properties of Concrete Materials	Session Chair: José V. Martí Classroom C3 IV-2: Numerical Analysis & Computation	Session Chair: Eugenio Pellicer Classroom C2 IV-3: Project Management & Cost Control	Session Chair: Norbert Delatte Classroom C1 IV-4: Engineering and Construction Education
M-16, EVALUATION OF CRYSTALLINE WATERPROOFING ADMIXTURE ON PORTLAND CEMENT CONCRETE <i>Rodolfo De Sa Petrucci and Daniel Hastenpflug</i>	St-101, DAMAGE MODELING AND ASSESSMENT FOR BRITTLE MATERIALS <i>Siamak Yazdani, Amin Salehi, Ashkan Saboori, Babak Jahani, and Svenn Borgersen</i>	CPM-23, PROBABILISTIC CALCULATION OF TOTAL LABOR CONSUMPTION RATE OF REINFORCED CONCRETE WORKS - WITH AND WITHOUT CORRELATIONS <i>Markus Kummer and Christian Hofstadler</i>	Su-1, STAND-ALONE EDUCATIONAL CENTER <i>Rashid Al Shali, Ghulam Qadir, Asalah El Naffah, Batoul Hittini, Aisha Obaid, and Hind Rida</i>
M-19, THERMAL RESISTANCE OF ALKALI ACTIVATED SLAG CONCRETE <i>Kiachehr Behfarnia and Mohammad Shahbaz</i>	St-124, A RATIONAL METHOD FOR COMPUTATION OF CABLE STRUCTURES <i>Thang Ba Phung and Lai Tuong Nguyen</i>	CPM-25, CALCULATION OF "NORMAL" CONSTRUCTION TIME FOR BUILDING CONSTRUCTION PROJECTS WHILST CONSIDERING UNCERTAINTIES <i>Christian Hofstadler</i>	EPE-1, DEVELOPMENT OF PORTABLE VIBRATION EXPERIMENT DEVICE TO SUPPORT INTUITIVE UNDERSTANDING <i>Osamu Tsujihara, Yuichi Nakatani, Terumasa Okamoto, and Takeshi Yamamura</i>
M-2, COMPARATIVE INVESTIGATION OF STRENGTH PROPERTIES OF CONCRETE MIXED WITH VARIOUS POWDER AS ALTERNATIVE CEMENTITIOUS MATERIALS <i>Isamu Yoshitake, Keisuke Miyamoto, Jun Mizushima, Kurumi Yamamoto, and Koichiro Yamato</i>	St-45, ANALYZING REINFORCED CONCRETE BEAMS BY USING THE UPF FEATURES OF ANSYS <i>Paula Manica Lazzari, Américo Campos Filho, Bruna Manica Lazzari, and Alexandre Rodrigues Pacheco</i>	CPM-26, CALCULATION OF THE LABOR CONSUMPTION RATE FOR SHUTTERING WORKS WHILST CONSIDERING UNCERTAINTIES <i>Christian Hofstadler and Markus Kummer</i>	CPM-5, CONSTRUCTION MANAGEMENT STUDENTS' PERCEPTIONS ON WORK-LIFE BALANCE <i>Duygu Akalp, Mehmet Ozbek, and Pinar Omur-Ozbek</i>
M-20, EFFECT OF CURING TEMPERATURE ON THE PROPERTIES OF 100% CLAY-BASED GEOPOLYMER CONCRETE <i>Muhammad Mukhlesur Rahman, David W. Law, and Indubushan Patnaikuni</i>	St-52, DEFORMATION AND ULTIMATE STRENGTH OF R/C ARCH UNDER ASYMMETRIC LOAD <i>Takashi Hara</i>	CPM-8, SPATIAL REGRESSION ANALYSIS FOR MODELING THE SPATIAL VARIATION IN HIGHWAY CONSTRUCTION COSTS <i>Minsoo Baek and Baabak Ashuri</i>	EPE-14, FROM PROTEGE TO CUSTOMER: INCREASING STUDENT INFLUENCE IN CIVIL AND STRUCTURAL ENGINEERING EDUCATION <i>Ulrike Quapp and Klaus Holschemacher</i>
M-28, MULTI-FUNCTIONAL CEMENTITIOUS COMPOSITES WITH SENSING AND HEALING CAPABILITIES <i>Hocine Siad, Mohamed Lachemi, Mustafa Sahmaran, and Anwar Hossain</i>	St-57, USING THE ELEMENT-EMBEDDED REBAR MODEL IN ANSYS TO ANALYZE REINFORCED CONCRETE BEAMS <i>Bruna Manica Lazzari, Américo Campos Filho, Paula Manica Lazzari, and Alexandre Rodrigues Pacheco</i>	CS-4, GENETIC ALGORITHM OPTIMIZATION OF MULTIPLE RESOURCES FOR MULTI-PROJECTS <i>Sarah Fotouh and A. Samer Ezeldin</i>	EPE-8, IDENTIFYING BAD PRACTICES: A WAY TO INTRODUCE ETHICS IN THE CLASSROOM <i>Ester Giménez-Carbó, Hugo Coll, Ma José Pelufo, Guillermo Noguera, and Pedro Serna</i>
M-33, STUDY ON DETECTION METHOD OF DEFECTS IN COVERED CONCRETE USING ELECTRICAL RESISTIVITY MEASUREMENT <i>Keiyu Kawai, Isao Ujike, and Hiroshi Okuno</i>	St-71, A COMPUTATIONAL FRAMEWORK FOR HOLISTIC LIFE-CYCLE DESIGN OF BUILDINGS <i>Terje Haukaas and Stevan Gavrilovic</i>	EPE-15, A LINEAR PROGRAMMING APPLICATION AND SOLUTION FOR MINIMIZING CLASS SCHEDULING CONFLICTS <i>Melissa Humphrey and Amarjit Singh</i>	CPM-13, PROFESSIONAL EDUCATION FOR DESIGN MANAGEMENT IN THE CONTEXT OF INDUSTRIAL PROJECTS <i>Tassia Farssura Lima Da Silva, Aline Valverde Arroiteia, and Silvio Burrattino Melhado</i>
M-41, EXPERIMENTAL STUDY ON CONCRETE PERMEABILITY AFFECTED BY ENVIRONMENTAL VIBRATION <i>Xue-Feng Ma and Jian-Qing Bu</i>	St-87, NUMERICAL INVESTIGATION OF THE BEARING CAPACITY OF TRANSVERSELY PRESTRESSED CONCRETE DECK SLABS <i>Sana Amir, Cor Van der Veen, Ane de Boer, and Joost C. Walraven</i>	C-4, AN INVESTIGATION OF PERSON-TASK-TECHNOLOGY INTERACTION AND ICT ADOPTION IN CONSTRUCTION <i>Yuanyuan Hua and Anita M.M Liu</i>	
O-6, STUDY ON FAILURE MODE OF HUSK MORTAR ENERGY-SAVING WALLBOARDS <i>Yu Zhang, Qingwen Zhang, Jian Zhao, and Guangchun Zhou</i>	St-9, THE STATIC BEHAVIORS AND NUMERICAL PREDICTION ON DISPLACEMENT OF AN EXISTING ARCH DAM <i>Nishiuchi Tatsuo</i>	C-6, FACTORS INFLUENCING PRODUCTIVITY IN CONSTRUCTION <i>Khedher Yahya Almathami, Bambang Trigunarsyah, and Vaughan Coffey</i>	
M-49, SUSTAINABLE ULTRA-HIGH-PERFORMANCE GLASS CONCRETE FOR INFRASTRUCTURES <i>Arezki Tagnit-Hamou and Nancy A. Soliman</i>	St-96 - STRENGTHENING OF RC BEAMS SUBJECTED TO CYCLIC LOAD USING ULTRA HIGH PERFORMANCE STRAIN HARDENING CEMENTITIOUS COMPOSITES <i>Abd El-Hakim Khalil, Emad El Sayed Etman, Ahmed Atta and Mohamed Essam</i>		



Resilient Structures and Sustainable Construction

The Ninth International Structural Engineering and Construction Conference (ISEC-9)

Valencia, Spain July 24 - 29, 2017

Free Time 12:15 - 12:30

Lunch 2: 12:30- 13:30 (Building 4G Foyer)



Technical Session V: Wednesday, July 26, 2017; 13:30 - 15:30

Session Chair: Takashi Hara Classroom C4 V-1: Concrete Structures	Session Chair: Isamu Yoshitake Classroom C3 V-2: Testing and Application of New Construction Materials for Infrastructure	Session Chair: Pablo Ballesteros-Pérez Classroom C2 V-3: Project Management & Cost Control
St-117, REINFORCED CONCRETE CRACK MODEL BASED ON STIFFNESS ANALYSIS OF TENSION MEMBERS <i>Angus Murray, Raymond Ian Gilbert, and Arnaud Castel</i>	M-21, BOND AND FLEXURAL BEHAVIOR OF SELF-CONSOLIDATING CONCRETE BEAMS REINFORCED WITH GFRP BARS <i>Slamah Krem and Khaled Soudki</i>	C-7, IMPROVING PRODUCTIVITY, WORKFLOW MANAGEMENT, AND RESOURCE UTILIZATION IN PRECAST CONSTRUCTION <i>Mehrdad Arashpour, Eric Too, and Tiendung Le</i>
St-133, SERVICEABILITY OF LOW CREEP FLY ASH GEOPOLYMER CONCRETE BEAMS <i>Arnaud Castel, Stephen Foster, and Raymond Ian Gilbert</i>	M-26, EXPERIMENTAL STUDY OF ULTRA-HIGH PERFORMANCE FIBER REINFORCED CONCRETE DOSAGES WITH ULTRA FAST SETTING TIME <i>Ester Gimenez-Carbo, Raquel Torres, and Pedro Serna</i>	CPM-2, APPLICABILITY OF CULTURE PROFILE ON CONSTRUCTION ORGANIZATION <i>Debby Willar, Chris Hombokau, and Estrellita Waney</i>
St-26, ULTIMATE STRENGTH OF CONCRETE FILLED SQUARE STEEL TUBULAR BEAM-COLUMNS <i>Masayuki Haraguchi, Masae Kido, and Keigo Tsuda</i>	M-37, CHARACTERISTICS OF FRESH MIXTURE OF A NOVEL CEMENT-LESS WASTEPAPER-BASED LIGHTWEIGHT BLOCK AND ITS MOLDING PROCESSES <i>Oriyomi M. Okeyinka, David A. Oloke, and Jamal M. Khatib</i>	CPM-20, INFLUENCES ON INNER CITY CONSTRUCTION SITES: A COMPARISON OF THEORY AND PRACTICE <i>Bernhard Bauer, Ulrike Haider, Jörg Koppelhuber, and Detlef Heck</i>
St-27, FRM SHEAR STRENGTHENING FOR CONCRETE BEAMS <i>Adel Younis, Usama Ebead, and Kshitij C. Shrestha</i>	M-42, APPLICATION OF INNOVATIVE MATERIALS IN PRECAST CONCRETE STRUCTURES <i>Klaus Holschemacher</i>	C-21, USING STATISTICAL MODELS BASED ON HISTORICAL PROJECT DATA TO ESTIMATE DURATIONS FOR TRANSPORTATION PROJECTS <i>Guillermo Nevett, Douglas Alleman, and Paul Goodrum</i>
St-8, UTILIZATION OF STEEL FIBRES IN DIAGONALLY REINFORCED CONCRETE COUPLING BEAMS AS ADDITIONAL TRANSVERSE REINFORCEMENTS <i>Hyun-Do Yun, Seok-Joon Jang, Sun-Woo Kim, and Wan-Shin Park</i>	M-47, SELF-HEALING CONCRETE USING FLY ASH <i>Yoshitaka Ishikawa</i>	CPM-17, FORECASTING CONCEPTUAL COSTS OF BRIDGE PROJECTS USING NON-PARAMETRIC REGRESSION ANALYSIS <i>Yuanxin Zhang, and R. Edward Minchin Jr.</i>
St-29, ON THE USE OF EXPERIMENTAL TESTING IN RC BUILDING STRUCTURES UNDER CONSTRUCTION <i>Manuel Buitrago, Jose M. Adam, Pedro A. Calderón, and Juan J. Moragues</i>	M-7, THEORETICAL APPROACH TO DETERMINATION OF ACOUSTIC PROPERTIES OF BUILDING MATERIALS <i>Lukáš Fiala and Robert Černý</i>	CPM-24, CALCULATION OF THE LABOR CONSUMPTION RATE FOR SHUTTERING WORKS WHILST CONSIDERING UNCERTAINTIES <i>Markus Kummer</i>
M-15, STUDY OF REPLACEMENT OF SAND BY EXPANDED POLYSTYRENE IN STRUCTURAL LIGHTWEIGHT CONCRETE <i>Mateus Tilton Tostes and Daniel Hastenpflug</i>	O-5, YIELD STRESS BASED ON NATURAL STRAIN THEORY UNDER CYCLIC TENSILE-COMPRESSIVE LOADING AFTER LARGE UNIAXIAL TENSION <i>Yasuyuki Kato</i>	
M-4, MICROSTRUCTURE, TEXTURE, AND MECHANICAL PROPERTIES OF GEOPOLYMERS PREPARED USING INDUSTRIAL WASTE <i>Monika Čáchová, Jaroslava Kotatkova, Pavla Rovnanikova, Magdalena Dolezelova, Nikol Alblova, Petr Svora, Eva Vejmelkova, Vaclav Koci, and Robert Černý</i>	M-31, A STUDY OF HEMPCRETE PROPERTIES USING NATURAL HYDRAULIC LIME – MIX DESIGN, MECHANICAL PROPERTIES AND MICROSTRUCTURE <i>Samo Lubej, Sebastian Toplak, Marjan Le, and Andrej Ivanic</i>	
	M-44, EFFECT OF CLAY ON PROPERTIES OF CONCRETE <i>Ayub Elahi and Atizaz Ali</i>	

Tea & Coffee Break 15:30 - 16:00 (Building 4G Foyer)



Resilient Structures and Sustainable Construction

The Ninth International Structural Engineering and Construction Conference (ISEC-9)

Valencia, Spain July 24 - 29, 2017



Technical Session VI: Wednesday, July 26, 2017; 16:00 - 18:00

Session Chair: Ashok Ahuja Classroom C4 VI-1: Damage Detection & Structure Retrofit	Session Chair: Dejan Dinevski Classroom C3 VI-2: Soil Properties and Foundation Engineering	Session Chair: Detlef Heck Classroom C2 VI-3: Information Technologies
St-134, NUMERICAL PARAMETRIC STUDIES FOR THERMOGRAPHIC INSPECTION IN CONCRETE <i>Rilya Rumbayan and Glenn Washer</i>	GFE-17, EXCEL BASED SETTLEMENT OF BEAMS ON ELASTIC FOUNDATIONS WITH FREE-ENDS AND ARBITRARY LOADING <i>Amir W. Al-Khafaji and Robert Jacobs</i>	C-1, EXPLORING BARRIERS IN IMPLEMENTING BUILDING INFORMATION MODELLING: A PRELIMINIRAY STUDY <i>Ghanim A. Bekr</i>
St-18, A RETROFIT METHOD FOR OLD PRECAST PANEL BUILDING <i>Haruyuki Yamamoto, Ankhtuya Altangerel, and He Huang</i>	GFE-3, AN ESTIMATING METHOD FOR LATERAL BEHAVIOR OF PILED-RAFT FOUNDATION <i>Haruyuki Yamamoto and He Huang</i>	C-31, PREVALENCE AND VALUE OF BUILDING INFORMATION MODELING USES IN CONSTRUCTION <i>Robert M. Leicht, Miaomiao Niu, and John I. Messner</i>
Q-1, APPLICABILITY OF WIDE-RANGE ULTRASONIC TESTING TO NON-DESTRUCTIVE INSPECTION OF GROUT CONDITION IN PRESTRESSED CONCRETE BRIDGES <i>Kuniharu Fukushima, Kimihiko Amaya, Takanori Kinoshita, and Isamu Yoshitake</i>	GFE-6, ESTIMATION OF DYNAMIC RESPONSES ON CONTOURS OF SEVERAL ROUND CUTS AT THIN PLATE VIBRATIONS <i>Aleksey Kolesnikov and Vladimir Popov</i>	EPE-2, CURRICULUM RENEWAL IN ARCHITECTURE, ENGINEERING, AND CONSTRUCTION EDUCATION: VISUALIZING BUILDING INFORMATION MODELING VIA AUGMENTED REALITY <i>Mehrdad Arashpour and Guillermo Aranda-Mena</i>
St-38, A PERSPECTIVE ON SEAWATER/FRP REINFORCEMENT IN CONCRETE STRUCTURES <i>Adel Younis, Usama Ebead, and Antonio Nanni</i>	GFE-7, NON-CRACKING TECHNIQUES FOR GROUTING <i>Miroslav Todorov</i>	CS-7, DESIGN FOR SAFETY KNOWLEDGE-BASED BIM-INTEGRATED RISK REGISTER SYSTEM <i>Md Aslam Hossain, Ernest L. S. Abbott, and David K. H. Chua</i>
St-43, EFFECT OF SURFACE ROUGHENING ON CONCRETE/TRM BOND <i>Kshitij C. Shrestha, Usama Ebead, and Adel Younis</i>	GFE-9, CREEP CHARACTERISTICS OF CHALK MARL UNDER UNIAXIAL AND CONFINED COMPRESSION STATE STRESS <i>Nuri Al-Mohamadi</i>	AAE-4, ROBUST IFC FILES TO IMPROVE INFORMATION EXCHANGE: AN APPLICATION FOR THERMAL ENERGY SIMULATION <i>Qian Chen, Yunus Emre Harmanci, Yaowen Ou, and Borja Garcia de Soto</i>
St-70, REHABILITATION OF BOX GIRDER BRIDGE <i>Kawan Alani and Abdullah Admed</i>	T-1, STUDY ON MECHANISM OF ROCK FALL AT TUNNEL CUTTING FACE AFTER BLASTING <i>Fumi Sato, Naotaka Kikkawa, Nobutaka Hiraoka, Kazuya Itoh, and Naoaki Suemasa</i>	C-19, OPTIMIZING MULTI-WALL PANEL CONFIGURATION FOR PANELIZED CONSTRUCTION USING BIM <i>Hexu Liu, Benjamin Holmwood, Christoph Sydora, Gurjeet Singh, and Mohamed Al-Hussein</i>
St-99, EVALUATIONS OF REMAINING STRENGTH ESTIMATION METHOD BY USING PLATE GIRDER MODELS WITH CORROSION UNDER SLEEPERS <i>Naoyuki Asao and Katashi Fujii</i>	GFE-16, INNOVATIVE EXPLICIT FINITE DIFFERENCE SOLUTION TO TIME RATE OF SETTLEMENT IN CLAY <i>Amir Al-Khafaji</i>	
I-12, BEHAVIOR OF CORRODED RC BEAMS WITHOUT STIRRUPS REPAIRED WITH CFRP SHEETS <i>Abdullah Al-Saidy, Sherif El-Gamal, Khalifah Al-Jabri, and Bilal Waris</i>	GFE-10 - SUITABILITY OF RED MUD IN SUBGRADE USING RBI GRADE 81 <i>Kamal Singh and H.L. Tiwari</i>	

Free Time 18:00 - 21:00



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Valencia, Spain July 24 - 29, 2017

Conference Banquet: Wednesday, July 26, 2015 - 21:00 - 23:45

Dinner Banquet Function - Poseidon Restaurant at Las Arenas Resort

Entertainment: Global Sensation Show

Technical Tours: Thursday, July 27, 2017 from Universitat Politècnica de València

Technical Tour 1 (TT1) - Monroyo's Road

[08:00-16:00]

~~*Technical Tour 2 (TT2) - Port of Valencia*~~

CANCELLED

[08:00-14:00]

Accompanying Persons Tours from meeting point in the city center : 10 Person Minimum Required

~~*Accompanying Person Tour 1 (APT1) - July 25, 2017 - Valencia Historical Tour (Walking Tour)*~~

CANCELLED

[09:00 - 13:00]

~~*Accompanying Person Tour 2 (APT2) - July 26, 2017 - Valencia Avant-Garde and Fallas Museum Tour (Walking Tour)*~~

CANCELLED

[09:00 - 13:00]

Cultural Tours from Universitat Politècnica de València (M access): 15 Person Minimum Required

Cultural Tour 1 (CT1) - July 28, 2017 - Altea & Moraira

[08:30 - 17:00]

Cultural Tour 2 (CT2): July 29, 2017 - Requena (incl. wine tasting)

[08:30 - 17:00]