4th World Congress and Exhibition on

CONSTRUCTION & STEEL STRUCTURE

October 16-18, 2017 | Atlanta, Georgia, USA
Day 1  October 16, 2017

Conference Hall-Piedmont 1

09:00-09:15 Registrations

09:15 - 9:45

Opening Ceremony

Keynote Forum

Introduction

09:45-10:15  Title: Influence of collision damage on load-carrying capacity of steel girder
Eiki Yamaguchi, Kyushu Institute of Technology, Japan

10:15-10:45  Title: Future trends in the design and construction of steel and composite infrastructure
Brian Uy, University of Sydney, Australia

10:45-11:15  Title: Influence of road surface and vehicle dynamics on bridge design
Sukhvarsh Jerath, University of North Dakota, USA

Panel Discussion

Networking & Refreshment Break 11:15-11:45 @ Piedmont Prefunction

11:45-12:15  Title: Recent advancement of steel materials for construction and their future trends
Ryoichi Kanno, Nippon Steel and Sumitomo Metal Corporation, Japan

12:15-12:45  Title: Effective use of steel composites in blast and impact load damage mitigation
Damith Mohotti, University of Sydney, Australia

Sessions:
Structures  |  Steel Construction  |  Civil Engineering  |  Digital Structural Designs

Session Chair: Sukhvarsh Jerath, University of North Dakota, USA

Session Introduction

12:45-13:10  Title: Risk management in the construction projects facilitation by building information modelling
M. Manikandan, Gulf Consult, Kuwait

Group Photo @ 13:10-13:15

Panel Discussion

Lunch Break 13:15-14:00 @ OAK

14:00-14:25  Title: Characteristics of seesaw system for vibration control of structures
Hiroshi Tagawa, Hiroshima University, Japan

14:25-14:50  Title: Structural optimization for buildings under stochastic excitations
Junho Chun, Syracuse University, USA

14:50-15:15  Title: Prediction method of low cycle fatigue capacities of steel vibration control devices under random plastic deformation
Takumi Ito, Tokyo University of Science, Japan

15:15-15:40  Title: Hydraulic and structural design of navigational lock
Amit Dhanuka, Structural Engineer, India

Panel Discussion

Networking & Refreshment Break 15:40-16:00 @ Piedmont Prefunction

16:00-16:25  Title: Near miss reporting, analysis and data visualization in BIM
Eric Marks, Georgia Institute of Technology, USA

Panel Discussion
Day 2        October 17, 2017
Conference Hall-Piedmont 1

Keynote Forum

09:30-10:00  Title: Analytical assessment of combined and sequential earthquake and fire effects on steel structures
             Amr S. Elnashai, University of Houston, USA

10:00-10:30  Title: Performance of cold-formed steel framed structures under extreme events: Seismic, fire and blast
             Gilbert A. Hegemier, University of California, San Diego, USA

10:30-11:00  Title: Alloy design of ultra-high strength steels hardened by nanoscale particles for structural applications
             LIU Chain Tsuan, City University of Hong Kong, Hong Kong

Panel Discussion

Networking & Refreshment Break 11:00-11:30 @ Piedmont Prefunction

11:30-12:00  Title: Tall building design and ultra-high strength concrete core wall behaviour from the constructability perspectives
             M. Manikandan, Gulf Consult, Kuwait

12:00-12:30  Title: A new concept of crack analysis of reinforced concrete members
             Gintaris Kaklauskas, Vilnius Gediminas Technical University, Lithuania

Sessions: Earthquake Resistance Design | Construction Engineering and Management | Construction Industry | Structures | Concrete Structures
Session Chair: Manikandan, Gulf Consult, Kuwait

Session Introduction

12:30-12:55  Title: Micromechanical modelling of fracture and fatigue in structural steels
             Ravi Kiran Yellavajjala, North Dakota State University, USA

Panel Discussion

Lunch Break 12:55-13:50 @ OAK

13:50-14:15  Title: OSHA Data Initiative’s (ODI) meaning and findings
             Scott A. Arias, Eastern Kentucky University, USA

Young Research Forum

14:15-14:35  Title: Strongback system coupled with framed structures to control the building seismic response
             Vittoria Laghi, University of Bologna, Italy

14:35-14:55  Title: Long term durability problems of steel girder bridges due to temperature variation
             Yang Zhou, University of Colorado Denver, USA

14:55-15:15  Title: Coupled corrosion fatigue of A572 hot rolled steel beams
             Elsayed Salem, Rensselaer Polytechnic Institute, USA

Panel Discussion

Networking & Refreshment Break 15:15-15:35 @ Piedmont Prefunction

15:35-15:55  Title: Study on ultimate seismic behavior and repair method of damaged steel frames
             Ayumu Ushigome, Tokyo University of Science, Japan

15:55-16:15  Title: A study on ultimate state and mechanical characteristics of connection joint of damaged H-shaped bracing structure
             Yasuto Yonezawa, Tokyo University of Science, Japan

16:15-16:35  Title: A study on restoring force characteristics and passive control design method of steel framed structures with scaling-frame
             Keita Saito, Tokyo University of Science, Japan
Title: An experimental study on resistant mechanism of embedded connection for steel square tube filled with filler ~effect of characteristics of filler~
Yuta Nakaie, Tokyo University of Science, Japan

Panel Discussion

Day 3 October 18, 2017
Conference Hall-Piedmont 1

Keynote Forum

Introduction
09:30-10:00 Title: Emerging issues in the construction industry: A critical review of past and present trends
Ahmed Syed, East Carolina University, USA

10:00-10:30 Title: Demountable and reusable composite floor systems
Milan Veljkovic, Delft University of Technology, Netherlands

10:30-11:00 Title: Shape memory alloy (SMA) based smart bracing system for improving the seismic performance of steel structures
Shahria Alam, University of British Columbia, USA

Panel Discussion

Networking & Refreshment Break 11:00-11:20 @ Piedmont Prefunction

11:20-11:50 Title: A dynamic approach for the analysis of thin-walled members within the generalised beam theory
Gianluca Ranzi, University of Sydney, Australia

Sessions:
Construction Industry | Earthquake Resistance Design | Digital Structural Designs | Construction Engineering and Management
Session Chair: LIU Chain Tsuan, City University of Hong Kong, Hong Kong

Session Introduction

11:50-12:15 Title: Modelling of composite beam connected to box-column
Mohammadreza Eslami, Clemson University, USA

12:15-12:40 Title: Structural design of powerhouses for hydropower projects
Honey Mehra, SMEC(I) Pvt. Ltd., India

12:40-13:05 Title: An experimental study of the capacity of top and seat T connections with stiffeners
Abdulkadir Cüneyt Aydın, Ataturk University, Turkey

Lunch Break 13:05-13:50 @ OAK

13:50-14:15 Title: Effect of wall penetration depth of sheet pile retaining wall for seismic response
Julius Emmanuel Emuriat, Addis Ababa University School of Technology, Ethiopia

Workshop

14:15-15:15 Title: Damage to steel buildings after 2011 Tohoku earthquake in Japan
Mohammadreza Eslami, Clemson University, USA

Video Presentation

15:15-15:35 Title: Mechanisms responsible for porosity in structure
Peng Sheng Wei, National Sun Yat-Sen University, Taiwan

Panel Discussion @ 15:35-16:20

Networking and Refreshment Break 16:20-16:40 @ Piedmont Prefunction

Extended Networking Session

Closing Ceremony