



ARCITECTURE AND STRUCTURE

24-26 April 2019

**PRESENTATION PROGRAM**

## SPONSORS



## SEWC2019 PROGRAM

<b>23 April 2019 Tuesday</b>	
14.00-18.00	<b>Registration</b> -The Marmara Taksim Hotel ground floor
17.00-18.30	<b>SEWC Board Meeting</b> – Foundation for Architecture meeting room
19.30-21.30	<b>Welcome reception</b> - Şerefiye (Theodosius) Cistern
<b>24 April 2019 Wednesday</b> The Marmara Hotel Taksim	
08.00-09.00	Registration (Ground floor)
Ball Room A+B (Ground Floor)	
09.00-10.00	Opening Session (Ball room- ground floor)
10.00-11.00	Keynote Lectures Chair: Yusuf Arayıcı
10.00-10.30	<i>Jan B. Obrebski</i> Lightweight Structures in Civil Engineering – Progress -Fascination and Own Achievements
10.30-11.00	<i>Leslie Robertson</i> Highlights and Lessons
11.00-11.30	Coffee Break
11.30-13.00	Keynote Lectures Chair: Yusuf Arayıcı
11.30-12.00	<i>Narendra K. Srivastava</i> Lessons from Structures in Nature, v3
12.00-12.30	<i>SawTeen See</i> Lotte World Tower and PNB 118
12.30-13.00	<i>Ding Jiemin</i> Coordination and Integration of Architectural Design and Structural Design for Sports Buildings
13.00-14.30	LUNCH (Panorama Lounge- 20 <sup>th</sup> floor)

## 24 April 2019 Wednesday

The Marmara Hotel Taksim

13.00-14.30 LUNCH (Panorama Lounge- 20 <sup>th</sup> floor)					
	Ortaköy Room M Floor		Galata Room M Floor		Ball Room A G Floor
14.30-15.45	Disaster Resilient Buildings & Cities  Chair: Gülay Aşkar	14.30-15.45	Experimental Methods & Tests  Chair: Fevziye Aköz	14.30-15.45	Structural Design  Chair: Satwant Rihal
14.30-14.45	Nagaoka Takuma Study on Practical Application of Damping Control Ceiling	14.30-14.45	Rensei Akiyama Seismic Performance of Steel Pipe Pile with Wings and a Construction Method for Joining with an Upper Column	14.30-14.45	Miwa Mizutani Performance-Based Seismic Design in Japan
14.45-15.00	Mahmood Hosseini A Light-Weight and High Resistance Wall and False Ceiling System made of Recycled and Natural Materials to Increase the Sustainability and Resilience of Buildings	14.45-15.00	Suzuki Keita, Research on Prevention of Collapse of Existing Dangerous Concrete Block Walls Bending Test of Concrete Block Wall Coated with Polyurea Resin, Performance Verification of Aramid Fiber Tape	14.45-15.00	Kumars Zandparsa Curved Girder Behavior Under Outside of the Girder Passive/Active Stressing Force
15.00-15.15	Mohamad Reza Hamed, Reducing the Risk of Earthquake Induced Casualty through Creation of Safe Spaces Inside the Buildings by Utilizing Interior and Structural Double Purpose Shelter Designs (DPSD)	15.00-15.15	Nasar Ahmad Khan Influence of Openings on the Inelastic Response of Unstiffened Steel Plate Shear Wall Systems	15.00-15.15	Saeed Tamaddon Effect of the Earthquake Incidence Angle on the Seismic Response of Steel Buildings with Plan Irregularity
15.15-15.30	Azita Abolfathirad, Contents and Equipment for Creation of Double-Function Buildings to be Responsive to Post-Earthquake Needs	15.15-15.30	Daiki Sato Damage Evaluation of Full-Scale Steel Gymnasium based on E-Defense Shaking Table Tests	15.15-15.30	Yoshida Hirona Research on the Development of the Semi-Rigid Column Base of RC; Experimental and Analytical Study on RC Columns with Tapered Part
15.30-15.45	Mahmood Hosseini Architectural and Structural Designs of Neighborhood Self-help Centers Considering Sustainability and Resilience Aspects	15.30-15.45	Han Wook Cho Re-modelling and Structural Health Monitoring of Olympic Gymnastic Stadium in Seoul	15.30-15.45	Shunsuke Okayama, A Canopy in Station Square with Irregular Grid Steel Girder and Trapezoid Steel Wall
15.45-16.15	Coffee Break	15.45-16.15	Coffee Break	15.45-16.15	Coffee Break

## 24 April 2019 Wednesday

The Marmara Hotel Taksim

15.45-16.15	Coffee Break	15.45-16.15	Coffee Break	15.45-16.15	Coffee Break
	Ortaköy Room M Floor		Galata Room M Floor		Ball Room A G Floor
16.15-17.00	SEWC INDIA Temple Structures Chair: Sanna Rathinavelu	16.15-17.45	Experimental Methods & Tests Chair: Nabi Yüzer	16.15-17.45	High-Rise Buildings Chair: Stephen Kelley
16.15-16.30	Sanna Rathinavelu Structural System of Temple is an Organism	16.15-16.30	Valery Piva Experimental Study on the Shear and Residual Pull-Out Capacity of Disc Anchors	16.15-16.30	Song Keum-jung Structural Schematic Design (A) for Over Site Development Buildings on top of Existing Metro Station'
16.30-16.45	Harsha Vardhini Prabakaran Creating Spaces for Gods: The Expansion of Historical Madurai City and Its Architectural Inheritance	16.30-16.45	Alireza Faroughi Evaluation on Proper Geometrics for Yielding Steel Core of Concentric Buckling Restrained Braces	16.30-16.45	Kim Ja Young Structural Schematic Design (B) for Over Site Development Buildings on Top of Existing Metro Station
16.45-17.00	Pradiba Raajkumaar Rajendran Defensible Space in the Temple City of Madurai	16.45-17.00	Keisuke Watanabe Development of Active Response Control System Using Artificial Intelligence	16.45-17.00	Masanori Muguruma Realization of High-Rise Mixed-Use Building in which RC Columns and CFT Columns are Connected with Rigid Joints"
17.00-17.45	Architectural and Environmental Engineering Chair: B. K. Raghu Prasad	17.00-17.15	Mônica A. Smits Proposal for Glued Bamboo Laminated Model for the Estimation of Elastic Modules by Ultrasound	17.00-17.15	Donghyun Chung The Structural Issues of Concrete Tall Building
17.00-17.15	Vidyashankar N. Hoskere State of the Art in the Design of Water Towers in India				
17.15-17.30	B. K. Raghu Prasad Some Recent Problems in Following is 1893 - 2016 (Part-1): Criteria for Earthquake Resistant Design of Structures	17.15-17.30	Masafumi Yanada Structural and Fire-Resistant Design of Medium to High-Rise Hybrid Building with Timber and Steel	17.15-17.30	Kwangryang Chung The Revival of Braced Frame in the Form of Tall Building
17.30-17.45	Surya Prakash Ponnada Project Delivery Challenges & Project Management Solutions – Case Studies	17.30-17.45	Uğur Demir Impact of Fire Exposure on Seismic Behavior of Reinforced Concrete Columns	17.30-17.45	Yuna Katori Proposal for a New Structure System of High-Rise Buildings and Research on Structure Plan"



## SEWC2019 PROGRAM

<b>25 April 2019 Thursday</b> The Marmara Hotel Taksim 09.00-12.30	
Ball Room A+B (Ground Floor)	
Keynote Lectures Chair: Juan Gerardo Oliva Salinas	
09.00-09.30	<i>Rajgopala A. Sundaram</i> Old and New Shells
09.30-10.00	<i>SeungDeog Kim</i> Concept Design and Applications of Deployable Scissors System for Advanced Buildings
10.00-10.30	<i>Maria E. Garlock</i> Felix Candela Umbrellas Transformed: From Roofs to Coastal Defense
10.30-11.00	Coffee Break
Keynote Lectures Chair: Görün Arun	
11.00-11.30	<i>Yonca Çeltikçi</i> Designing New into the Old: Yapı Kredi Culture & Art Center
11.30-12.00	<i>Rosario Ceravolo</i> Diagnosis and Preservation of 20th Century Architectural Heritage: From the First Thin Shell Solutions to the Iconic Structures Built by Pier Luigi Nervi and Riccardo Morandi in Turin
12.00-12.30	<i>Ken'ichi Kawaguchi</i> Safety of Ceilings and Modern Architectures
12.30-14.00	LUNCH (Panorama Lounge- 20 <sup>th</sup> floor)

## 25 April 2019 Thursday

The Marmara Hotel Taksim

12.30-14.00	LUNCH (Panorama Lounge- 20 <sup>th</sup> floor)				
	Beyoğlu-Galata Room M Floor		Ball Room B G Floor		Ball Room A G Floor
14.00-15.00	Architect & Engineer Collaboration  Chair: Filiz Piroğlu	14.00-15.30	Vibration Control Systems  Chair: Ken'ichi Kawaguchi	14.00-15.30	Architectural Design  Chair: Görün Arun
14.00-14.15	Juan G. Oliva Salinas Creativity in Collaborative Work between Architects and Engineers	14.00-14.15	Tatsuhiko Maeda Design of a Huge Complex Building of Two Structurally Independent Seismic Isolation Structures Coupled by a Unique Expansion Joint	14.00-14.15	Chiara Pompei The Past and Future of the Tiber River: Urban and Infrastructure Transformation
14.15-14.30	Maria E. Garlock Modernizing and Disseminating the 'Structural Art' Teaching of David Billington	14.15-14.30	Masashi Ogino Structural Design of a High-Rise Building Using Tuned Viscous Mass Dampers Installed Across Three Consecutive Stories	14.15-14.30	Hiroomi Tanaka Structural Design of Large Commercial Facilities Using Advanced Steel Frame System
14.30-14.45	Remo Francesco Pedreschi The work of Eladio Dieste and its Impact on Engineering and Architectural Education	14.30-14.45	Saeedi Samira The Use of TADAS Device with Variable Heights of Plates to Control Energy Dissipation for Earthquakes of Different Levels	14.30-14.45	Shinichiro Kawamoto Structural Design of the New National Stadium in Japan
14.45-15.00	Satwant Singh Rihal Heritage Structures and Structural Engineering Education- Perspectives- and Future Directions	14.45-15.00	Eisuke Mitsuda Seismic Retrofit Design using Coupled Vibration Control System, Kansai University Bldg 4-1 designed by TOGO MURANO in 1960	14.45-15.00	Zhang Qilin Experimental and Numerical Studies on Aluminium Alloy Gusset Joints for Free-Form Single Layer Grid Structures
15.00-15.30	Coffee Break	15.00-15.15	Kohei Suzuki Damping Performance and Application Example of the Composite Damper Consisting of Viscoelastic Material and Friction Material	15.00-15.15	Gülden Gümüşburun Ayalp The Link Between Demographics and Entrepreneurship Orientations at Construction Industry
		15.15-15.30	Lu Zheng Comparative Studies on Two Additional Mass Dampers	15.15-15.30	Aydanur Yenel Architectural Continuity from the Past to the Future
		15.30-16.00	Coffee Break	15.30-16.00	Coffee Break



## 25 April 2019 Thursday

The Marmara Hotel Taksim

15.00-15.30	<b>Coffee Break)</b>				
	Beyoğlu-Galata Room M Floor				
15.30-16.30	<b>Bridges Engineering vs Architecture &amp; Landscape</b> Chair: Zekai Celep				
15.30-15.45	Pasquale Colonna The Bridge in the Territory. The Duty of a Beauty that must be Designed and Maintained				
15.45-16.00	Alessandro Stocco Rotas Italia Pedestrian Bridge		15.30-16.00	<b>Coffee Break</b>	
16.00-16.15	Enzo Siviero Bridges - Some Concept Designs for Istanbul			Ball Room B G Floor	
16.15-16.30	Laura Giovanna Guidi "Measuring Beauty" in Bridge Design: Aesthetic as Result of Structural Efficiency		16.00-17.30	<b>Vibration Control Systems</b> Chair: Rosario Ceravolo	
16.30-17.00	<b>Coffee Break</b>		16.00-16.15	Masaya Aoyama Development and Design of System to Control Vibrations due to Human Rhythmic Action of Concert Audiences using Floating Mass Damper	
17.00-18.00	<b>Bridges Engineering vs Architecture &amp; Landscape</b> Chair: Zekai Celep		16.15-16.30	Kumars Zandparsa Effect of Bracing Orientation on Modal Vibration in Steel Structures	
17.00-17.15	Alessandro Stocco "Piccoli Angeli" Bridge		16.30-16.45	Masato Miyashita Structural Design and Performance Evaluation of a Mid-Story Seismic Isolated High-Rise Building	
17.15-17.30	Anania Laura C-FRP Cables for the Licata Railway Cable Stayed Bridge Proposal		16.45-17.00	Yamamoto Hiroshi Examples of Renovation of Buildings by Seismic Isolation Retrofit	
17.30-17.45	Jan Biliszczuk Concrete Cable-Stayed and Extradosed Bridges Recently Built in Poland		17.00-17.15	Masaru Kikuchi Advanced Hysteresis Model of High-Damping Rubber Bearings for Seismic Isolation	
17.45-18.00	Laura Giovanna Guidi The Evolution of Long-Span Bridges and the Innovative Contribution of Calatrava		17.15-17.30	Koichi Masuda Behavior of Real Scale Lead Rubber Bearing Shaking Test under the Real Scale Earthquake Response	
			15.30-16.00	<b>Coffee Break</b>	
				Ball Room A G Floor	
			16.00-17.30	<b>Structural Design</b> Chair: SeungDeog Kim	
			16.00-16.15	Tobias Cortes Deep Tunnel Lining Design for the Brenner Base Tunnel	
			16.15-16.30	Radu-Constantin Cazamir Danubian Port Giurgiu is Thriving	
			16.30-16.45	Jeong Jaewook Case Studies of Innovative Composite Structural System applied to Singapore and South Korea	
			16.45-17.00	Zhang Hengfei Structural Selection and Discussions on 800-meter Span City Domes	
			17.00-17.15	Yao Li Research on Multilevel-Tension Cable Supported Rigid Latticed Structure	
			17.15-17.30	Ken Ishii Effective Seismic Input Rates for Existing Buildings Considering Soil-Structure Interaction	



## SEWC2019 PROGRAM

<b>26 April 2019 Friday</b> The Marmara Hotel Taksim 09.00-12.30	
Ball Room A+B (Ground Floor)	
	Keynote Lectures Chair: Deniz Mazlum
09.00-09.30	<i>Randolph Langenbach</i> RECOVERING THE LOST 'MOMENT': How Turkish Hımsı may hold the Secret to stopping Pancake Collapse of Concrete Moment Frames
09.30-10.00	<i>Enzo Siviero</i> Morandi Bridge in Genova from a Tragedy to a Renaissance
10.00-10.30	<i>Xilin Lu</i> New Technologies for Seismic Response Control of Tall Buildings
10.30-11.00	Coffee Break
	Keynote Lectures Chair: Deniz Mazlum
11.00-11.30	<i>Radoslav Zuk</i> The Role of Structure in a Creative and Comprehensive Architectural Design
11.30-12.00	<i>Bruce Fairbanks</i> The Airport Terminal - Shaping of a New Tipology
12.00-12.30	<i>Stephen J Kelley</i> Challenges of Preserving the Gateway Arch in Saint Louis, Missouri, USA
12.30-14.00	LUNCH (Panorama Lounge- 20 <sup>th</sup> floor)

## 26 April 2019 Friday

The Marmara Hotel Taksim

12.30-14.00	<b>LUNCH</b> (Panorama Lounge- 20 <sup>th</sup> floor)				
	Ortaköy Room M Floor		Galata Room M Floor		Ball Room A G Floor
14.00-15.30	<b>Seismic Retrofit and Strengthening of Structures</b> Chair: Kadir Güler	14.00-15.30	<b>SEWC-INDIA</b> Architectural and Environmental Engineering Chair: L. Ramachandra Manjunatha	14.00-15.30	<b>Historic Structures</b>  Chair: Meltem Vatan Kaptan
14.00-14.15	Giulia De Lucia The Role of Structural Health Monitoring in the Seismic Protection of Monumental Structures: the Virtual Lab of the Sanctuary of Vicoforte	14.00-14.15	Abdul Aleem M. I. Sustainable Geopolymer Concrete with Manufactured Sand	14.00-14.15	Kari Christer Avellan New Perspective on Historic Materials and Technologies for Sustainable Future Innovations in Building Standards”
14.15-14.30	Hassane Ousalem Behavior of Brick Masonry-Reinforced Concrete Composite Columns under Lateral Loads	14.15-14.30	Narayana G. Study on Flexural Behaviour of Reinforced Concrete Beam by Incorporating Cement Bonded Fly Ash Aggregate to Natural Aggregates	14.15-14.30	Vigneswar V. Sivanesan Structural Strategy and Construction System in the Case of Traditional Beri-Chettiar Dwellings in Chennai (1850-1950)
14.30-14.45	Ramiro Sofronie Seismic Rehabilitation of Patrimonial Buildings	14.30-14.45	Sandeep S. Shirkhedkar Site Specific Seismic Study for Proposed Power Project at Meghanaghat, Bangladesh	14.30-14.45	Gianfranco De Matteis Masonry Vaults: Architectural Evolution, Structural Behaviour and Collapse Mechanisms.
14.45-15.00	Javier Lopez Gimenez Evaluation of Seismic Retrofit Schemes for Operational Industrial Facilities In Turkey	14.45-15.00	G. S Suresh Behavior of Steel-Concrete Composite Bridge with Isolator	14.45-15.00	Shademaneh Haidarbaigi The Effective Philosophy for Seismic Rehabilitation of Cylindrical Masonry Towers, Case: Tughrul Tower
15.00-15.15	Nakano Tokio The Research on Seismic Evaluation and Retrofit of Condo Building in Japan	15.00-15.15	L. Ramachandra Manjunatha. A Study on Recent Developments & Growing Importance of Steel Industry based By-Products in the Indian Construction Sector for Cost Effective Durable & Sustainable Constructions	15.00-15.15	Livi- Gruia Costin Seismic Risk of Patrimonial Buildings
15.15-15.30	Yoshiharu Kanebako Seismic Retrofit of Old Aged Wooden Buildings to keep the Original Atmosphere	15.15-15.30	S. P. Anchuri (Sanna Rathinavelu) Form Based Structural Optimization of High-Rise Structures”	15.15-15.30	Gianfranco De Matteis, Structural Features of Typical Italian Bridges Built in the ‘50s: Four Case Studies in the Province of Caserta
15.30-16.00	<b>Coffee Break</b>				
16.00-17.00	<b>Closing Ceremony</b> Ball Room- G Floor				
19.00-21.30	<b>Gala Dinner</b> Bosphorus- Joy Boat Restaurant				

## SEWC2019 PROGRAM

24-26 April 2019

### POSTERS

Foyer Area (Ground Floor)

Kenji Umemura, Yutaka Soga, Mitsuo Asano High-rise dual towers using mechanical joints transmitting lateral force to grid-form soil improvement- Global Gate
Feng Yuan, Xiang Xin'an, Wang Heng, Chen Wenming, Deng Kaiguo System Introduction and Engineering Application of Large Opening Spoke Cable Supported Rigid Grid Structure- A New Hybrid Space Structure
Antonello De Luca, Laura Giovanna Guidi Ponte Della Costituzione Across Canal Grande (VE): The Pioneering "Pure Arch" Solution by Calatrava
Junichirou Tsutakabe, Yutaka Soga, Mitsuo Asano Earthquake-Absorbing Structure Securing Habitability against Wind Load - Bellevue Office Nagoya
Mahshid Doost Mohamadian Flexible Architectural Design of Complex Subway Stations as Multi-Purpose Spaces for Emergencies Following Natural Disasters
Motohiko Kuwa Structural Design for Irregular Shaped Building without Seismic Joints

## CONFERENCE ROOMS

### G FLOOR PLAN



### M FLOOR PLAN

