# iBridge 2016 Program

**August 8, 2016**

## OPENING SESSION

**Welcome - Alp Caner** - Chair of Organizing Committee

*İsmail Kartal* - Director General of Turkish Highways  
*İsmail Murtazaoğlu* - Deputy Director General of Turkish State Railways  
*Nurdan Apaydın* - Turkish Highways Head of Structures Department  
*Polat Gülkan* - Chair of Scientific Committee

## COFFEE BREAK

## KEYNOTE SESSION

**Polat Gülkan** (Çankaya University) Turkey  
**Phillip Yen** (FHWA) USA

## LUNCH

### Room 1

**KGM Special Session**

- Chair: Uğur Kenan Adılioğlu
- Long Span Bridges and Structural Health Monitoring Systems: Selected Cases  
  - Nurdan Apaydın
- Recent Bridges in Turkey: Design Concepts  
  - Seçil Cam
- From Past to Present: Historical Bridges of Anatolia  
  - Halide Sert
- Special Construction Techniques Used in Osman Gazi Bay Bridge  
  - Erdoğan Dedeoğlu

### Room 2

**Designing and Constructing Against Extreme Events**

- Chair: Taner Yılmaz
- ID129 Seismic Design Of Chikugo River Bridge To Control Resistance Performance  
  Takayuki Omori, Noboru Ishikura, Atsushi Kobayashi, Hirokazu Ito - Japan
- ID152 Risk And Reliability Assessment Of Highway Bridges In Seismically-Active Flood-Prone Regions  
  Taner Yılmaz, Swagata Banerjee Basu - Turkey
- ID160 Effect Of In-Span Hinges On The Seismic Behavior Of Multiple-Frame Reinforced Concrete Box-Girder Bridge  
  Mohammad Abbasi, Mohamed A. Moustafa - USA
- ID226 Incrementally Launched Viaducts Of The Northern Marmara Highway: Design And Construction In High Seismic Areas  
  Ettienne Combescure, Hatice Karayılgı, Özgür Özkal, Julien Erdem Erdoğan, Ömer Güzel, Giulio Maria Scoito - Turkey
- ID341 Evaluation of Steel Bridge Truss Systems by Conversion to Equivalent Box Girders  
  Gökhan Gelisen, Turkey

### Room 3

**Bridge Computer Technology and Analysis**

- Chair: Almendr Bayraktar
- ID027 Coupling Of CFD Model And FVCOM To Predict Coastal Bridge Flows  
  Be Huang, Bing Zhu - China
- ID033 Integrated 3d Bridge-Condition Visualization To Facilitate Element-Based Bridge Condition Rating And Inspection  
  Zhiang Shen, Zhiiong Shang, Vijay Durvusula - China
- ID146 Effect Of Viscous Damping Modeling Characteristics On Seismic Response Of Bridges  
  Mohammad Abbasi, Mohamed A. Moustafa - USA
- ID149 Stationary And Transient Responses Of Suspension Bridges To Spatially Varying Ground Motions Including Site Response Effect  
  Süleyman Adanur, Ahmet Can Altunışık, Kurtuluş Soyılık, Almendr Bayraktar, A. Aydin Dumanoğlu - Turkey
- ID122 Analysis Of Cable-Stayed Bridges Subjected To Severe Wind Loading  
  Mý Chorzepea, Max Ovet
# iBridge 2016 Program

## August 8, 2016

### ROOM 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 15:30 | Advances in Bridge Construction Techniques: Long Span Bridges  
Chair: Nurdan Apaydın  
ID086 Challenging Construction And Erection Methods For The Izmıt Bay Suspension Bridge And The 3rd Bosporus Bridge  
Henrik Polk, Jesper Sørensen, Kent Fuglsang, Lars Sørensen  
ID335 Third Bosporus Bridge – Conceptual Design Optimized For A Fast Track Project  
Jean-François Klein, Michel Virlogeux, Thierry Delémont  
ID350 Fracture-Based Analysis of Third Bosporus Bridge Cable Bands – Khaled Mahmoud  
ID338 Third Bosporus Bridge – Conceptual Design And Structural Behaviour Of The Cable Systems  
Thierry Delémont, Jean-François Klein, Michel Virlogeux, Vincent De Ville  
ID051 Organic Prestressing Impact In Multi-Span Large Deck Construction  
Pedro Pacheco; Hugo Coelho - Portugal | Bridge Design  
Chair: Necati Çatbaş  
ID009 The Influence Of Web Distortion Of Doubly-Symmetric Steel I-Beam On Elastic And Plastic Slenderness Limits  
Scluc Bas, Ilker Kalkan, Sabahattin Aykac - Turkey  
ID011 Economic Impact Analysis Of Accelerated Bridge Construction  
Punda Yavuz, Turner Joseph Selterman, Upul Bandara Attanayake, Haluk Mehmet Akhan - USA  
ID145 De-Bonding Strands As An Anchorage Zone Crack Control Method For Pretensioned Concrete Bulb-Tee Bridge Girders  
Emre Kutlarar, Pinar Okumus, Michael Oliva - USA  
ID099 Dynamic Loading Tests Of Nissibi Cable-Stayed Bridge  
Alemdar Bayraktar, Temel Türker, Janusz Tadla, Altok Kursun, Arif Erdiş - Turkey  
ID197 A Real Case Study About Evaluation Of The Existing Situation Of A Post Tensioned Single Span Box Girder Bridge  
Kamil Ergüner, Ali Güntap Görgülü, Sema Melek Kasapgil - Turkey | Advances in Bridge Construction Techniques  
Chair: Jose Romo  
ID012 Accelerated Replacement Of Steel Plate Railway Bridges Using Moving Cranes On Railroad  
Eunsoo Choi, Chanyeong Jeon, Kyuho Jeong, Seungmin Gin, Han-Chool Park - Korea  
ID039 Slide-In Bridge Construction Implementation In Michigan, USA  
Upul Attanayake, Haluk Akhan, Ozan Utku Ridvanoglu - USA |

### ROOM 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 15:30 | Bridge Maintenance and Health Monitoring  
Chair: Erdal Şaşak  
ID005 Structural Health Monitoring Of Golden Horn Metro Crossing Bridge In Istanbul  
Peter Furtner, Martin Stöger, Helmut Wenzel - Austria  
ID032 Bosporus Bridge Rehabilitation  
Kemal Arman Domaniç, Alp Caner - Turkey  
ID351 Suspension Bridge Health Monitoring Role In Bridge Management  
Dyab Khazem - USA  
ID103 Big Data Processing For Real-Time Safety Control Of Bridges  
João Santos, Christian Crémona, Paulo Silveira - Portugal  
ID216 Monitoring And System Identification Of Suspension Bridges: An Alternative Approach  
Erdal Şaşak - Turkey | Evaluation of Bridge Bearings, Isolation Systems, Dampers and Expansion Joints  
Chair: Gökhân Özdemir  
ID008 Agiæa Bridge - A Cable Stayed Motorway Bridge With Specific Proposal For Anti-Seismic Bearing System  
Oliver Benicke, Peter Huber - Germany  
ID028 Significance Of Loading History On The Hysteretic Behavior Of Isolators  
Gökhân Özdemir, Beyhan Bayhan - Turkey  
ID038 Innovative Cylindrical Pendulum Bearings For A Record Bridge Span For Rail Traffic  
Simon Hoffmann, Max Brünninghold - Switzerland  
ID045 Behavior And Design Of Spread Slab Beam Bridges  
Tevfik Terzioglu, Dongqi Jiang, Mary Beth D. Hueste, John B. Mander - USA  
ID125 Static And Dynamic Behavior Of Unbonded Elastomeric Bridge Bearings  
Kemal Arman Domaniç, Alp Caner - Turkey | Historical Bridges and Restoration  
Chair: Mutluhan Nas  
ID142 Are We Missing Aesthetics In Bridge Design?  
Usame Ekici - Turkey  
ID161 Analytical Structural Investigation of Historical Dicle (On Gözlu) Bridge In Turkey  
Aysegul Demir, Yasar Handi Gedik, Oguz Gunes, Kasim A. Korkmaz - Turkey  
ID169 Structural Investigation Of Justinianus Bridge, Turkey  
Vildan G. Mentese, Yasar H. Gedik, Oguz Gunes, Kasim A. Korkmaz - Turkey |

### ROOM 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30</td>
<td>WELCOME RECEPTION</td>
</tr>
</tbody>
</table>
August 9, 2016

KEYNOTE SESSION
Khaled Mahmoud (Bridge Technology Consulting - BTC) USA
Akira Wada (Tokyo Institute of Technology) Japan

ROOM 1

10:30
Condition Assessment of Aging Bridges
A4

Chair: Erdal Şafak
ID044 Corrosion Mapping In Bridge Decks Using Ground Penetrating Radar
Pelin Ipek Temurcan, Thikra Dawood, Tarek Zayed - Canada
ID064 Effect Of Reinforcement Corrosion On Safety And Stability Of Slab-On-Girder Bridges Versus Frame Bridges
Amina Mohammed - Libya, Husham Almansour - Canada
ID088 Time-Dependent Corrosion Model For Suspension Bridge Main Cables
Efe Karanci, Raimondo Bettì - USA
ID138 GPR-Based Condition Assessment Model For Concrete Bridge Decks
Mohammed Alsharqawi, Tarek Zayed, Ahmad Shami - Canada

11:00
Historical Bridges and Restoration
B4

Chair: Alemdar Bayraktar
ID024 Restoration Effect On The Structural Behavior Of Historical Masonry Arch Bridges
Ahmet Can Altunışık, Alemdar Bayraktar, Ali Fuat Genç - Turkey
ID100 Safety Assessment Of Stone Arch Bridges Using Micro And Macro Modeling Including Soil Effects
Alemdar Bayraktar, Ali Fuat Genç, EmrahCan Akbulut, Ahmet CanAltunışık - Turkey
ID104 Restoration Works Carried Out At Historical Sokollu Mehmet Paşa Bridge Across The Drina River In Bosnia And Herzegovina
Halide Sert, Süheyla Yılmaz, Hakan Demirci, Ayşe Arşin, E. Mahmut Partal, Mutluhan Nas, G. Sibel Turan - Turkey
ID126 Evaluating The Linear Behavior Of The Historical Mehmed Pasha Sokolovic Bridge Across The Drina River In Bosnia And Herzegovina
Halide Sert, Mutluhan Nas, Süheyla Yılmaz, Hakan Demirci, Ayşen Arşin, G. Sibel Turan, Nurdan Apaydın - Turkey

12:00
Bridge Design
C4

Chair: Özgür Özkul
ID031 Yesildere Intersection Bridge - Design Challenges And Solutions
Altan Yavuzcan, Özgün Kökten, Alp Yaşçoğlu, Tulin Solak, İsmail Çetin - Turkey
ID035 On The Design And Construction Of Kemaliye Bridge
Şefika Çacılı, Turkey Esra Namli, Turkey
ID198 Structural Behavior Investigation Of Turkish Highway Bridges Considering Soil Structure Interaction
Mehmet F. Yılmaz, Seda Konor, Kasım A. Korkmaz, Kadir Güler - Turkey
ID228 The First Extradosed Bridge In Turkey: Design Of The Antalya Çali Bridge
Cemal Noyan Özel, Özgür Özkul, Erdem Erdöğan, Kamil Ergüner - Turkey

LUNCH

TCDD Special Session

A5

Chair: Seçil Cam
ID001 Effect Of Soil-Structure Interaction On Performance Based Design Of Integral Abutment Bridges
Kianosh Ashkani Zadeh, Carlos E. Ventura - Canada
ID050 Production And Quality Of Pre-Stressed Beams Used In Construction Of 3rd Bosporus Bridge Approach Viaducts
Süleyman Uluböyük, Selahattin Düzbasan, Erol Yaktı, Tolga Uluatz - Turkey
ID120 Engineering Structures Designed Within The Scope Of Northern Marmara Motorway Project
Ezra Namli, Necdet Çağlayan, M.Cem Dönmez, Demir Yıldız, Mehmet Ercinç, Şehnaz Aktas - Turkey
ID006 Bridgedeck Waterproofing On Steeldecks, Improved Bond To Asphalt
Dirk Ubelhör - Germany
ID227 Pier Optimization Using Support Condition And Pier Shape: Eysite Balanced Cantilever Viaduct
Cemal Noyan Özel, Özgür Özkul, Erdem Erdöğan, Mehmet Koçluca, Ebru Seyfi, Seçil Cam - Turkey

13:30

B5

Designing and Constructing Against Extreme Events
C5

Chair: Özgür Avşar
ID029 Travelling Wave Effect To The Stress Propagation In Cable Stayed Bridges
Çağlayan Hızal, Günsoy Turan
ID049 Effect Of Flood-Induced Scour On The Seismic Response Of A Highway Bridge - A Case Study
Bengi Atak, Özgür Avşar, Alp Caner - Turkey
ID087 Performance Of Ultra-High Performance Concrete Self-Centering Bridge Piers Under Seismic Loads
Cancan Yang, Pinar Okumus - USA
ID101 Earthquake Response Of Balanced Cantilever Bridges Under Vertical Ground Motions
Alemdar Bayraktar, Fatma Nur Kudü, Soner Sümerkan - Turkey

15:00

COFFEE BREAK
# iBridge 2016 Program

## August 9, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>A6</th>
<th>B6</th>
<th>C6</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30</td>
<td>Designing and Constructing Against Extreme Events</td>
<td>Bridge Computer Technology and Analysis</td>
<td>Bridge Maintenance and Health Monitoring</td>
</tr>
<tr>
<td>Chair: Ahmet Yakut</td>
<td>Chair: Bruno Briseghella</td>
<td>Chair: Günsoy Turan</td>
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<tr>
<td>ID041 Preliminary Assessment Of Wind Actions In Large Span MSS</td>
<td>ID084 High Strength Eccentrically Loaded Slender Reinforced Concrete Deep Beams With Vertical Edge Restraints</td>
<td>ID002 Strengthening And Load Testing For Short Span Steel Bridge For Abnormal Loads</td>
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</tr>
<tr>
<td>André Resende; Hugo Coelho; Pedro Pacheco</td>
<td>Ali Belhacene, Ahmed Bouhaloufa, Kazuter Zelat, Tahar Kadri, Mohamed S.Bekouche</td>
<td>Nazar K. Oukaili, Abdulmuttalib I. Said, Abbas Abdumajeed Allawi, Abeer Aqeel</td>
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<tr>
<td>ID041 Preliminary Assessment Of Wind Actions In Large Span MSS</td>
<td>ID063 Study Of Time Dependent Properties Of Concrete On Bridges Built By The Cantilever Method</td>
<td>ID023 Time Dependent Structural Identification Of Long Span Highway Bridges For Sustainability And Resiliency</td>
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<tr>
<td>André Resende; Hugo Coelho; Pedro Pacheco</td>
<td>Bruno Briseghella, Miguel Munoz - China</td>
<td>Ahmet Can Altuntasık, Alemdar Bayraktar - Turkey</td>
<td></td>
</tr>
<tr>
<td>ID121 Design of Coastal Bridges Against Severe Storms And Sea-Level Rise</td>
<td>ID158 Considerations For Finite Element Modeling Of Bosphorus Suspension Bridge</td>
<td>ID030 Modal Parameter Identification Of A Continuous Beam Bridge By Using Grouped Response Measurements</td>
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<tr>
<td>Mi G. Chorzespa, Arash Saeidpour, Jason Christian, Stephan Durham</td>
<td>Selcuk Bas, Nurdan Apaydin, Necati Catbas - Turkey</td>
<td>Hasan Ceylan, Günsoy Turan - Turkey</td>
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</tr>
<tr>
<td>ID149 Resistance of Axially Loaded T and X Joints of Elliptical Hollow Sections at Elevated Temperature</td>
<td>ID289 Wheel Load Distribution In Straight And Skewed Concrete Slab Bridges Stiffened With Side Railings</td>
<td>ID114 Bridge Widening Application Issues And Monitoring Recommendations</td>
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<tr>
<td>Emre OZYURT, Turkey</td>
<td>Ghasan Fawaz, Mounir Mabsout, Kassim Tarhini - Lebanon</td>
<td>Chris A. O’rordan-Adjah, Edward Severino, Necati Catbas, Dan M. Frangopol</td>
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<tr>
<td>ID132 Blast Effects on the Structural Response of a Highway Bridge</td>
<td>ID300 Wheel Load Distribution In Continuous Steel Girder Bridges Stiffened With Sidewalks And Railings</td>
<td>ID139 Damage Detection Of Truss Bridge Via Vibration Data Using Tpc Technique</td>
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<td>Ahmet Tuğrul TOY, Bang SEVİM - Turkey</td>
<td>Moemen Hajjar, Samer Nuwayhid, Mounir Mabsout, Kassim Tarhini - Lebanon</td>
<td>Ahmed Al-Qayyim, Barlas Özden Çağlayan - Turkey</td>
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## Breaks

- **17:00**
  - **A7**
  - **B7**
  - **C7**

- **17:20**

## Award Ceremony

- **19:00**

- **20:30**