

IBSBI 2011**INTERNATIONAL CONFERENCE
Innovations on Bridges and Soil-Bridge Interaction****THURSDAY 13/10/2011**

8.30 – 9.30 Registration

9.30 – 10.00 Opening ceremony

10.00 – 10.30 Welcome reception

Room 1 10.30 – 11.00 Invited speaker N. Hajdin		Room 2 10.30 – 11.00 Invited speaker K. Kawashima	
Room 1 11.00 – 11.20 11.20 – 11.40 11.40 – 12.00 12.00 – 12.20	Session 1	Room 2 11.00 – 11.20 11.20 – 11.40 11.40 – 12.00 12.00 – 12.20	Session 2

12.20 – 12.40 Coffee break

Room 1 12.40 – 13.10 Invited speaker M. Calvi		Room 2 12.40 – 13.10 Invited speaker D. Bruno	
13.10 – 13.30 13.30 – 13.50 13.50 – 14.10 14.10 – 14.30	Session 3	13.10 – 13.30 13.30 – 13.50 13.50 – 14.10 14.10 – 14.30	Session 4

14.30 – 17.00 Noon break

Room 1 17.00 – 17.20 17.20 – 17.40 17.40 – 18.00 18.00 – 18.20	Session 5	Room 2 17.00 – 17.20 17.20 – 17.40 17.40 – 18.00 18.00 – 18.20	Session 6
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IBSBI 2011**INTERNATIONAL CONFERENCE
Innovations on Bridges and Soil-Bridge Interaction****FRIDAY 14/10/2011**

Room 1 9.00 – 9.30 Invited speaker A. Pecker	Room 2 9.00 – 9.30 Invited speaker M. Constantinou
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9.30 – 10.00 Coffee break

Room 1 10.00 – 10.20 10.20 – 10.40 10.40 – 11.00 11.00 – 11.20 11.20 – 11.40	Session 7	Room 2 10.00 – 10.20 10.20 – 10.40 10.40 – 11.00 11.00 – 11.20 11.20 – 11.40	Session 8
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11.40 – 12.00 Coffee break

Room 1 12.00 – 12.20 12.20 – 12.40 12.40 – 13.00 13.00 – 13.20 13.20 – 13.40 13.40 – 14.00	Session 9	Room 2 12.00 – 12.20 12.20 – 12.40 12.40 – 13.00 13.00 – 13.20 13.20 – 13.40 13.40 – 14.00	Session 10
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14.00 – 16.00 Noon break

Room 1 16.00 – 16.20 16.20 – 16.40 16.40 – 17.00 17.00 – 17.20	Session 11	Room 2 16.00 – 16.20 16.20 – 16.40 16.40 – 17.00 17.00 – 17.20 17.20 – 17.40	Session 12
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21.00 Conference dinner

IBSBI 2011

**INTERNATIONAL CONFERENCE
Innovations on Bridges and Soil-Bridge Interaction**

SATURDAY 15/10/2011

Room 1 9.00 – 9.30 Invited speaker M. Saiidi	Room 2 9.00 – 9.30 Invited speaker P. Papanikolas
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9.30 – 10.00 Coffee break

Room 1 10.00 – 10.20 10.20 – 10.40 10.40 – 11.00 11.00 – 11.20 11.20 – 11.40 11.40 – 12.00	Session 13	Room 2 10.00 – 10.20 10.20 – 10.40 10.40 – 11.00 11.00 – 11.20 11.20 – 11.40 11.40 – 12.00	Session 14
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12.00 – 12.30 Closure of Conference

OCTOBER 13

Session 1 – Room 1

Seismic behavior – Isolation and damping Systems

Chair: G.T. Michaltsos – T.G. Konstantakopoulos

10.30-11.00 Invited Speaker: N. Hajdin

“On Belgrade bridges over the Sava River”

11.00-11.20 S.D. Tegou, I.A. Tegos, T.N. Salonikios

“Segmentation of piers and abutments into vertical layers with expanded polystyrene insertions”

11.20-11.40 N. Makris, M. F. Vassiliou

“Complete similarities in the response of seismic isolated bridges”

11.40-12.00 M. Petronijević, D. Ladjinović, A. Rašeta

“Effects of the soil-structure interaction on the regular seismic behavior of bridges”

12.00-12.20 S.D. Tegou, I.A. Tegos

“A proposal for cost-effective design of precast I-beam bridges”

Session 2 – Room 2

Old bridges & maintenance – Stone Bridges

Chair: G. Gazetas – E. Vintzileou

10.30-11.20 Invited Speaker: K. Kawashima

K. Kawashima, R. Zafra, T. Sasaki, K. Kajiwara, M. Nakayama

“Effectiveness of polypropylene fiber reinforced cement composites for enhancing the seismic performance of bridge columns”

11.20-11.40 N. Loukatos, N. Tzanetos, I. Kritikos

“Seismic retrofit of 74m prestressed concrete overpass bridge with v-type abutments”

11.40-12.00 G. Lanzano, M. Mancini, F. Santucci de Magistris, G. Fabbrocino

“Caisson foundation assessment for seismic vulnerability analysis of existing bridges”

12.00-12.20 N. Loukatos, N. Tzanetos, P. Mergos, I. Kritikos

“Seismic retrofit of 144m road prestressed concrete bridge”

Session 3 – Room 1

Seismic behavior – Isolation and damping Systems

Chair: A. Liolios – L. Stavridis

12.40-13.10 Invited Speaker: M. Calvi

G.M. Calvi, T.J. Sullivan, A. Villani “Conceptual Seismic design of Cable-Stayed Bridges”

13.10-13.30 I.A. Tegos, N.C. Giannakas, T.A. Chrysanidis

“Seismic design of circular section piers under axial load and biaxial bending belonging to low ductility bridges. Analytical and Experimental Investigation of Bending Resistance”

13.30-13.50 S.P. Papadopoulos, A.G. Sextos

“Excitation of higher modes of long bridges due to spatial variability of earthquake ground motion”

13.50-14.10 V. Sentzas, N. Pnevmatikos

“The influence of curvature to the response of curved bridges subjected to earthquake loading”

14.10-14.30 I. Tegos, S. Tegou, A. Spanou, T. Salonikios

“Use of bridge approach embankments as seismic restrainers ”

Session 4 – Room 2

Old bridges & maintenance – Stone Bridges

Chair: N. Makris – N. Malakatas

12.40-13.10 Invited Speaker: D. Bruno

“Structural modelling in long span cable stayed bridges”

13.10-13.30 E. Vintzileou, A. Papathanassiou, A. Zagkotsis, A.-A. Manoledaki

“The medieval bridge of Kremasti in Lesvos: Documentation, assessment & proposal interventions”

13.30-13.50 G. Thomas

“Eastern Mediterranean stone bridges. Structural and Aesthetic Aspects ”

13.50-14.10 E. Rovithis, K. Pitilakis

“Seismic performance and rehabilitation of old stone bridges in earthquake-prone areas: The case of debosset bridge in Greece”

14.10-14.30 I.G. Raftoyiannis, G.I. Ioannidis, A.G. Veis

“Condition assessment and retrofit of a highway steel bridge ”

Session 5 – Room 1

Seismic behavior – Isolation and damping Systems

Chair: D. Sophianopoulos – N. Gerolymos

17.00-17.20 I. Tegos, O. Markogiannaki

“A seismic restraining system for bridges. Analytical study of a strut-ties mechanism”

17.20-17.40 X. Dang, W. Yuan

“Isolation capacity of continuous grider bridges using CSFAB under near fault ground motions”

17.40-18.00 S. Cao, W. Yuan

“Input-based lateral force pattern study for pushover analysis of elevated pile foundation system of bridges”

18.00-18.20 A. Sextos, I. Kilanitis, I. Moschonas

“Effect of isolation bearing modeling on the seismic fragility of bridges”

18.20-18.40 M. Skordeli, A. Athanatopoulou, I. Tegos

“Influence of seismic incident direction on the linear response of a bridge”

Session 6 – Room 2

Seismic behavior – Isolation and damping Systems

Chair: T.G. Konstantakopoulos – T. Avraam

17.00-17.20 D. Sophianopoulos, P. Tsopelas

“Bridge with un-bonded post-tensioned piers. Dynamics simulation under base excitation”

17.20-17.40 Z. Wei, J. Zhong, W. Hu, W. Yuan

“Seismic design principles of cable-stayed bridge of whole floating system with elastic cable connection”

17.40-18.00 I. Lefas, T. Tsiknias, V. Georgiannou

“Design and Construction of bridge G7, Egnatia Motorway, NW Greece”

18.00-18.20 D.K. Kolios, G.K. Pantazopoulos, P.O. Theodoropoulos, T.G. Tsiknias

“Cost benefits of seismic isolation on constructed bridges”

OCTOBER 14

Session 7 – Room 1

Design methods

Chair: N. Malakatas – N. Gerolymos

9.00-9.30 Invited Speaker: A. Pecker

“Influence of non linear soil structure interaction on the seismic demand in bridges”

10.00-10.20 T.G. Konstantakopoulos, I.G. Raftoyiannis, G.T. Michaltsos

“Moving loads on multi-span bridges”

10.20-10.40 I.A. Tegos, S.D. Tegou

“The design of the continuity slabs of precast I-beam bridges”

10.40-11.00 T. Avraam, I.G. Raftoyiannis, G.T. Michaltsos

“Floating bridges under moving loads”

11.00-11.20 R.-C. Xiao, D.-L. Zhuang, L.-J. Jia, J. Cheng, B. Sun, W. Zhang, J. Gao

“Conceptual design of the YongDing river bridge in Beijing”

11.20-11.40 I.G. Raftoyiannis, G.T. Michaltsos

“A special form of cable-stayed bridges”

Session 8 – Room 2

Design methods

Chair: K. Spiliopoulos – D. Sophianopoulos

9.00-9.30 Invited Speaker: M.C. Constantinou

“Unified LRFD-based procedures for analysis and design of bridge bearings and seismic isolators”

10.00-10.20 T. Tzaveas, E. Gavaise

“Sustainable Bridge design in Egnatia odos motorway”

10.20-10.40 I.A. Tegos, S.A. Mitoulis, G. Mavrakis

“An alternative proposal for the design of balanced cantilever bridges with small span lengths”

10.40-11.00 T.G. Konstantakopoulos, I.G. Raftoyiannis, G.T. Michaltsos

“Dynamic behavior of a bridge on floats”

11.00-11.20 T.G. Konstantakopoulos, C. Charitidis

“Stability of prestressed steel beams of bridges”

11.20-11.40 I.G. Raftoyiannis, T.P. Avraam

“Lateral buckling of upper cord section in steel truss bridges”

Session 9 – Room 1

Geotechnical problems, Soil-structure interaction, Fabrication & Construction

Chair: A. Liolios – N. Makris

12.00-12.20 E. Zygouri, D. Bairaktaris

“Earthquake resisting foundation of a long bridge on a covered river bed”

12.20-12.40 I. Moschonas, A. Kappos, A. Sextos

“Generalized fragility curves for straight bridges, for arbitrary angle of incidence of the seismic action, including soil-bridge interaction”

12.40-13.00 M. Mancini, G. Fabbrocino

“Structural characterization of existing bridges for seismic vulnerability analysis”

13.00-13.20 E. Karatzas, V. Karatzas, G. Karidis

“Instability problems for high piers”

13.20-13.40 N. Gerolymos, A. Zafeirakos, G. Gazetas

“Some new thoughts on the performance-based design of caisson supported bridges”

13.40-14.00 A. Tsatsis, R. Kourkoulis, I. Anastasopoulos, G. Gazetas

“Bridge pier founded on pile-group: ductile design against faulting”

Session 10 – Room 2

Geotechnical problems, Soil-structure interaction, Fabrication & Construction

Chair: P. Papanikolas – K. Spiliopoulos

12.00-12.20 P. Xinos

“Modular scaffolding systems for bridges”

12.20-12.40 N. Loukatos, N. Tzanetos, E. Xypolitidis, I. Kritikos

“Railway arch steel bridge of 110m span”

12.40-13.00 T. Tzaveas

“Bridge construction management. Effective tools to control construction schedules”

13.00-13.20 E. Zygouri, D. Bairaktaris

“Seismic behavior of long bridges with slender abutments”

13.20-13.40 Ph. Karydakis

“Bridge of dreams. A cable-stayed pedestrian bridge in Athens”

Session 11 – Room 1

Long span bridges, Computational techniques

Chair: I.G. Raftoyiannis – P. Karydakis

16.00-16.20 L.T. Stavridis

“A simplified analysis of the behavior of suspension bridges under live load”

16.20-16.40 D. Sophianopoulos, T. Konstantakopoulos

“Stay cables’ rain-wind induced vibrations. Response characteristics, exciting mechanisms, and modelling”

16.40-17.00 I.A. Tegos, S.A. Mitoulis

“Design of long-span bridges with conventional reinforced concrete decks”

17.00-17.20 C. Constantoulakis, G. Nikolopoulos

“Main gateway “Sheikh Zayed” Bridge, Abu Dhabi, UAE”

Session 12 – Room 2

Long span bridges, Computational techniques

Chair: G.T. Michaltsos – T. Avraam

16.00-16.20 D. Bruno, F. Greco, P. Lonetti, E. Bianchi

“Nonlinear modelling of the static response of long-span cable-stayed bridges”

16.20-16.40 D. Bruno, F. Greco, P. Lonetti, A. Pascuzzo

“Dynamic analysis of long span cable-stayed bridges under the action of moving loads”

16.40-17.00 L. Stavridis, K. Spiliopoulos, A. Ioannidou

“Evaluation of the load carrying capacity of a bridge system under external prestressing”

OCTOBER 15

Session 13 – Room 1

Experimental research, Monitoring

Chair: G.T. Michaltsos – I.G. Raftoyiannis

9.00-9.30 Invited Speaker: M. Saiidi

M. Saiid Saiidi, A. Vosooghi, A. Zaghi, S. Motaref, C. Cruz

“Innovative earthquake-resistant bridges – Repair, connections, and materials”

10.00-10.20 A. Meda, D. Rosignoli, S. Maringoni

“Repair and strengthening of reinforced concrete structures through ultra high performance fiber reinforced cementitious composites”

10.20-10.40 S.T. Kim, K. Cho, S.Y. Park, J.-R. Cho, B.-S. Kim

“Experimental study of FRP-DFRCC composite decks”

10.40-11.00 A. Parapanisiou, D. Argyropoulou, E. Andreadou, X. Demertzi, T. Chrysanidis, I. Tegos

“A suggestion of a quick and economic method of strengthening bridge piers”

11.00-11.20 C. Joh, I. Kwahk, J. Lee, B.-S. Kim

“Tensile test of reinforced ultra high performance concrete prismatic bars”

11.20-11.40 J. Lee, C. Joh, J. Kwark, B.-S. Kim

“Horizontal shear strength between ultra high performance concrete and normal concrete”

11.40-12.00 C. Leahy, E.J. Obrien, B. Enright

“Modeling extreme traffic loading on bridges using kernel density estimators”

Session 14 – Room 2

Experimental research, Monitoring

Chair: G. Gazetas – T.G. Konstantakopoulos

9.00-9.30 Invited Speaker: P. Papanikolas

P. Papanikolas, A. Stathopoulos-Vlamiis, A. Panagis, G. Grillaud, O. Flamand

“Wind induced cable vibration of Rion Antirion Bridge “Charilaos Trikoupis”

10.00-10.20 J. Meredith, A. González

“Damage identification in bridges using empirical mode decomposition of the acceleration response to random traffic”

10.20-10.40 P. Papanikolas, A. Stathopoulos-Vlamiis, A. Panagis

“The structural health monitoring system of Rion-Antirion Bridge “Charilaos Trikoupis”

10.40-11.00 E. Lambrou, G. Pantazis

“Geodetic monitoring of bridge oscillations”

11.00-11.20 D.-C. Papadioti, C. Papadimitriou, P. Panetsos

“Bridge health monitoring techniques. Integrating vibration measurements and physics-based models”

11.20-11.40 V. Gikas, S. Daskalakis, T. Mpimis

“Bridge-vehicle interaction analysis based on microwave radar interferometry: An experimental investigation of Evripos cable-stayed bridge”

11.40-12.00 P. Psimoulis, E. Kokkinou, N. Bazeos, S. Stiros, D. Karabalis

“Using robotic theodolites (RTS) in structural health monitoring
The Gorgopotamos Railway Bridge as a case study”