

IBSBI 2014

International Conference on Bridges

“Innovations on Bridges and Soil-Bridge Interaction”

Athens, GREECE

16-18 October 2014

THURSDAY 16/10/2014

8.30 – 9.30 Registration
9.30 – 10.00 Open ceremony
10.00 – 10.30 Welcome reception

Room 1

10.30 – 11.00 Invited speaker **D. Bruno**
11.00 – 11.30 Invited speaker **G. Gazetas**

11.30– 12.00 Coffee break

Room 1

12.00 – 12.20
12.20 – 12.40
12.40 – 13.00 Session 1
13.00 – 13.20
13.20 – 13.40
13.40 – 14.00

Room 2

12.00 – 12.20
12.20 – 12.40
12.40 – 13.00 Session 2
13.00 – 13.20
13.20 – 13.40
13.40 – 14.00

14.00 – 16.00 Lunch break

Room 1

16.00 – 16.30 Invited speaker **P. Papanikolas**

16.30 – 17.00 Coffee break

Room 1

17.00 – 17.20
17.20 – 17.40 Session 3
17.40 – 18.00

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FRIDAY 17/10/2014

Room 1

9.00 – 9.30 Invited speaker **A. Pecker**

9.30 – 10.00 Invited speaker **M.S. Saiidi**

10.00 – 10.30 Coffee break

Room 1	Room 2
10.30 – 10.50	10.30 – 10.50
10.50 – 11.10	10.50 – 11.10
11.10 – 11.30 Session 4	11.10 – 11.30 Session 5
11.30 – 11.50	11.30 – 11.50
11.50 – 12.10	11.50 – 12.10

12.10 – 12.30 Coffee break

Room 1	Room 2
12.30 – 12.50	12.30 – 12.50
12.50 – 13.10 Session 6	12.50 – 13.10 Session 7
13.10 – 13.30	13.10 – 13.30

13.30 – 15.30 Lunch break

Room 1

15.30 – 16.00 Invited speaker **B. Stipanic**

16.00 – 16.30 Coffee break

Room 1
16.30 – 16.50
16.50 – 17.10 Session 8
17.10 – 17.30

21.00 Conference Dinner

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SATURDAY 18/10/2014

Room 1

9.00 – 9.30 Invited speaker **J.S. Steinfelt**

9.30 – 10.00 Coffee break

Room 1

10.00 – 10.20

10.20 – 10.40

10.40 – 11.00 Session 9

11.00 – 11.20

11.20 – 11.40

11.40 – 12.00 Coffee break

Room 1

12.00 – 12.20

12.20 – 12.40 Session 10

12.40 – 13.00

13.00 – 13.20

13.20 – 13.40 Closure of Conference

OCTOBER 16

Session 1 – Room 1

Seismic Behavior

10.30-11.00 Invited Speaker: D. Bruno

“Nonlinear static response of Self-anchored Cable supported bridges”

11.00-11.30 Invited Speaker: G. Gazetas

“Some new trends in seismic design of bridge–pier foundations”

12.00-12.20

“Longitudinal and transverse seismic retrofit of bridges”

O. Markogiannaki, I. Tegos, S. Vasileiou

12.20-12.40

“A proposal for improving regularity of integral concrete bridges”

V. Pilitsis, I. Tegos

12.40-13.00

“Vulnerability functions to estimate the seismic damage response for the Krystallopigi bridge of Egnatia motorway, Northern Greece”

Ast. Liolios, P. Panetsos, Ang. Liolios, G. Hatzigeorgiou, D. Kalkinis

13.00-13.20

“De Bosset” monumental stone bridge in Cephalonia: strengthening measures and seismic response under the earthquakes of 26/01/2014 and 03/02/2014”

E. Rovithis, K. Pitilakis, T. Vlachoulis, I. Karani, E. Chorafa, E. Zarogiani

13.20-13.40

“A proposal for the use of a new type of pier connections with deck and pile cap with in-service and seismic advantages”

I. Tegos, V. Pilitsis, T. Chrysanidis

13.40-14.00

“A proposal for the improvement of the earthquake resistance of multi-span precast I-beam bridges”

I.A. Tegos, S.D. Tegou

Session 2 – Room 2

Old bridges & maintenance – Bridge Monitoring – Old Bridges

12.00-12.20

“Environmental effects on bridges - statistical durability study based on existing inspection data”

F. Alogdianakis, I. Balafas, D.C. Charmpis

12.20-12.40

“Evaluation of the remaining strength of Rion-Antirion cables-stayed bridge using the multiscaling fracture mechanics approach”

D. Zacharopoulos, T. Panagiotopoulos

12.40-13.00

“Identification of soil-structure interaction effects based on geodetic monitoring of a railway bridge”

P. Psimoulis, S. Stiros, F. Moschas

13.00-13.20

“Design and implementation of a multi-sensor monitoring system for structural integrity assessment - The case of Attiki Odos, Pallini cable-stayed bridge”

V. Gikas, P. Karydakis, G. Piniotis, T. Mpimis, F. Papadimitriou, A. Panagakis

13.20-13.40

“Strengthening and maintenance measures of a bailey-type road bridge”

V.D. Papavasileiou, I.G. Raftoyiannis

13.40-14.00

“The effect of stereotomy on the shape of the thrust-line and the minimum thickness of masonry arches”

N. Makris, H. Alexakis

Session 3 – Room 1**Seismic Behavior****16.00-16.30 Invited Speaker: P. Papanikolas**

“Monitoring data processing for fatigue verification under particular deck vibration of “Charilaos Trikoupis” bridge”

17.00-17.20

“The use of unbonded tendons on bridges in seismic regions”

O. Markogiannaki, I. Tegos, S. Vasileiou

17.20-17.40

“The dynamics of a vertically restrained rocking bridge”

N. Makris, M.F. Vassiliou

17.40-18.00

“The use of piers of high flexibility for the degradation of seismic inertial forces on integral bridges”

I. Tegos, V. Pilitsis

OCTOBER 17**Session 4 – Room 1****Design Methods - Stability problems, types & analysis****9.00-9.30 Invited Speaker: A. Pecker**

“Kinematic soil structure interaction for bridge piled foundations”

9.30-10.00 Invited Speaker: S.M. Saiidi

“Resilient and sustainable bridges of the future”

10.30-10.50

“Appraisal of simplified methods for the analysis of box-girder bridges”

L. Stavridis, K. Spiliopoulos, A. Afantenou, I. Kapogiannis

10.50-11.10

“Investigation on stability problems of piers with practically infinite bending stiffness”

E. Karatzas Roussou, V. Karatzas, G. Karydis, T. Konstantakopoulos

11.10-11.30

“Inclined bridge under free moving load - A special problem”

T. Avraam, G.T. Michaltsos

11.30-11.50

“Practical method for completed dead load state determination in cable-stayed bridges with earth anchors”

B. Sun, R. Xiao, D. Zhuang, S. Yuan, E. Xue

11.50-12.10

“Conventional and alternative design of highway bridge in Egnatia motorway including many innovative solutions”

D. Anastasopoulos, Z. Kopelia, V. Pilitsis, I. Tegos

Session 5 – Room 2**Design Methods - Stability problems, types & analysis - Long Span Bridges****10.30-10.50**

“Optimal location of arch bracings in arch bridges for maximum buckling load”

J. Cheng, J. Ni, L. Jia, R. Xiao

10.50-11.10

“Cables with dampers for flow-induced vibration”

T.G. Konstantakopoulos, G.T. Michaltsos

11.10-11.30

“Cables with movable anchorages for flow-induced vibration”

I. Raftoyiannis, G. Papastergiou, G. Michaltsos

11.30-11.50

“Optimum design analysis of cable supported bridges”

D. Bruno, F. Greco, P. Lonetti

11.50-12.10

“A mathematical research on cables with fixed or movable anchorages”

T.G. Konstantakopoulos, G.T. Michaltsos

Session 6 – Room 1**Design Methods - Stability problems, types & analysis****12.30-12.50**

“The design of a network arch bridge crossing over Arachthos river in Arta, Greece.”

D. Mouroukis, P. Veros, K. Lontos

12.50-13.10

“Rocking and overturning problems in bridges”

G.T. Michaltsos, I.G. Raftoyiannis

13.10-13.30

“Shear design of bridge piers with rectangular and circular cross-section”

I.A. Tegos, S.D. Tegou, V.G. Pilitsis

Session 7 – Room 2

Fabrication & construction - Experimental research

12.30-12.50

“Foundation of a lightweight steel road bridge on peat”

C. Maraveas, K. Miamis, K. Tasiouli

12.50-13.10

“A proposal for the construction of cast in-situ bridges with tall piers”

I.A. Tegos, S.D. Tegou, I. Thomaidis, I.-P. Thomaidis

13.10-13.30

“Realization of new Sava river crossing in Belgrade (Serbia)”

B. Stipanic, N. Hajdin

Session 8 – Room 1

Design Methods - Stability problems, types & analysis

15.30-16.00 Invited Speaker: B. Stipanic

“Cable-Stayed Bridges - Concept Design Factors ”

16.30-16.50

“Effectiveness of classical pendulum bearings”

I.G. Raftoyiannis, T.G. Konstantakopoulos, G.T. Michaltsos

16.50-17.10

“Dependence modelling for bridge structural components under asynchronous seismic excitation”

P. Spyridis, A. Tamparopoulos, K. Bergmeister, Ang. Liolios

17.10-17.30

“The influence of the vertical inertia forces on the behavior of FPB isolators”

I.G. Raftoyiannis, G.T. Michaltsos

OCTOBER 18

Session 9 – Room 1

Soil-structure interaction - Geotechnical problems

9.00-9.30 Invited Speaker: J.S. Steenfelt

“Izmit bay bridge - Geotechnical challenges and innovative solutions”

10.00-10.20

“Soil-structure interaction of seismic isolated bridges”

P. Tsopelas, S.M. Papathanasiou, A. Ucak, E. Prapa

10.20-10.40

“Performance-based design of bridge foundation on partially improved liquefiable soil”

D. Karamitros, G. Bouckovalas, K. Andrianopoulos

10.40-11.00

“Development of foundation springs and soil structure interaction evaluation for the third Bosphorus bridge”

W.-Y. Chen, A. Giannakou, J. Chacko

11.00-11.20

“Aspects of the soil-structure interaction - The dynamic response of bridge piers on caisson foundations”

R. Cairo, G. Dente

11.20-11.40

“Simplified method for seismic analysis of motorway bridges”

A. Agalianos, L. Sakellariadis, I. Anastasopoulos, G. Gazetas

Session 10 – Room 1**Fabrication & construction - Experimental research****12.00-12.20**

“Experimental study on a costless movement restraining system - Application of struts - ties in seismically designed bridges”

O. Markogiannaki, I. Tegos

12.20-12.40

“Experimental investigation on the shear transfer between concrete interfaces - Case study: The problem of designing bridge seismic stoppers”

S.D. Tegou, I.A. Tegos

12.40-13.00

“Calibration of finite element models of Metsovo bridge using ambient vibration measurements”

C. Argyris, D.-C. Papadioti, P. Panetsos, C. Papadimitriou

13.00-13.20

“Dynamic characteristics of bridge-foundation-soil systems based on laboratory and on-site measurements”

P. Faraonis, A. Sextos, V. Zabel, F. Wuttke