



# 21<sup>st</sup> EUROPEAN REGIONAL EARTHQUAKE ENGINEERING SEMINAR

# Seismic Assessment and Retrofit of Bridges

June 16-18, 2010

Işık University, Şile Campus Istanbul, Turkey





# **Seminar Program**

# Wednesday 16 June 2010

Prof. Dr. Atilla Ansal......Secretary General of EAEE

Prof. Dr. Mustafa Erdik ...... Chairman and Director of KOERI

Prof. Dr. M. Nuray Aydınoğlu......Vice Chairman

#### Technical Session 1 ...... Chairman: Prof. Dr. Mustafa Erdik

11:00-12:00 Prof. Dr. M. Nuray Aydınoğlu "Nonlinear Analysis Procedures for Seismic Assessment and Design of Bridges"

#### Lunch Break 12:00-13:30

# Technical Session 2: ......Chairman: Prof. Dr. M. Nuray Aydınoğlu

13:30- 14:30 Prof. Dr. Paolo E. Pinto "Assessment and Retrofit of Bridges: Case Studies"

14:30-15:30 Prof. Dr. Andreas Kappos "Seismic Vulnerability Assessment of Bridges: Analytical and Empirical Methods"

15:30-16:30 Prof. Dr. Murat Dicleli "Seismic Design and Retrofitting of Highway Bridges using Response Modification Techniques"

16:30-17:30 Prof. Dr. Mustafa Erdik "Seismic Isolation of Bridges and Retrofit of Bolu and Mecidiyekoy Viaducts"

#### **Seminar Banquet 19:00-22:00**

#### Thursday 17 June 2010

#### Technical Session 3: ...... Chairman: Prof. Dr. Andreas Kappos

9:30-10:30	Asst.	Prof.	Dr.	Anastasios	Sextos	"Impact	of	Asynchronous	Seismic
Excitation on the Vulnerability of R/C Bridges"									

- 10:30-11:30 Prof. Dr. Matej Fischinger "Seismic Analysis of RC Bridges Using the N2 Method"
- 11:30-12:30 Prof. Dr. Tatjana Isakovic "Seismic Analysis of Experimentally Tested RC Bridge"

#### Lunch Break 12:30-14:00

# Technical Session 4: ...... Chairman: Prof. Dr. Paolo Emilio Pinto

- 14:00-15:00 Prof. Dr. George Mylonakis "The Great M8.8 Chile Earthquake of February 27, 2010: Overview & Performance of Bridge Structures"
- 15:00-16:00 Prof. Dr. Stavroula Pantazopoulou "Soil-Structure Interaction in Integral bridges the Usefulness of a Target Response Shape in Bridge Assessment and Retrofit"

#### Coffee Break 16:00-16:15

16:15-17:15 Dr. Göktürk Önem "Seismic Assessment of Bridges by Practice-Oriented Nonlinear Analysis Procedures"

# Friday 18 June 2010

# Technical Session 5: ......Chairman: Prof. Dr. George Mylonakis

- 9:30-10:30 Junichi Shaura, P.E., M.Sc. "Seismic Reinforcement Project for Large Scale Bridges in Istanbul"
- 10:30-11:30 Prof. Dr. Rainer Flesch "In Situ-Testing of Austrian Bridges for Seismic Assessment"

#### Coffee Break 11:30-11:45

# Technical Session 6: ...... Chairman: Prof. Dr. Murat Dicleli

- 11:45 12:05 Herbert.Friedl "Structural Health Monitoring of UHPFRC constructions possible application in post earthquake assessment of bridges"
- 12:05 12:25 Tibor Lang "Reduction of Seismic Effects on Bridges by Using Seismic Isolators"
- 12:25 12:55 Lenka Konečná "Reduction of Seismic Effects on Bridge by Changing of Structural System"

#### Lunch Break 13:00-14:00

- 14:00 14:20 Cenan Özkaya "Seismic Design of Sakarya-II Viaduct Located Within 300 Meters of the North Anatolian Fault"
- 14:20 14:40 Ass. Prof. Dr. Musa Hakan Arslan "An investigation on earthquake performance of existing R/C bridge columns in Turkey"
- 14:40 15:00 Dr.Oğuz Bahadır Şadan "Direct Displacement-Based Seismic Assessment Procedure for Multi-Span Reinforced Concrete Bridges"
- 15:00 15:20 Olympia Taskari "3D Finite Element Modelling of a Highway Bridge Considering the Effect of Soil and Foundation"
- 15:20 15:40 Alper Kanyılmaz "Seismic Retrofitting of Bridges by means of Seismic Isolation Methods"
- 15:40 16:00 Sotiria Stefanidou "Seismic Assessment of an Overpass Bridge with a Torsional Fundamental Mode Using Non-Linear Pushover and Time-History Analysis"

#### Coffee Break 16:00-16:15

- 16:15 16:35 Goran Jekic "Approach to Diagnosis of Bridge Structures and Analysis Methods Used by the Institute of Earthquake Engineering and Engineering Seismology – Skopje"
- 16:35 16:55 Battol Moneer Wahba "Bridges Seismic Screening and Rapid Assessment Methods"

# ORGANISING AND SCIENTIFIC COMMITTEES

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# **GENERAL INFORMATION:**

Questions regarding registration, exhibits or other nontechnical aspects of the Regional Seminar should be addressed to:

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