



SERIES

SEISMIC ENGINEERING RESEARCH INFRASTRUCTURES
FOR EUROPEAN SYNERGIES



SERIES Workshop: “Role of research infrastructures in seismic rehabilitation”

February 8-9, 2012

Venue: Conference Hall, Civil Engineering Faculty, Istanbul Technical University

Ayazaga Campus, Maslak, 34469 Istanbul (TR)

Tentative Programme

1st day - Wednesday, February 8th, 2012 (09:00 - 16:25)

Session 1 (09:00 - 10:35) - Chair: E.Carvalho, N.Kumbasar

	Opening - Welcome	A.Ilki (ITU)	09:00	09:10
SS1-1	A Multi-Disciplinary Engineering Approach to Protection of Infrastructure from Seismic Actions	N. J.Perera, D.P.Thambiratnam (Queensland Univ., Robert Bird Group Australia)	09:10	09:30
SS1-2	Rapid Seismic Assessment Procedures for Turkish Building Stock	A. Yakut, A. Erberik, S. Akkar, H. Sucuoglu, A. Ilki (METU, ITU)	09:30	09:50
SS1-3	Effects of Waterjet Technique Application on Joining Surfaces of External Retrofitting Technique	O.Gedik, R.Hikiji, A.Tasai (Yokohama National University, Japan)	09:50	10:10
SS1-4	Post-earthquake Risk-based Decision Making Methodology for Turkish School Buildings	U.Yazgan, R.Oyguc (ITU)	10:10	10:30
	Overall discussion – SS1		10:30	10:35

Coffee break

10:35

10:50

Session 2 (10:50 - 12:35) - Chair: E.Carvalho, K. Guler

SS2-1	Structural Vulnerability Functions and Comparison of the Observed Damage of RC Buildings after Major Turkish Earthquakes	U. Mert Tugsal, B.Taskin (ITU)	10:50	11:10
SS2-2	Determination of Seismic Vulnerability Using Ambient and Forced Vibration Data	Z.Dalkilic, S.Soyoz (Bogazici University)	11:10	11:30
SS2-3	Probabilistic Path Finding Method for Post-Disaster Risk Estimation	F.Leon, G. M. Atanasiu (TUIasi)	11:30	11:50
SS2-4	Effects of Local Strengthening Interventions on the Global Seismic Performance of Existing RC Structures	M. Di Ludovico, R. Frascadore, A. Prota, M. Dolce, G. Manfredi (UNAP)	11:50	12:10
SS2-5	Experimental Behavior of non Conforming full scale RC Beam-Column Joints Retrofitted with FRP	M. Di Ludovico, A. Balsamo, A. Prota, G.M. Verderame, M. Dolce , G. Manfredi (UNAP)	12:10	12:30
	Overall discussion – SS2		12:30	12:35

Lunch break

12:35

13:20

Session 3 (13:20 - 14:45) - Chair: P.Pinto, F.Karadogan				
SS3-1	Capacity Assessment of Existing RC Buildings Using a 3-D Adaptive Pushover Procedure	R.Oyguc, H.Boduroglu (ITU)	13:20	13:40
SS3-2	Assessing Seismic Vulnerability of Multi-Leaf, Heritage Masonry Walls Using Elasto-Plastic Damage Model	B.H. Al-Gohi, C. Demir, A. Ilki, M.H. Baluch, M.K. Rahman (ITU, KFUPM Saudi Arabia)	13:40	14:00
SS3-3	Hybrid Control of a 3-D Structure by using Semi-Active Dampers	G. Turan (Izmir Inst. of Technology)	14:00	14:20
SS3-4	Towards Robust Behavioral Modeling of R.C. Members	K.Orakçal (Bogazici University)	14:20	14:40
Overall discussion – SS3			14:40	14:45

Coffee break	14:45	15:00
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Session 4 (15:00 - 16:25) - Chair: P.Pinto, E.Yuksel				
SS4-1	Implementation of Experimentally Developed Methodology for Seismic Strengthening and Repair in Historic Monuments	V. Shendova, Z.Rakicevic, R.Apostolska, Z.Bozinovski (IZIIS)	15:00	15:20
SS4-2	Effect of CFRP Retrofitting Application on Seismic Behavior of Historic Monumental Buildings at Cappadocia Region of Turkey	B.Ozturk (Nigde University)	15:20	15:40
SS4-3	Nonlinear Static Pushover and Dynamic Time-History Analysis of a Shear Wall Building in Madinah	M. Ajmal, M.K. Rahman, Z. Celep, M.H. Baluch (ITU, KFUPM Saudi Arabia)	15:40	16:00
SS4-4	Finite Element Modeling of Seismic Performance of Low Concrete Strength Exterior Beam-Column Joints	D. Ahmed, M.K. Rahman, A.Ilki, M.H. Baluch (KFUPM Saudi Arabia, ITU)	16:00	16:20
Overall discussion – SS4			16:20	16:25

2nd day - Thursday, February 9th, 2012 (09:00 - 17:25)

Session 5 (09:00 - 10:55) - Chair: E.Alarcon, Z.Celep				
	Keynote lecture: Leges de terrae concussionem necesse est mutare	M.Sozen (Purdue Univ.)	09:00	09:30
SS5-1	Earthquake Engineering Experimental Facility for Research and Public Outreach	E.Eseller-Bayat, M.K.Yegian, S.Gokyer (ITU, Northeastern University)	09:30	09:50
SS5-2	Application of Mesh Reinforced Mortar for Performance Enhancement of Infill Walls	P. Ezzatfar, M.E.Ayatar, B.Binici, O.Kurc, E.Canbay, H.Sucuoglu, G.Ozcebe (METU)	09:50	10:10
SS5-3	Shaking Table Test of a Pre-damaged Masonry Building Retrofitted with a Mortar-Textile Composite	M.Urban, L.Stempniewski (KIT)	10:10	10:30
SS5-4	Experimental Research on Seismic Retrofitting of Old-type RC Columns with Advanced Composite Materials	D.Bournas, T.Triantafillou (JRC, UPAT)	10:30	10:50
Overall discussion – SS5			10:50	10:55

Coffee break	10:55	11:10
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Session 6 (11:10 - 12:55) - Chair: E.Alarcon, M.Aydogan				
SS6-1	Seismic Rehabilitation of Concrete Buildings by Converting Frame Bays into RC Walls	M.N.Fardis, A.Schetakis, E.Strepelias (UPAT)	11:10	11:30
SS6-2	Pseudodynamic Tests on 4-storey Nonductile Frames with RC Infilling of the Bay	E.Strepelias, X.Palios, S.Bousias, M.N.Fardis (UPAT)	11:30	11:50
SS6-3	RC Infilling of Existing RC Structures for Seismic Retrofitting	C. Z. Chrysostomou, N. Kyriakides, P. Kotronis, P. Roussis, M. Poljansek, F. Taucer (Cyprus Univ. of Techn., Univ. of Nantes, Univ. of Cyprus, JRC)	11:50	12:10
SS6-4	Substructure Pseudo-Dynamic Tests on Seismic Response Control of Soft-first-story Buildings	H. Kanno, N. Teramoto, T. Nishida, J. Kobayashi (Akita Prefectural University, Japan)	12:10	12:30
SS6-5	Seismic Response of the School Buildings in Van to Earthquake October 24, 2011	Z. Celep, Y. Durgun (ITU)	12:30	12:50
Overall discussion – SS6			12:50	12:55

Lunch break	12:55	13:40
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Session 7 (13:40 - 15:25) - Chair: A.Plumier, Z.Hasgur				
SS7-1	Shaking Table Tests on Deficient RC Frames Strengthened with Post-Tensioned Metal Straps	R.Garcia et al. (TA Project BANDIT at CEA)	13:40	14:00
SS7-2	Shaking Table Test Design to Evaluate Earthquake Capacity of a 3-storey Building Specimen Composed of Cast-in-situ Concrete Walls	S.Ivorra, D.Foti, I.Ricci, G.Gasparini, S.Silvestri, T.Trombetti (Univ. de Alicante, Tech. Univ. of Bari, Univ. of Bologna)	14:00	14:20
SS7-3	Shaking Table Tests of Dissipative Anchor Devices in Historic Masonry	S. Paganoni, D. D'Ayala, P. Candeias, A. Campos Costa (University of Bath, LNEC)	14:20	14:40
SS7-4	Contribution of the Spandrels and of the Perpendicular Walls to the Seismic Performance of Masonry Walls	H.Degree, A.Plumier, L.Lascar, L.Vasseur (University of Liège, Wienerberger nv)	14:40	15:00
SS7-5	Experimental Investigation of Dynamic Behaviour of Cantilever Retaining Walls	P. Kloukinas, A. Penna, A. Scotto Di Santolo, S. Bhattacharya, M. Dietz, L. Dihoru, A. Evangelista, A.L. Simonelli, C.A. Taylor, G. Mylonakis (UPAT, CIMA-AMRA, UNAP, UNIVBRIS, Univ. of Sannio)	15:00	15:20
Overall discussion – SS7			15:20	15:25

Coffee break	15:25	15:40
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Session 8 (15:40 - 17:25) - Chair: A.Plumier, K.Orakcal				
SS8-1	Seismic Assessment of Soil-Pile-Structure Interaction	A.L. Simonelli et al. (TA Project PILESI at UNIVBRIS)	15:40	16:00
SS8-2	Physical Modeling for the Evaluation of the Seismic Behavior of Underground Structures	G.Tsinidis, D.Pitilakis , E.Rovithis, E.Kirtas, A.Anastasiadis, K.Pitilakis (AUTH)	16:00	16:20
SS8-3	Susceptibility of Shallow Foundations to Rocking and Sliding Movements during Seismic Loading	C.M. Heron, S.K. Haigh, S.P.G.Madabhushi (UCAM)	16:20	16:40
SS8-4	Centrifuge Modelling of Liquefaction-Induced Settlement of Shallow Foundations	A.Marques, P.Coelho, U.Cilingir, S.Haigh, G.Madabhushi (Univ. of Coimbra, Univ. of Sheffield, UCAM)	16:40	17:00
SS8-5	Stability Control of Rafted Pile Foundation against Soil Liquefaction	A.M.Y. Mohammed, K. Maekawa (University of Tokyo)	17:00	17:20
	Overall discussion – SS8		17:20	17:25