



European COoperation in the field of Scientific and Technical research
Transport and Urban Development



COST Action C26:
“Urban Habitat Constructions Under Catastrophic Events”

SYMPOSIUM ON
“URBAN HABITAT CONSTRUCTIONS
UNDER CATASTROPHIC EVENTS”
Malta, 23-25 October 2008

October 23rd, 2008	
8:30 – 9:00	Management committee meeting

OPENING SESSION: Welcoming addresses	
Chair: Ruben Paul Borg	
9.15 – 10.00	<ul style="list-style-type: none"> ▪ Hon. George Pullicino, Minister for Resources & Rural Affairs, Malta ▪ Prof. Juanito Camilleri, Rector of the University of Malta. ▪ Prof. Alex Torpiano, Dean, Faculty of Architecture & Civil Engineering, University of Malta. ▪ Prof. Federico Mazzolani, Chairman, COST Action C26. Introduction to the International Symposium
SESSION 1: General keynote lectures	
Chair: Kiril Gramatikov	
10.00 – 11.00	<ul style="list-style-type: none"> • H. Koukkari (FI), <i>Life cycle analysis of existing buildings</i> (Keynote Lecture) • M. Faber (CH), <i>Advances in the evaluation of robustness of structures</i> (Keynote lecture)
11.00 – 11:30	Coffee break
SESSION 2a: Fire resistance I	
Chair: Yong Wang	
11.30 – 13:30	<ul style="list-style-type: none"> • S.Beckley and R. Kaiser (UK,CZ), <i>Applications of Fire Engineering</i> (Keynote Lecture) • F. Wald (CZ), <i>General report on WG1 activity</i> • M. Gillie , A. Santiago, Y. Wang (UK,PT), <i>Fire modelling</i> • D. Pintea, M. Kaliske, D. Bacinkas, Á. Török (RO,DE,LT,HU), <i>Material properties at elevated temperatures</i> • L. Kwasniewski, M. Gillie, S. Datoussaïd, J.M. Franssen (PL,UK,BE), <i>Bench marks to global analysis in Fire</i> • N. Lopes, Z. Drabowicz, M. Veljkovic, P. VilaReal, A. Bouchair (PT,CZ,SE,FR), <i>Member design in fire.</i>
13.30 – 14.30	Buffet lunch



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SESSION 2b: Fire resistance II	
Chair: František Wald	
14.30 – 16.15	<ul style="list-style-type: none"> • I. Burgess, J. Davison, Y. Wang, F. Wald, A. Santiago (UK,CZ,PT), <i>Introduction to connection behaviour and analysis</i> • B. Faggiano, R. Zaharia, D. Pintea (IT,RO), <i>Risk and management in case of fire after earthquake</i> • R. Zaharia, B. Faggiano, D. Pintea (RO,IT), <i>Structural analysis in case of fire after earthquake</i> • M. Heinisuo, M. Hajpál (FI,HU), <i>Fire resistance design in Europe</i> • E. Nigro, M. Hajpál (IT,HU), <i>Existing buildings and fire engineering</i> • Y. Wang, F. Wald, Á. Török (UK,CZ,HU), <i>Provisions for fire damaged buildings</i> • Discussion
16.15 – 16.45	Coffee break
SESSION 3a: Earthquake resistance I	
Chair: Dan Dubina	
16.45 – 18.00	<ul style="list-style-type: none"> • A. Mandara (IT), <i>General report on WG2 activity</i> • A. Stratan, D. Dubina (RO), <i>Selection of time-history records for dynamic analysis of structures.</i> • D. Lungu et al. (RO), <i>Bucharest soil conditions and input ground motion for the structural performance analysis</i> • J.-U. Sickert, M. Kaliske, W. Graf (D), <i>Fuzzy stochastic earthquake analysis of structures</i>



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October 24th, 2008	
SESSION 3b: Earthquake resistance II Chair: Raffaele Landolfo	
9.00 – 10.15	<ul style="list-style-type: none"> • R.Pascu (RO) <i>The performance based approach in seismic rehabilitation of buildings</i> (Keynote lecture) • R. Apostolska, Z. Bonev, D. Blagov, G. Necevska-Cvetanovska (MK), <i>Design seismic response evaluation for 2D and 3D frames with flexible foundation using capacity spectrum method</i> • M. D’Aniello, G. Della Corte, F.M. Mazzolani (IT), <i>Buckling Restrained Braces subjected to Catastrophic Seismic Events</i> • A. Mandara, F. Ramundo, G. Spina (IT), <i>Smart technologies in the seismic protection of existing buildings</i>
10.15 – 10.45	Coffee break
SESSION 3c: Earthquake resistance III Chair: Alberto Mandara	
10.45 – 12:00	<ul style="list-style-type: none"> • D. Dubina, D. Dinu, A. Stratan (RO), <i>Seismic resistant dual steel /dual frames : Performance based analysis of structural effectiveness</i> • K. Georgiadi-Stefanidi, E. Mistakidis, P. Perdikaris (GR), <i>Fibre-reinforced concrete jackets for improving the seismic response of reinforced concrete members: experimental and numerical results</i> • A. Dogariu, D. Dubina & F. Campitiello, G. De Matteis (RO,IT), <i>FEM modeling masonry shear walls strengthened with metal sheeting</i> • G. De Matteis, F.M. Mazzolani, L. Krstevska, L. Tashkov (IT,MK), <i>Seismic vulnerability assessment and strengthening intervention of the Fossanova gothic church: numerical and experimental activity.</i> • Discussion
12.00 – 13.00	Buffet lunch
SESSION 4a: Explosion and impact resistance I Chair: Gianfranco De Matteis	
13.00 – 15.45	<ul style="list-style-type: none"> • D. Hadden (UK), <i>Design of buildings against explosions</i> (Keynote lecture) • M. Byfield (UK), <i>General report on WG3 activity</i> • G. De Matteis, I. Langone (IT), <i>Risk of progressive collapse of precasted concrete wall multistorey structures due to blast loading</i> • J.F. Demonceau, J.P. Jaspard (B), <i>Experimental tests simulating the lost of a column in a composite building frame</i> • F. Dinu, D. Dubina (R), <i>Response of high rise steel buildings as a result of column loss</i> • P. Smith and A. Tyas (UK), <i>Blast load assessment by simplified and advanced methods</i>
15.45 – 16.15	Coffee break



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SESSION 4b: Explosion and impact resistance II	
Chair: Mike Byfield	
16.15 – 18.00	<ul style="list-style-type: none">• A. Lastunen (FI), <i>Aircraft impact testing</i>• M. Byfield (UK), <i>Estimation of safe standoff distances for buildings subjected to blast</i>• A. Tyas (UK), <i>Blast load and structural response measurement</i>• U. Kuhlmann, L. Rolle (D), <i>Ductile behaviour of steel beam-to-column joints under extreme loading conditions</i>• G. De Matteis, A. Eboli, F.M. Mazzolani (IT), <i>Blast effect in submerged floating tunnels</i>• Discussion



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October 25th, 2008	
SESSION 5: Risk assessment of catastrophic scenarios	
Chair: Jean-Pierre Muzeau	
8:30 – 11:00	<ul style="list-style-type: none"> • G. Solari (IT), <i>Lessons from catastrophic events in the evolution of Bridge and Wind Engineering</i> (Keynote lecture) • M. Indirli (IT), <i>General report on WG4 activity</i> • H. Narasimhan (CH), <i>General methodology for risk assessment</i> • T. Stathopoulos (CND), <i>Catastrophic effects of extreme wind</i> • F. Romanelli (UNESCO), <i>Lessons from the 2008 Sichang earthquake about modeling of seismic input</i> • R.P. Borg, R.C. Borg, G. Borg Axisa (MT), <i>Seismic Risk of Buildings in Malta</i> • Discussion
11:00– 11:30	Coffee break
SESSION 6: Volcanic hazard and the Vesuvius study case	
Chair: Maurizio Indirli	
11:30 – 13:30	<ul style="list-style-type: none"> • C. Dumaisnil, J.C. Thouret , J.P. Muzeau (FR), <i>Overview of volcanic hazards</i> • G. Zuccaro (IT), <i>A probabilistic model for the evaluation of the impact of explosive eruption scenarios at Vesuvius</i> • F. Mazzolani, B. Faggiano, D. De Gregorio (IT), <i>Actions in the catastrophic scenarios of a volcanic eruption</i> • M. Indirli (IT), <i>The Vesuvius GIS database</i> • F. Mazzolani, B. Faggiano, D. De Gregorio (IT), <i>Analysis methodology for the evaluation of the eruption effects on buildings</i> • Discussion
13:30	Closure
13:30 – 14:30	Buffet lunch
14:30 – 16:00	Management committee meeting