

Analysis and Mitigation of Risks in Infrastructures INFRARISK-

5th Summer School Workshop
University of Minho, Guimarães, 15th July 2019

Location: Building 11 - Lecture Hall 003

Programme

9:00	Opening Session António Gomes Correia <i>Head of Doctoral Programmel, UMinho</i> Rita Bento <i>Director of the Doctoral Programme INFRARISK-</i> Desmond Hartford <i>Member of the Evaluation Committee</i> Atilia Ansal <i>Member of the Evaluation Committee</i>	14:30	Keynote Lecture Chairpersons: Carlos Sousa Oliveira, Paulo Lourenço Spatial and temporal incidence of disastrous floods and landslides in Portugal during the last 150 years José Luís Zêzere (<i>Invited Speaker</i>)
9:20	Research Project Presentations – Earthquake Engineering Chairpersons: Rita Bento, António A. Correia Mitigating earthquake vulnerability of mixed URM-RC buildings at the urban scale: Numerical analysis of representative intervened URM-RC buildings Gonçalo Lopes (<i>2nd year</i>) Supervision: Romeu Vicente (U Minho), Miguel Azenha (U Minho), Tiago M. Ferreira (U Minho) Probabilistic seismic risk assessment of “Placa” buildings: Selection of Building Stock Geometry and Properties Vasco Bernardo (<i>2nd year</i>) Supervision: Paulo Candeias (LNEC), Anibal Costa (U Aveiro) Development of aluminium alloy hysteretic damping system: Material Characterization Ricardo Ferreira (<i>2nd year</i>) Supervision: Jorge Proença (IST), António Gago (IST) Numerical modelling of URM buildings with timber diaphragms Maria Pia Ciocci (<i>3rd year</i>) Supervision: Paulo B. Lourenço (U Minho), Rui Marques (U Minho) A Scoping Study for the assessment of Historical Centres Rui Maio (<i>4th year</i>) Supervision: Romeu Vicente (U Aveiro), Sergio Lagomarsino (U Genova), Tiago M. Ferreira (U Minho)	15:20	Research Project Presentations – Hydrological Engineering Chairpersons: Carlos Sousa Oliveira, Paulo Lourenço Risk-based analysis of bridge scour prediction with live bed conditions Ana Margarida Bento (<i>3rd year</i>) Supervision: Teresa Viseu (LNEC), João Pêgo (FEUP), Lúcia Couto (LNEC) Stochastic modelling of fluvial morphodynamics Bruno Oliveira (<i>4th year</i>) Supervision: Rodrigo Maia (FEUP), Francesco Ballio (Politecnico di Milano) Advances on risk and reliability analysis of coastal, maritime and offshore structures Tiago Ferradosa Former supervision team: Francisco Taveira Pinto (FEUP), Luciana Neves (FEUP), Teresa Reis (LNEC)
11:10	Coffee break	16:30	Coffee break
11:30	Research Project Presentations – Earthquake Engineering Chairpersons: Romeu Vicente, Tiago M. Ferreira Experimental testing in support of a seismic risk assessment Gidewon Tekeste (<i>4th year</i>) Supervision: António A. Correia (LNEC), Anibal G. Costa (U Aveiro) Cost function review in seismic risk mitigation Sanam Moghimi (<i>4th year</i>) Supervision: Alexandra Carvalho (LNEC), Paulo B. Lourenço (U Minho) Seismic retrofit options for an old RC wall-frame building in Lisbon: Impact on loss estimation and cost-benefit analysis Claudia Caruso (<i>4th year</i>) Supervision: Rita Bento (IST), Miguel Castro (FEUP) Multi-objective optimization of irregular RC bridge infrastructures based on evolutionary algorithms Vitor Camacho (<i>4th year</i>) Supervision: Mário Lopes (IST), Carlos Sousa Oliveira (IST) Robustness of multi-story timber buildings in seismic regions Leonardo Rodrigues Former supervision team: Jorge Branco (U Minho), Luís Neves (U Nottingham)	16:45	Research Project Presentations – Infrastructures & Geotechnics Chairpersons: Rita Bento, Xavier Romão Experimental investigation of embankment failure by overtopping Teresa Alvarez (<i>3rd year</i>) Supervision: Rui Ferreira (IST), Teresa Viseu (LNEC) Capacity assessment of a high-voltage lattice tower under different loading patterns Fábio Paiva (<i>3rd year</i>) Supervision: Luís Guerreiro (IST), Rui Carneiro de Barros (FEUP) Risk management applied to cultural heritage buildings: The effect of soil settlements and vibrations induced by underground structures Georgios Karanikoloudis (<i>4th year</i>) Supervision: Paulo B. Lourenço (U Minho), João Bilé Serra (LNEC) Risk analysis of bridges using a new reliability-based robustness assessment methodology Hugo Guimarães (<i>5th year</i>) Supervision: José Campos e Matos (U Minho), Dan Frangopol (U Lehigh), António Abel Henriques (FEUP)
13:15	Lunch break	18:10	Discussion: Board of Studies and Researchers/Scholars
		18:40	Closing Session Carlos Sousa Oliveira Members of the INFRARISK-, Board of Studies Desmond Hartford Principal Engineering Scientist, BC Hydro, Vancouver, Canada Atilia Ansal Member of the Evaluation Committee