

Analysis and Mitigation of Risks in Infrastructures INFRARISK-

8th Summer School Workshop

Faculty of Engineering – University of Porto (FEUP), 4th November 2022

Location: Room G129 Professor Joaquim Sarmento, Civil Engineering Department (Building G)

Programme

- 10:00 **Opening Session**
Rui Colçada
Director of FEUP
Humberto Varum
Director of the PRODEC Doctoral Programme, FEUP
Rita Bento
Director of the Doctoral Programme INFRARISK-
- 10:20 **Research Project Presentations – Hydrology, Infrastructures & Geotechnics**
Chairpersons: Romeu Vicente, Rita Bento
Frozen in time: continuous measurements in a dam breach flow
Teresa Alvarez
Supervision: Rui Ferreira (IST), Teresa Viseu (LNEC)
Experimental methods for investigating the effects of soil settlements and vibrations in cultural heritage buildings, induced by underground structures
Georgios Karanikoloudis
Supervision: Paulo B. Lourenço (U Minho), João Bilé Serra (LNEC)
Development of multi-hazard risk indicators for immovable cultural heritage: flood vulnerability assessment
Luis Gerardo Flores Salazar
Supervision: Xavier Romão (FEUP), Rui Figueiredo (CIIMAR)
- 11:20 **Coffee break**
- 11:40 **Research Project Presentations – Infrastructures & Geotechnics, Earthquake Engineering**
Chairpersons: António Correia, Rui Figueiredo
Increasing robustness of critical infrastructures assessment using artificial intelligence and structural monitoring
Fabiana Navia Miranda
Supervision: Juan Mata (LNEC), João Santos (Ventient Energy), Xavier Romão (FEUP)
Effect of earthquake risk on the real estate market – An application to Lisbon
João Fragoço Januário
Supervision: Carlos Oliv. Cruz (IST), Humb. Varum (FEUP), Vítor Sousa (IST)
BIM-based seismic vulnerability assessment using the Equivalent Frame Method
Gonçalo Lopes
Supervision: Romeu Vicente (U Aveiro), Miguel Azenha (U Minho), Tiago Ferreira (U Minho)
BRD_AI prototype – Development of aluminium alloy hysteretic system: System configuration and analysis
Ricardo Ferreira
Supervision: Jorge Proença (IST), António Gago (IST)
- 13:00 **Lunch break**
- 14:30 **Keynote Lecture**
Chairpersons: Xavier Romão
Saving the planet, a new challenge for structural engineers"
Prof. Rui Pinho (U Pavia)
Invited Speaker
- 15:20 **Research Project Presentations – Earthquake Engineering**
Chairpersons: Paulo B. Lourenço, Xavier Romão
Simulation and testing of wall-to-diaphragm connections in masonry buildings
Maria Pia Ciocci
Supervision: Paulo B. Lourenço (U Minho), Rui Marques (U Minho)
Lessons learned from the 2017 Central Mexico Earthquakes: the seismic performance of historic adobe buildings in the State of Morelos
Rafael Ramirez Eudave
Supervision: Tiago Ferreira (U Minho), António Formisano (U Naples)
Exploring cost-benefit analysis for earthquake risk reduction
Holger Lovon Quispe
Supervision: Vítor Silva (U Aveiro), Tiago Ferreira (U Minho) Romeu Vicente (U Aveiro)
- 16:20 **Discussion: Board of Studies and Researchers/Scholars**
- 16:50 **Closing Session**
Carlos Sousa Oliveira
Desmond Hartford
Carlos Rebelo
Atilla Ansal
Members of the INFRARISK-, Board of Advisors

