CURRICULUM VITAE

RICARDO NUNO CARVALHO MONTEIRO

1. Personal Information

NAME: Ricardo Nuno Carvalho Monteiro

BIRTHDATE: February 10, 1982 **NACIONALITY:** Portuguese **PLACE OF BIRTH:** Porto, Portugal

E-MAIL: ricardo.monteiro@iusspavia.it, rncmonteiro@gmail.com

PHONE NUMBER: +39 333 641 4865

2. EDUCATION

2011 European Ph.D. in Civil Engineering, University of Porto, Portugal

(1-year placement at ROSE School, Pavia, Italy)

Thesis Title:Probabilistic Seismic Assessment of BridgesAdvisors:Prof. Raimundo Delgado (University of Porto)Prof. Aníbal Costa (University of Aveiro)

Tion. Amour Costa (Chrycistry of Aveno)

2005 Civil Engineering Degree (Structural Engineering Curriculum),

University of Porto, Portugal

Final Grade 17 out of 20 (ranked 1st)

3. CURRENT AND PAST APPOINTMENTS

September 2013 – Present Deputy Director, UME (formerly ROSE) Graduate

School, IUSS Pavia, Italy

November 2016 – Present Senior Assistant Professor, Institute for Advanced Study

(IUSS) of Pavia, Italy

December 2011 – October 2016 Junior Assistant Professor, Institute for Advanced Study

(IUSS) of Pavia, Italy

August 2011 – Present Affiliated Post-Doctoral Researcher, European Centre for

Training and Research in Earthquake Engineering, Pavia,

Italy

August 2011 – Present Affiliated Post-Doctoral Researcher, Institute of R&D in

Structures and Construction, Faculty of Engineering,

University of Porto, Portugal

October 2010 – November 2011 Researcher, University of Pavia, Structural Mechanics

Department

4. TRAINING AND RESEARCH

December 2011 –

Assistant Professor

Present

IUSS, Istituto Universitario di Studi Superiori di Pavia, Italy

Supervision or co-supervision of 24 Master Theses:

- 1. Borozan J., May 2017 (expected), UME School, MEEES Programme, Seismic assessment of RC buildings considering soil-structure interaction
- 2. O'Hearne N., May 2017 (expected), UME School, MEEES Programme, Seismic numerical assessment of historical buildings
- 3. Musta P., May 2017 (expected), UME School, MEEES Programme, Simplified Numerical Models for Seismic Performance of CFSTs
- 4. Gaviria A., May 2016, UME School, REM Programme, Database of standards, practices and procedures for disaster risk reduction
- 5. Sarchi, L., May 2016, UME School, REM Programme, *Numerical modeling of non-engineered structures*
- 6. Perdomo C., May 2016, UME School, MEEES Programme, Use of Generalized Force Vectors for multi-mode pushover analysis of bridges
- 7. Kalemi, B., May 2016, UME School, MEEES Programme, Seismic Performance of RC Filled Steel Columns
- 8. Mystiliadi, A., May 2016, UME School, MEEES Programme, Steel fibres reinforced concrete in static and dynamic conditions
- 9. Qu, L., May 2015, UME School, MEEES Programme, Seismic performance of RC structures with mixed steel-FRP rebars
- Vecere, A., May 2015, UME School, REM Programme, Post Disaster Needs Assessment – Shelter structures
- 11. Ejiofor, M., May 2015, UME School, REM Programme, *Flood Risk Model for Nigeria*
- 12. Civiletti, G., May 2015, UME School, REM Programme, *Improved models for increased seismic risk awareness*
- 13. Jiang, Y., May 2014, UME School, ROSE Programme, Sustainable High Performance Concrete-Steel Tubular Columns for Seismic Areas
- 14. Ahmed, K., May 2014, UME School, REM Programme, Seismic Risk Assessment in Pakistan
- 15. Ghazaryan, A., May 2014, UME School, REM Programme, *Disaster risk financing and insurance strategy*
- 16. Keramat, S., May 2014, UME School, REM Programme, Reducing Disaster Risk through Promotion of Rights and Good Governance
- 17. Zhang, X., May 2013, UME School, ROSE Programme, Different Approaches to Derive Analytical Fragility Functions of Bridges
- 18. Zelaschi, C., May 2013, UME School, ROSE Programme, Systemic characterization of RC bridges for seismic loss assessment
- 19. Sriwastava, A., May 2013, UME School, REM Programme, Development of a methodology to distribute existing rainfall amounts on terrain and simulation of rainfall induced flooding
- 20. Sepitci, B., May 2013, UME School, REM Programme, The Relationship between Global Climate Change and Rainfall Induced Natural Hazards
- 21. Santos, R., May 2013, UME School, REM Programme, Assessing housing needs following the Canterbury Earthquakes: A critical review of predictive models and feasibility of their implementation in New Zealand
- 22. González, R., May 2013, UME School, REM Programme, From hurricane hazard modelling to risk assessment; a comparative study
- 23. Servi, Y., May 2013, UME School, REM Programme, Disaster Risk Management for the East Asia and Pacific Region
- 24. Endire, Y., May 2013, UME School, REM Programme, Wildfire Risk Assessment in Benishangul Gumuz Regional State of Ethiopia

Supervision/Co-supervision of 9 PhD Theses:

- 1. Perdomo C., 2019 (expected), UME School, UME Doctoral Programme, ROSE curriculum, Seismic loss assessment procedures for RC bridges
- 2. Silva A., 2019 (expected), UME School, UME Doctoral Programme, ROSE curriculum, *Numerical assessment and comparison of steel-based building retrofitting techniques*
- 3. Cerchiello V., 2018 (expected), UME School, UME Doctoral Programme, REM curriculum, Remote sensing-based building fragility models for seismic risk assessment
- 4. Yilmaz C., 2018 (expected), UME School, UME Doctoral Programme, REM curriculum, Simplified procedures for landslide risk assessment
- 5. Papadopoulos A., 2018 (expected), UME School, UME Doctoral Programme, ROSE curriculum, *Harmonization of multi-hazard risk assessment approaches*
- 6. Vecere A., 2018 (expected), UME School, UME Doctoral Programme, REM curriculum, Early loss assessment methodologies for different natural hazards
- 7. Jiang, Y., 2017 (expected), UME School, UME Doctoral Programme, ROSE curriculum, Sustainable High Performance Concrete-Steel Tubular Columns for Seismic Areas
- 8. Civiletti, G., 2017 (expected), UME School, UME Doctoral Programme, REM curriculum, *Improved seismic awareness models for Italian buildings*
- 9. Zelaschi, C., 2016 (expected), UME School, UME Doctoral Programme, ROSE curriculum, Seismic risk assessment of bridge networks

January 2017 – Present

Coordinator (IUSS Pavia, Italy)

 $ITERATE-Improved\ Tools\ for\ Disaster\ Risk\ Mitigation\ in\ Algeria$

Funded by European Commission – Directorate General for Civil Protection

January 2016 – Present

Coordinator (IUSS Pavia, Italy)

ReLUIS (Network of Seismic Engineering University Laboratories) – Research line 7 – Displacement-based loss assessment

Funded by the Italian Civil Protection Department

January 2015 – Present

Deputy Coordinator IUSS Pavia, Italy

SYRIS-ERC – Systemic Risk Modelling and Governance Funded by Lombardy Region and Cariplo Foundation

January 2015 – December 2016

Research Unit Deputy Coordinator (IUSS Pavia, Italy)

SASPARM 2.0 - Support Action for Strengthening PAlestine capabilities for seismic Risk Mitigation

Funded by European Commission – Directorate General for Civil Protection

January 2015 – June 2016

Deputy Coordinator

Eucentre and Centre of Integrated Geomorphology for the Mediterranean Area (CGIAM), Italy

Progetto Scuole

Funded by Italian Ministry of Education and Research

June 2014 – Present

Coordinator IUSS Pavia, Italy

Erasmus+ Mobility Programme

Funded by the European Commission

February 2014 – December 2015

Research Unit Coordinator

IUSS Pavia, Italy

ReLUIS (Network of Seismic Engineering University Laboratories)

Funded by the Italian Civil Protection Department

September 2013 – Present

Deputy Coordinator IUSS Pavia, Italy

MEEES - Erasmus Mundus Master in Earthquake Engineering and

Engineering Seismology

Funded by the European Commission

March 2013 – September 2015

WP Coordinator

EUCENTRE, Pavia, Italy and University of Porto

PRISE - Earthquake Loss Assessment of the Portuguese Building Stock
Funded by the Portuguese National Foundation for Science and Technology
Main Tasks: Seismic Risk Exposure Model for Portuguese Building Stock.

November 2010 – October 2014

Task Coordinator

EUCENTRE, Pavia, Italy

FP7 European Project NERA (Network of European Research Infrastructures for Earthquake Risk Assessment and Mitigation)

Main Tasks: Local Research Unit Task Coordinator: Updating of structural fragility curves, taking into account new information on an existing network, for optimized loss/risk assessment studies.

October 2010 – September 2012

Collaborator

Global Earthquake Model

Main Tasks: Use of OpenQuake: open-source application for assessment of seismic risk

October 2010 – November 2011

Post-Doctoral Researcher

University of Pavia, Structural Mechanics Department

FP7 European Project SYNER-G (Systemic Seismic Vulnerability and Risk Analysis for Buildings, Lifeline Networks and Infrastructures Safety Gain)

Main Tasks: Estimation of fragility curves of different bridge typologies; Classification of Bridges for Loss Assessment Studies.

January – September 2010

Doctoral Researcher

University of Porto, Faculty of Engineering

FCT National Project (Seismic Assessment and Retrofitting of Bridges)

March – July 2008

Visiting PhD student

EUCENTRE, Seismic Risk Section, Pavia, Italy

Earthquake Loss Assessment of Bridges

(Supervision: Dr. Rui Pinho and Dr. Helen Crowley)

September 2007 – June 2009

Tutor, Civil Engineering MSc theses

University of Porto, Portugal

(Supervision: Prof. Raimundo Delgado)

- Carvalho, A., June 2009, Master Thesis, FEUP, Seismic Assessment of reinforced concrete bridges
- Sousa, L., July 2008, Master Thesis, FEUP, Seismic assessment of reinforced concrete hollow piers bridges
- Ribeiro, R, March 2008, Master Thesis, FEUP, *Pushover analysis of reinforced concrete bridges*

February – July 2007 **Visiting PhD student**

EUCENTRE, Seismic Risk Section, Pavia, Italy

Evaluation of Nonlinear Static Procedures for the Seismic Assessment of

(Supervision: Dr. Rui Pinho and Dr. Chiara Casarotti)

September 2006 – February 2007

Tutor, Civil Engineering Degree thesis

University of Porto, Portugal Seismic Vulnerability of Bridges

(Supervision: Prof. Raimundo Delgado)

August 2005 – July 2007 **Doctoral Researcher**

University of Porto, Portugal

FP6 European Project LESSLOSS (Risk Mitigation for Earthquakes and Landslides, Subproject 9, Probabilistic risk assessment: methods and applications)

Main Tasks: Probabilistic applications for vulnerability assessment of buildings and bridges.

5. TEACHING AND ACADEMIC COORDINATION APPOINTMENTS

December 2011 – Present

Assistant Professor

IUSS, Istituto Universitario di Studi Superiori di Pavia, Italy

- Deputy Director, Understanding and Managing Extremes (UME) Graduate School;
- Deputy Coordinator, Erasmus Mundus Master in Earthquake Engineering and Engineering Seismology (MEEES) – IUSS Pavia, University of Grenoble, University of Patras and Middle East Technical University;
- Scientific Coordinator, Earthquake Engineering and Engineering Seismology (ROSE) Master and PhD Programmes, UME Graduate School;
- Scientific Coordinator, Risk and Emergency Management (REM) Master and PhD Programmes, UME Graduate School;
- Assistant Coordinator, Weather Related Risk (WRR) PhD Programme, UME Graduate School and CIMA Foundation, Savona, Italy;
- Proposal of new study programmes (Master in Chemical and Environmental Risk and Nuclear Risk);
- Presentation of several proposals (e.g. European Commission) for funding for a European Joint Doctoral Programme in Understanding and Managing Extremes;
- Establishment of a Joint Doctorate Degree between IUSS Pavia and University of Toronto (the first Europe-Canada joint degree ever) in the field of Resilience of Critical Infrastructure.

December 2016 – February 2017

Teaching Assistant IUSS Pavia, Italy

Earthquake Engineering and Engineering Seismology (Lecturer: Gian Michele Calvi)

February - March

2016

Teaching Assistant IUSS Pavia, Italy

Earthquake Engineering and Engineering Seismology

(Lecturer: Gian Michele Calvi)

November 2015

Invited Lecturer University of Stellenbosch

Midrand Conference Centre, Johannesburg, South Africa

1-day session for practitioners on "Seismic Design of RC Buildings"

October 2015

Invited Lecturer

University of Stellenbosch, South Africa

MSc/PhD course in Seismic Design of RC Buildings

February – March

2015

Teaching Assistant IUSS Pavia, Italy

Earthquake Engineering and Engineering Seismology

(Lecturer: Gian Michele Calvi)

April – May 2014

Teaching Assistant IUSS Pavia, Italy

Myths and Fallacies in Structural Engineering

(Lecturer: Gian Michele Calvi)

November 2013

Teaching Assistant

EUCENTRE, Pavia, Italy

Displacement Based Seismic Design of RC Buildings

April – May 2013

Teaching Assistant

IUSS Pavia, Italy

Myths and Fallacies in Structural Engineering

(Lecturer: Gian Michele Calvi)

November 2012

Invited Lecturer

University of Porto, Faculty of Engineering, Portugal

Behaviour of Structures in Seismic Prone Regions

2-week training module provided to a delegation of Turkish practitioners with a view to provide them with tools to carry out seismic

assessment in specific Turkish regions.

May – June 2012

Teaching Assistant

IUSS Pavia, UME School, Italy

Displacement Based Seismic Design of Structures (Lecturers: Nigel Priestley and Gian Michele Calvi)

MSc and PhD Programme in Earthquake Engineering and Engineering

Seismology

November 2011

Teaching Assistant IUSS Pavia, Italy

Understanding Earthquake Engineering

(Lecturer: Gian Michele Calvi)

February –

Teaching Assistant

March 2011 IUSS Pavia, (formerly) ROSE School, Italy

Seismic Assessment and Retrofitting of Existing Structures

(Lecturer: Rui Pinho)

MSc and PhD Programme in Earthquake Engineering and Engineering

Seismology

September 2007 – February 2008

Teaching Assistant

Faculty of Engineering, University of Porto, Portugal

Structural Analysis, MSc in Civil Engineering

6. **OTHER APPOINTMENTS**

Scientific Committee Member August 2016

6th International Disaster and Risk Conference IDRC Dayos 2016

July 2016 Seismic Risk Consultant/Expert

International Agency for Atomic Energy (IAEA)

January 2016 -

Editorial Manager

present

Journal of Earthquake Engineering – Taylor and Francis

PhD Evaluation Committee Member November 2015

> Miriam Lopez - Optimum seismic isolation design parameters for multispan slab-girder skewed highway bridges – University of Porto, Portugal

October 2015 -Present

Editorial Board Member

Civil Engineering Journal, K.N. Toosi University of Technology, Tehran,

Iran

May 2015 Chairman

2nd Second International Workshop on Seismic Performance of Non-

Structural Elements (SPONSE), Pavia, Italy Design and Implementation Considerations II

February 2015

Scientific/Organizing Committee Member

OECD Nuclear Energy Agency Committee on the Safety of Nuclear Installations (CSNI) Workshop on "Testing PSHA Results and Benefit of Bayesian Techniques for Seismic Hazard Assessment", EUCENTRE,

IUSS Pavia, Italy

September 2014 Scientific Committee Member and Invited Speaker

Workshop "Field testing and seismic vulnerability assessment", Austrian

Institute of Technology, Vienna, Austria

Contributions to seismic assessment of populations of bridges

August 2014 Chairman

> 2nd European Conference on Earthquake Engineering and Seismology, Istanbul, Turkey

Assessment and Design of Bridges

May 2014 -

Rector **Present**

International College for Civil Protection "Cardinale Agustino Riboldi",

Pavia, Italy (appointed by the Eucentre Foundation)

May 2013	Chairman The 13 th International ROSE Seminar and The 1 st International UME School Seminar, Pavia, Italy
September 2012	 Chairman 15th World Conference on Earthquake Engineering, Lisbon, Portugal Assessment and Retrofitting of Existing Structures (Reinforced concrete structures and Isolation and anti-seismic devices) Preparedness and Emergency Management of Large Earthquakes
October 2010 – August 2014	Collaborator Seismosoft Ltd – Earthquake Engineering Software Solutions Main Tasks: User Support, Licensing and Sales Management, Marketing and Outreach

7. Publications

Portuguese)

Conference Proceedings Papers

1. Curreli, D.; Marques, M.; Monteiro, R.

Avaliação da Vulnerabilidade Sísmica de Pontes, Seminário de Estruturas, FEUP, Porto, Março 2005 (in Portuguese)

2. Delgado, P.; Marques, M.; Monteiro, R.; Delgado, R.; Costa, A.

Two Ways of Assessing the Seismic Vulnerability of Bridges, First European Conference on Earthquake Engineering and Seismology, Switzerland, September 2006

- 3. Delgado, P.; Monteiro, R.; Marques, M.; Costa, A.; Delgado, R.
- **Probabilistic Seismic Safety Assessment Of Bridges Application To A Real Case**, First European Conference on Earthquake Engineering and Seismology, Switzerland, September 2006
- 4. Delgado, R.; Marques, M.; Monteiro, R.; Delgado, P.; Romão, X.; Costa, A. **Setting Up Real Or Artificial Earthquake Records For Dynamic Analysis**, First European Conference on Earthquake Engineering and Seismology, Switzerland, September 2006
- 5. Delgado, P.; Marques, M.; Monteiro, R.; Delgado, R.; Costa, A. **Avaliação Expedita da Segurança Sísmica de Pontes**, 4^{as} Jornadas Portuguesas de Engenharia de Estruturas, LNEC, Lisboa, Dezembro 2006 (in Portuguese)
- 6. Delgado, P.; Monteiro, R.; Marques, M.; Costa, A.; Delgado, R. **Avaliação Probabilística da Segurança Sísmica de Pontes. Aplicação a um Caso Prático**, 4^{as} Jornadas Portuguesas de Engenharia de Estruturas, LNEC, Lisboa, Dezembro 2006 (in

7. Pinho, R.; Casarotti, C.; Monteiro, R.

An Adaptive Capacity Spectrum Method and Other Nonlinear Static Procedures Applied to the Seismic Assessment of Bridges, 1st US-Italy Seismic Bridge Workshop, EUCENTRE, Italy, April 2007

8. Pinho, R.; Casarotti, C.; Monteiro, R.; Delgado, R.

Verification of Nonlinear Static Procedures (NSP) for the Assessment of Bridges, Workshop in Nonlinear Static Methods for Design/Assessment of 3D Structures, IST, Lisbon, 5-6 May, 2008.

9. Monteiro, R.; Maruqes, M.; Pinho, R.; Casarotti, C.; Delgado, R.

Verification of Nonlinear Static Procedures (NSP) for the Assessment of Bridges and Buildings, The 8th International ROSE School Seminar, Pavia, 22-23 May, 2008.

10. Monteiro, R.; Casarotti, C.; Pinho, R.

Using Nonlinear Static Procedures for seismic assessment of irregular viaducts, Fifth European Workshop on the seismic behaviour of Irregular and Complex Structures, Catania, 16-17 September, 2008.

11. Pinho, R.; Marques, M.; Monteiro, R.; Casarotti, C.

Using the Adaptive Capacity Spectrum Method for the assessment of irregular frames, Fifth European Workshop on the seismic behaviour of Irregular and Complex Structures, Catania, 16-17 September, 2008.

12. Monteiro, R.; Ribeiro, R.; Marques, M.; Delgado, R.; Costa, A. **Pushover Analysis of RC Bridges Using Fiber Models or Plastic Hinges**, The 14th World Conference on Earthquake Engineering, Beijing, China, 12-17 October, 2008.

13. Marques, M.; Coutinho, D.; Monteiro, R.; Delgado, R.; Costa, A. **Pushover Analysis of RC Buildings with Different Nonlinear Models**, The 14th World Conference on Earthquake Engineering, Beijing, China, 12-17 October, 2008.

14. Ribeiro, R.; Monteiro, R.; Delgado, R.

Modelo com Não Linearidade Concentrada ou Distribuída em Análise Pushover de Pontes, BE2008 — Encontro Nacional de Betão Estrutural, Guimarães, 5-7 Novembro, 2008. (in Portuguese)

15. Delgado, P.; Monteiro, R.; Marques, M.; Delgado, R.; Costa, A. **Análise probabilística da vulnerabilidade sísmica de um viaduto irregular**, ASCP09 – 1° Congresso Nacional de Segurança e Conservação de Pontes, Lisboa, 1-3 Julho, 2009. (in

Portuguese)

16. Monteiro, R.; Delgado, R.; Pinho, R.; Casarotti, C.

Avaliação do comportamento sísmico de pontes por análise estática não linear, ASCP09 – 1º Congresso Nacional de Segurança e Conservação de Pontes, Lisboa, 1-3 Julho, 2009. (in Portuguese)

17. Monteiro, R.; Delgado, R.; Crowley, H.; Pinho, R.

Avaliação da segurança sísmica de pontes segundo diferentes metodologias, ASCP09 – 1º Congresso Nacional de Segurança e Conservação de Pontes, Lisboa, 1-3 Julho, 2009. (in Portuguese)

18. Monteiro, R.; Delgado, R.

Avaliação probabilística da segurança sísmica de pontes em betão armado, Reabilitar2010 — Encontro Nacional de Conservação e Reabilitação de Estruturas, Lisboa, 23-25 Junho, 2010. (in Portuguese)

19. Araújo, M.; Torres, A.; Monteiro, R.; Delgado, R.

Segurança Sísmica de um Conjunto de Pontes Portuguesas, Sísmica 2010 – 8º Congresso Nacional de Sismologia e Engenharia Sísmica, Aveiro, 20-23 Outubro, 2010. (in Portuguese)

20. Torres, A.; Araújo, M.; Monteiro, R.; Delgado, R.

Avaliação da Segurança Sísmica de Pontes Usando Análises Pushover, Sísmica 2010 – 8° Congresso Nacional de Sismologia e Engenharia Sísmica, Aveiro, 20-23 Outubro, 2010. (in Portuguese)

21. Monteiro, R.; Delgado, R.; Costa, A.

Avaliação Probabilística da Segurança Sísmica de Pontes Usando Análises Pushover, Sísmica 2010 – 8º Congresso Nacional de Sismologia e Engenharia Sísmica, Aveiro, 20-23 Outubro, 2010. (in Portuguese)

22. Monteiro, R.; Delgado, R., Costa, A.

Quantificação da Segurança Sísmica de Pontes através de Técnicas de Amostragem, Sísmica 2010 – 8º Congresso Nacional de Sismologia e Engenharia Sísmica, Aveiro, 20-23 Outubro, 2010. (in Portuguese)

23. Scodeggio, A.; Monteiro, R.; Dacarro, F.; Crowley H.; Pinho R.

Finite Element Model Updating of Buildings using Dynamic Identification Measurements, 15th World Conference on Earthquake Engineering, Paper No. 1331, Lisbon, Portugal, 2012.

24. Zelaschi, C.; Monteiro, R.; Marques, M.

Numerical simulation of the seismic behavior of RC bridge populations for defining optimal intensity measures, OpenSees Days Portugal 2014-Abstracts, 53.

25. Monteiro, R.; Zhang, X.; Pinho, R.

Different approaches to derive analytical fragility functions of bridges, Second European Conference on Earthquake Engineering and Seismology, Istanbul, Turkey, 2014.

26. Zelaschi, C.; Monteiro, R.; Marques, M.; Pinho R.

Comparative analysis of intensity measures for reinforced concrete bridges, Second European Conference on Earthquake Engineering and Seismology, Istanbul, Turkey, 2014.

27. Marques, M.; Castro, J.M.; Silva, V.; Carvalho, M.; and Monteiro, R.

Risco Sismico em Portugal – Desenvolvimentos do Projecto PRISE, 5as Jornadas Portuguesas de Engenharia de Estruturas, LNEC, Lisboa, Portugal, 2014. (in Portuguese)

28. Zelaschi, C.; Forcellini, D.; De Angelis, G. and Monteiro, R.

Performance based earthquake engineering approach applied to bridges in a road network, Proceedings of the 5th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN), Crete, Greece, May 25-27, 2015.

29. Monteiro, R.; Delgado, R. and Pinho R.

Using different uncertainty models for seismic assessment of RC bridges. Proceedings of the 5th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2015), Crete Island, Greece, 25–27 May, 2015.

30. Zelaschi, C.; Monteiro, R. and Pinho, R.

Improved fragility functions for RC bridge populations, Proceedings of the 5th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN), Crete, Greece, May 25-27, 2015.

31. Jiang Y., Silva A., Castro J.M. and Monteiro R.

Experimental Assessment of the Behavior of Rubberized Concrete Filled Steel Tube Members. Proceedings of the 8th International Conference on Behaviour of Steel Structures in Seismic Areas, Shanghai, China, July 1-4, 2015.

32. Dabbeek, J.; Alwahsh, H.; Sader, S.; Juhari, A.H.; Borzi, B.; Germagnoli, F.; Ceresa, P.; Monteiro, R.

Academic Hubs: Using Applied Research and Community Services to Build Resilience of Nations and Communities to Disasters. Proceedings of the International Workshop on Mitigation of Disasters due to Severe Climate Events: From Policy to Practice, Colombo, Sri Lanka, 10-13 March, 2016.

33. Zelaschi, C.; Monteiro, R. and Pinho, R.

Simplified Period Estimation of Italian RC Bridges for Large-Scale Seismic Assessment. Proceedings of the VII European Congress on Computational Methods in Applied Sciences and Engineering M. Papadrakakis, V. Papadopoulos, G. Stefanou, V. Plevris (eds.) Crete Island, Greece, 5–10 June, 2016.

34. Monteiro, R.: Ceresa, P.: Cerchiello, V.: Dabeek, J.: Di Meo, A.: Borzi, B.

Towards Integrated Seismic Risk Assessment in Palestine – Application to the City of Nablus. Proceedings of the VII European Congress on Computational Methods in Applied Sciences and Engineering M. Papadrakakis, V. Papadopoulos, G. Stefanou, V. Plevris (eds.) Crete Island, Greece, 5–10 June, 2016.

35. Civiletti, G.; Camassi, R.; Monteiro, R.

Italian seismic sequences: year 2000, the emergency phase in Romagna. Proceedings of the World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium (WMCAUS), Prague, 13-17 June, 2016.

36. Vecere, A.; Monteiro, R.; Amman, W.

Comparative analysis of existing tools for assessment of post-earthquake short-term lodging needs. Proceedings of the World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium (WMCAUS), Prague, 13-17 June, 2016.

37. Grigoratos, I.; Faravelli, M.; Di Meo, A.; Cerchiello, V.; Borzi, B.; Monteiro, R.; Ceresa, P. **Development of A Fragility and Exposure Model for Palestine – Application to The City of Nablus**. Proceedings of the World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium (WMCAUS), Prague, 13-17 June, 2016.

38. Borzi, B.; Di Meo, A.; Faravelli, M.; Ceresa, P.; Monteiro, R.; Dabeek, J.

Definition of Fragility Curves for Frame Buildings in Nablus – Palestine. Proceedings of the 1st International Conference on Natural Hazards & Infrastructure, Chania, Greece, 28-30 June. 2016.

39. Grigoratos, I.; Ceresa, P.; Monteiro, R.; Borzi, B.

Extending the applicability of simplified pushover-based vulnerability assessment methods to irregular RC buildings. Proceedings of the 1st International Conference on Natural Hazards & Infrastructure, Chania, Greece, 28-30 June, 2016.

40. Vecere, A.; Monteiro, R.; Amman, W.

Estimating Post-Earthquake Shelter Requirements. Proceedings of the 6th International Disaster and Risk Conference IDRC, Davos, Switzerland, 28 August – 1 September, 2016.

Deliverables and Reports

41. Fragility functions for roadway bridges

SYNER-G – Systemic Seismic Vulnerability and Risk Analysis for Buildings, Lifeline Networks and Infrastructures Safety Gain, Deliverable 3.6, 2012.

42. Developed integrated field monitoring technologies

NERA – Network of European Research Infrastructures for Earthquake Risk Assessment and Mitigation, Deliverable 15.1, 2013.

Journal Articles

43. Rui Pinho, Ricardo Monteiro, Chiara Casarotti and Raimundo Delgado

Assessment of Continuous Span Bridges through Nonlinear Static Procedures, Earthquake Spectra, 25(1), 143-159, 2009

44. C. Casarotti, R. Monteiro and R. Pinho

Verification of spectral reduction factors for seismic assessment of bridges, *Bulletin of the New Zealand Society for Earthquake Engineering*, **42**(2), 2009

45. Pinho, R.; Marques, M.; Monteiro, R. and Delgado. R.

Evaluation of Nonlinear Static Procedures in the Assessment of Building Frames, Earthquake Spectra, 29(4), 2013

46. Monteiro, R.; Margues, M.; Adhikari, G.; Casarotti, C. and Pinho, R.

Spectral Reduction Factors Evaluation for Seismic Assessment of Frame Buildings, Engineering Structures, 77, 129-142, 2014

47. Monteiro, R.; Delgado R. and Pinho, R.

Probabilistic Seismic Assessment of RC Bridges: Part I – Uncertainty Models, *Structures*, **5**, 258-273, 2016

48. Monteiro, R.; Delgado R. and Pinho, R.

Probabilistic Seismic Assessment of RC Bridges: Part II – Nonlinear Demand Prediction, *Structures*, **5**, 274-283, 2016

49. Zelaschi, C.; Monteiro, R.; Pinho, R.

Parametric Characterization of RC Bridges for Seismic Assessment Purposes, *Structures*, 7, 14-24, 2016

50. Monteiro, R.

Sampling based numerical seismic assessment of continuous span RC bridges, *Engineering Structures*, **118**, 407-420, 2016

51. Bernier, C., Monteiro, R. and Paultre, P.

Using the Conditional Spectrum Method for Improved Fragility Assessment of Concrete Gravity Dams in Eastern Canada, Earthquake Spectra, In-Press, 2016

- 52. Jiang, Y., Silva, A., Castro, M., Macedo, L., Silvestre, N. and Monteiro, R. Seismic performance of composite moment-resisting frames achieved with sustainable CFST members, Frontiers of Structural and Civil Engineering, 10(3), 312-332, 2016
- 53. Silva, A.; Jiang, Y.; Castro, J.M.; Silvestre, N.; Monteiro, R. Experimental assessment of the flexural behaviour of circular rubberized concrete-filled steel tubes, Journal of Constructional Steel Research, 122, 557-570, 2016.
- 54. Kazantzidou-Firtinidou, D.; Sousa, R.; Pinho, R.; Nascimbene, R. and Monteiro, R. Critical Evaluation of Modelling Parameters on Seismic Assessment of RC Irregular Buildings Case Study, *Journal of Earthquake Engineering* (submitted)
- 55. Pinho, R.; Pietra, D.; Monteiro, R. and Calvi, G.M.

 Reliability and Efficiency of Displacement-Based Seismic Design of Isolated Bridges

 Subjected to Transverse Excitation, Bulletin of Earthquake Engineering (submitted)

8. LINGUISTIC

Portuguese: Mother tongue

English: First Certificate in English (Grade A), Cambridge University, June 2006

Italian: Fluent

9. PERSONAL SKILLS AND COMPETENCES

- Technical reviewer (Earthquake Spectra, Engineering Structures, Earthquakes and Structures, Journal of Earthquake Engineering, NED University Journal of Research, Civil Engineering Journal)
- Experienced in structural modelling of RC bridges in nonlinear analysis software.
- Competent in graphical applications (Autodesk Autocad, Microstation);
- Competent in structural software (SAP2000, SeismoStruct, Robot, CypeCad);
- Competent in calculus application software (Matlab, Fortran, Visual Basic)

10. Prizes

2014 - Visiting Research Scholar Scholarship

European Commission (Erasmus Mundus) Middle East Technical University, Ankara, Turkey, September-October 2014

■ 2013 - SC@UM - Strengthening CFRP Challenge

University of Minho, Portugal, June 28, 2013 Ranked 2nd.

2006 - Visiting Young Researcher Scholarship

Short-listed within the 40 participants of the training Course on "Seismic Hazard and Risk Assessment", ETH-Zurich (September 11-14, 2006) following the 1st European Conference in Eathquake Engineering and Seismology

2005 - Prize Mota-Engil

Mota-Engil, SGPS, S.A.

Top student, Civil Engineering Degree, at Faculty of Engineering of University of Porto, academic year 2004/2005

2005 - Prize Engenheiro António de Almeida

Foundation Engenheiro António de Almeida Top student, Civil Engineering Degree, at Faculty of Engineering of University of Porto, academic year 2004/2005

■ **2005 - Best Final Project ("Building Structures")** in the Civil Engineering Degree at University of Porto, academic year 2004/2005

2000 - Prize Maia Rotary Club

Maia Rotary Club

Top student, High School of Maia, academic year 1999/2000

■ 2000 - Honorific Mention - V OIbF (Iberoamerican Physics Olympiad)

September 2000, Jaca, Spain