# CURRICULUM VITAE

**RICARDO NUNO CARVALHO MONTEIRO** 

NOVEMBER, 2020

### 1. **PERSONAL INFORMATION**

NAME: Ricardo Nuno Carvalho Monteiro BIRTHDATE: February 10, 1982 NACIONALITY: Portuguese PLACE OF BIRTH: Porto, Portugal E-MAIL: <u>ricardo.monteiro@iusspavia.it</u>

### 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 Bridges
Advisors:	Prof. Raimundo Delgado (University of Porto) Prof. Aníbal Costa (University of Aveiro)
2005	Civil Engineering Degree (Structural Engineering Curriculum), University of Porto, Portugal
Final Grade	17 out of 20 (ranked 1 <sup>st</sup> )

# **3.** CURRENT AND PAST APPOINTMENTS

November 2019 – Present	Associate Professor, University School for Advanced Studies IUSS Pavia, Italy
November 2016 – October 2019	Senior Assistant Professor, University School for Advanced Studies IUSS Pavia, Italy
December 2011 – October 2016	Junior Assistant Professor, University School for Advanced Studies IUSS 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. **RESEARCH ACTIVITIES**

### Supervision/Co-Supervision of PhD and MSc Theses

2013 – Present	<ul> <li>Supervision/Co-supervision of 10 PhD Theses:</li> <li>1. Zelaschi, C. (2017) PhD in Earthquake Engineering and Engineering Seismology (ROSE), Seismic assessment of spatially-distributed RC bridge</li> </ul>
	portfolios
	2. Jiang, Y. (2018) PhD in Earthquake Engineering and Engineering Seismology (ROSE), Seismic assessment of composite frames with concrete- filled steel tube columns
	3. Vecere A. (2019) PhD in Risk and Emergency Management (REM), Near Real-time Flood Loss Estimation as a Basis for Risk Financing Mechanisms

- 4. Perdomo C. (2020) PhD in Earthquake Engineering and Engineering Seismology (ROSE), Direct Economic Loss Assessment of Multi-Span Continuous RC Bridges under Seismic Hazard
- 5. Silva A. (2020) PhD in Earthquake Engineering and Engineering Seismology (ROSE), *Implications of earthquake-induced loss control in seismic design provisions*
- 6. Torres J. (2020) PhD in Risk and Emergency Management (REM) Crossing borders: A comparative assessment of community resilience to natural hazards in Arica, Chile and Tacna, Peru
- 7. Rodriquez C. (2020) PhD in Risk and Emergency Management (REM) A framework to assess disaster resilience based on the sustainable development goals
- 8. Abarca, A. (2021, expected), PhD in Earthquake Engineering and Engineering Seismology (ROSE) Seismic assessment of RC bridge infrastructure
- 9. Shahnazaryan, D. (2021, expected), PhD in Earthquake Engineering and Engineering Seismology (ROSE) *Consideration of expected annual losses in the seismic design of RC structures*
- 10. Mucedero, G. (2022, expected), PhD in Earthquake Engineering and Engineering Seismology (ROSE) Large scale seismic risk assessment of existing RC buildings in Italy

Supervision or co-supervision of 39 Master Theses:

- 1. Purushothama, C. (2019) MSc in Geomechanics, Civil Engineering and Risks (University of Grenoble Alpes, France), *Simplified Seismic Assessment of Infilled RC Frames*
- 2. Leone, J. (2019) MSc in Earthquake Engineering and Engineering Seismology (MEEES), *Evaluation of Risk Consistency of Force-Based and Displacement-Based Design Methods*
- 3. Mora, A. (2019) MSc in Earthquake Engineering and Engineering Seismology (MEEES), Evaluation of Risk Consistency of Force-Based and Displacement-Based Design Methods for Reinforced Concrete Moment Frames
- 4. Akan, O. (2019) MSc in Earthquake Engineering and Engineering Seismology (MEEES), *Establishing Displaced Shapes of Infilled RC Frames in Displacement-Based Design and Assessment*
- 5. Cripstyani, M. (2019) MSc in Earthquake Engineering and Engineering Seismology (MEEES), *Seismic Risk Assessment of Bridges in Indonesia*
- 6. Ahmed, S. (2019) MSc in Earthquake Engineering and Engineering Seismology (MEEES), *Large-Scale Seismic Risk Assessment and Definition of Retrofitting Strategies for RC Buildings*
- 7. Gonzalez, I. (2018) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Implications of seismic design provisions on accelerations sensitive non-structural components due to earthquake loading*
- 8. Alvarez, L. (2018) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Effect of material mechanical property variability on seismic performance of steel frames*
- 9. Shahnazaryan, D. (2018) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Comparison of earthquake-induced losses of reinforced concrete and steel frame buildings*
- 10. Rica, V. (2018) MSc Erasmus Mundus in Earthquake Engineering and Engineering Seismology (MEEES), *Integrated Seismic Risk in Palestine*
- 11. Carofilis, W. (2018) MSc in Earthquake Engineering and Engineering Seismology (ROSE), Seismic Loss Assessment and Retrofitting Strategies of a RC School Building
- 12. Bellotti, V. (2018) MSc in Earthquake Engineering and Engineering Seismology (ROSE), Seismic assessment of low-rise masonry buildings in Groningen's province (NL)

- 13. Zampieri, S. (2018) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Human-Induced Seismicity in Groningen: Prioritization of risk assessments and Resilience-Based Design*
- 14. Bagavasingam, T. (2018) MSc Erasmus Mundus in Earthquake Engineering and Engineering Seismology (MEEES), *Development of Fragility Curves* for RC Buildings in Northern Algeria
- 15. Mercurio, A. (2018) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Floor Response Spectrum for Seismic Design: Intervention on a High-Rise Building in Milan*
- 16. Borozan J. (2017) MSc in Earthquake Engineering and Engineering Seismology (ROSE), Seismic assessment of RC buildings considering soilstructure interaction
- 17. O'Hearne N. (2017) MSc in Earthquake Engineering and Engineering Seismology (ROSE), Seismic numerical assessment of historical buildings
- 18. Musta P. (2017) MSc Erasmus Mundus in Earthquake Engineering and Engineering Seismology (MEEES), *Simplified Numerical Models for Seismic Performance of CFSTs*
- 19. Gaviria A. (2016) MSc in Risk and Emergency Management (REM), Database of standards, practices and procedures for disaster risk reduction
- 20. Sarchi, L. (2016) MSc in Risk and Emergency Management (REM), *Numerical modeling of non-engineered structures*
- 21. Perdomo C. (2016) MSc Erasmus Mundus in Earthquake Engineering and Engineering Seismology (MEEES), Use of Generalized Force Vectors for multi-mode pushover analysis of bridges
- 22. Kalemi, B. (2016) MSc Erasmus Mundus in Earthquake Engineering and Engineering Seismology (MEEES), *Seismic Performance of RC Filled Steel Columns*
- 23. Mystiliadi, A. (2016) MSc Erasmus Mundus in Earthquake Engineering and Engineering Seismology (MEEES), *Steel fibres reinforced concrete in static and dynamic conditions*
- 24. Qu, L. (2015) MSc Erasmus Mundus in Earthquake Engineering and Engineering Seismology (MEEES), *Seismic performance of RC structures with mixed steel-FRP rebars*
- 25. Vecere, A. (2015) MSc in Risk and Emergency Management (REM), Post Disaster Needs Assessment Shelter structures
- 26. Ejiofor, M. (2015) MSc in Risk and Emergency Management (REM), *Flood Risk Model for Nigeria*
- 27. Civiletti, G. (2015) MSc in Risk and Emergency Management (REM), Improved models for increased seismic risk awareness
- 28. Jiang, Y. (2014) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Sustainable High Performance Concrete-Steel Tubular Columns for Seismic Areas*
- 29. Ahmed, K. (2014) MSc in Risk and Emergency Management (REM), *Seismic Risk Assessment in Pakistan*
- 30. Ghazaryan, A. (2014) MSc in Risk and Emergency Management (REM), *Disaster risk financing and insurance strategy*
- 31. Keramat, S. (2014) MSc in Risk and Emergency Management (REM), *Reducing Disaster Risk through Promotion of Rights and Good Governance*
- 32. Zhang, X. (2013) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Different Approaches to Derive Analytical Fragility Functions of Bridges*
- 33. Zelaschi, C. (2013) MSc in Earthquake Engineering and Engineering Seismology (ROSE), *Systemic characterization of RC bridges for seismic loss assessment*
- 34. Sriwastava, A. (2013) MSc in Risk and Emergency Management (REM), Development of a methodology to distribute existing rainfall amounts on terrain and simulation of rainfall induced flooding
- 35. Sepitci, B. (2013) MSc in Risk and Emergency Management (REM), *The Relationship between Global Climate Change and Rainfall Induced Natural Hazards*

	<ol> <li>Santos, R. (2013) MSc in Risk and Emergency Management (REM), Assessing housing needs following the Canterbury Earthquakes: A critical review of predictive models and feasibility of their implementation in New Zealand</li> <li>González, R. (2013) MSc in Risk and Emergency Management (REM), From hurricane hazard modelling to risk assessment; a comparative study</li> <li>Servi, Y. (2013) MSc in Risk and Emergency Management (REM), Disaster Risk Management for the East Asia and Pacific Region</li> <li>Endire, Y. (2013) MSc in Risk and Emergency Management (REM), Wildfire Risk Assessment in Benishangul Gumuz Regional State of Ethiopia</li> </ol>
2007 – 2009	<ul> <li>Tutor of 3 Civil Engineering MSc theses at University of Porto, Portugal (Main Supervisor: Prof. Raimundo Delgado)</li> <li>1. Carvalho, A. (2009) MSc in Civil Engineering, Seismic Assessment of reinforced concrete bridges</li> <li>2. Sousa, L. (2008) MSc in Civil Engineering, Seismic assessment of reinforced concrete hollow piece bridges</li> </ul>

 2. 2000, hoe in Civit Engineering, Seismic assessment of reinforced concrete hollow piers bridges
 3. Ribeiro, R (2008) MSc in Civil Engineering, Pushover analysis of reinforced concrete bridges

# Coordination/Participation in National/International Training and Research Projects

July 2019	Coordinator IUSS Pavia, Italy Intensive course on "Risk Assessment and Emergency Management of Disasters due to Natural Hazards" Funded by: Earthquake Disaster Policy Division, Ministry of the Interior and Safety, South Korea Budget: €19,000.00
January 2019 – Present	Research Unit Coordinator IUSS Pavia, Italy ReLUIS - Network of Seismic Engineering University Laboratories Work Package 5 – Assessment of integrated seismic retrofitting schemes Funded by: Italian Civil Protection Department Budget: €75,000.00
August 2018 – Present (August 2021)	<ul> <li>WP Coordinator (PI: Dr. José Miguel Castro)</li> <li>IUSS Pavia, Italy and University of Porto, Portugal</li> <li>MitRisk - Framework for seismic risk reduction resorting to cost-effective retrofitting solutions</li> <li>Funded by: Portuguese National Foundation for Science and Technology</li> <li>Main Tasks: Cost-benefit analysis in seismic loss estimation</li> <li>Budget: €160,670.97</li> </ul>
January 2018 – December 2019	Co-Principal Investigator (Co-PI: Prof. Michele Calvi) Eucentre Foundation, Italy INFRA-NAT – Increased Resilience of Critical Infrastructure under Natural and Human-induced Hazards Funded by: European Commission – DG-ECHO Budget: €762,839.05
January 2018 – Present	Deputy Coordinator (PI: Prof. Michele Calvi) IUSS Pavia, Italy Dipartimenti di Eccellenza - Revision of Seismic Action and Design Funded by: Italian Ministry of Education and Research (MIUR) Budget: €8,205,100.00
January 2017 – June 2020	WP Coordinator (Exposure Model) (PI: Dr. Mário Marques) IUSS Pavia, Italy and University of Porto, Portugal SMARTER - Seismic Urban Risk Assessment in Iberia and Maghreb Funded by: Portuguese National Foundation for Science and Technology Budget: €86,592.00

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September 2013 – February 2019	Deputy Coordinator (PI: Prof. Michele Calvi) IUSS Pavia, Italy MEEES – Erasmus Mundus Master in Earthquake Engineering and Engineering Seismology Funded by: European Commission Budget: €1,577,600.00
June 2013 – September 2015	Task Coordinator (PI: Dr. Mário Marques)Eucentre Foundation, Pavia, Italy and University of Porto, PortugalPRISE - Earthquake Loss Assessment of the Portuguese Building StockFunded by: Portuguese National Foundation for Science and TechnologyMain Tasks: Seismic Risk Exposure Model for Portuguese Building StockBudget: €193,080.00
November 2010 – October 2014	Task CoordinatorEucentre Foundation, Pavia, ItalyNERA - Network of European Research Infrastructures for Earthquake RiskAssessment and MitigationFunded by: European Commission (FP7)Budget: €11,949,356.04
October 2010 – November 2011	Post-Doctoral Researcher University of Pavia, Italy SYNER-G - Systemic Seismic Vulnerability and Risk Analysis for Buildings, Lifeline Networks and Infrastructures Safety Gain Funded by: European Commission (FP7) Budget: €4,784,534.55
January – September 2010	<b>Doctoral Researcher</b> <b>University of Porto, Portugal</b> <i>Seismic Assessment and Retrofitting of Bridges</i> Funded by: Portuguese National Foundation for Science and Technology
March 2005 – July 2007	Doctoral Researcher University of Porto, Portugal LESSLOSS - Risk Mitigation for Earthquakes and Landslides, Subproject 9, Probabilistic risk assessment: methods and applications Funded by: European Commission (FP6) Budget: €11,800,000.00

# 5. TEACHING ACTIVITIES

October 2019	<ul> <li>Invited Lecturer</li> <li>Stellenbosch University, South Africa <ul> <li>MEng/PhD in Civil Engineering, 1-week intensive course on "Seismic Design of RC Buildings"</li> <li>3-day session in Stellenbosch for practitioners on "Seismic Design of RC Buildings"</li> <li>3-day session in Johannesburg for practitioners on "Seismic Design of RC Buildings"</li> </ul> </li> </ul>
June 2018 – today	Lecturer University of Pavia and IUSS Pavia, Italy MSc in Civil Engineering for Risk Mitigation from Natural Hazards PhD in Earthquake Engineering and Engineering Seismology (ROSE) Fundamentals of Seismic Design
February 2018 – March 2018	<b>Teaching Assistant</b> <b>IUSS Pavia, Italy</b> <i>Earthquake Engineering and Engineering Seismology</i> (Lecturer: Gian Michele Calvi)

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October 2017	<ul> <li>Invited Lecturer</li> <li>Stellenbosch University, South Africa <ul> <li>MEng/PhD in Civil Engineering, 1-week intensive course on "Seismic Design of RC Buildings"</li> <li>1-day session in Stellenbosch for practitioners on "Seismic Design of RC Buildings"</li> <li>1-day session in Johannesburg for practitioners on "Seismic Design of RC Buildings"</li> </ul> </li> </ul>
November 2016	Lecturer IUSS Pavia, Italy PhD in Understanding and Managing Extremes (ROSE curriculum) Seismic Safety for Nuclear Installations: From Hazard Assessment to Structural Analysis
November 2015	Invited Lecturer Stellenbosch University, South Africa 1-day session in Johannesburg for practitioners on "Seismic Design of RC Buildings"
October 2015	Invited Lecturer Stellenbosch University, South Africa MEng/PhD in Civil Engineering, 1-week intensive course on "Seismic Design of RC Buildings"
April 2013 – May 2014	<b>Teaching Assistant</b> <b>IUSS Pavia, Italy</b> <i>Myths and Fallacies in Structural Engineering</i> (Lecturer: Gian Michele Calvi)
November 2013	Invited Lecturer Eucentre Foundation, Pavia, Italy 2-day course for practitioners on "Displacement Based Seismic Design of RC Buildings"
November 2012	<b>Invited Lecturer</b> <b>University of Porto, Faculty of Engineering, Portugal</b> <i>Behaviour of Structures in Seismic Prone Regions</i> 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	<b>Teaching Assistant</b> <b>IUSS Pavia, (formerly) ROSE School</b> MSc/PhD in Earthquake Engineering and Engineering Seismology (ROSE) <i>Displacement Based Seismic Design of Structures</i> (Lecturers: Nigel Priestley and Gian Michele Calvi)
November 2011	Teaching Assistant IUSS Pavia, Italy Understanding Earthquake Engineering (Lecturer: Gian Michele Calvi)
February – March 2011	Teaching Assistant IUSS Pavia, (formerly) ROSE School MSc/PhD in Earthquake Engineering and Engineering Seismology (ROSE) Seismic Assessment and Retrofitting of Existing Structures (Lecturer: Rui Pinho)
September 2007 – February 2008	<b>Teaching Assistant</b> <b>Faculty of Engineering, University of Porto, Portugal</b> MSc in Civil Engineering <i>Structural Analysis</i>

# 6. ACADEMIC COORDINATION

October 2016 –	<b>Coordinator</b>
Present	MSc in Earthquake Engineering and Engineering Seismology (ROSE)
September 2013 – Present	<b>Deputy Coordinator</b> Erasmus Mundus MSc in Earthquake Engineering and Engineering Seismology (MEEES)
September 2013 –	<b>Deputy Coordinator</b>
September 2016	MSc in Earthquake Engineering and Engineering Seismology (ROSE)
September 2012 –	<b>Deputy Coordinator</b>
August 2015	MSc in Risk and Emergency Management (REM)

# 7. ACADEMIC EVALUATION COMMITTEES

April 2013, July 2013, October 2013, April 2014, July 2014, April 2016, April 2019	Member of the Undergraduate Courses Final Exam Committee Department of Science, Technology and Society
December 2016,	<b>Member of the PhD Final Exam Committee</b>
May 2016	PhD in Understanding and Managing Extremes (UME)
a.y. 2017/2018 to	Member of the Admission Committee
2019/2020	MSc in Civil Engineering for Mitigation of Risk from Natural Hazards
a.y. 2013/2014 to	Member of the Admission Committee
2019/2020	PhD in Understanding and Managing Extremes (UME)
a.y. 2014/2015 to	Member of the Application Evaluation Committee
2018/2019	Erasmus+ Student Mobility Programme
a.y. 2014/2015 to 2016/2017	Member of the Admission Committee Erasmus Mundus MSc in Earthquake Engineering and Engineering Seismology (MEEES)
a.y. 2014/2015 to	Member of the Admission Committee
2016/2017	MSc in Earthquake Engineering and Engineering Seismology (ROSE)
a.y. 2012/2013 to	Member of the Admission Committee
2015/2016	MSc in Risk and Emergency Management (REM)
a.y. 2014/2015	Member of the Admission Committee MSc in Environmental and Chemical Risk (ECR)

# 8. EDITORIAL ACTIVITIES

December 2019 - present	Associate Editor Frontiers of Built Environment (Earthquake Engineering)
January 2016 - present	Editorial ManagerJournal of Earthquake Engineering – Taylor and FrancisGuest EditorSpecial Issue (Journal of Earthquake Engineering – Taylor and Francis) in"Seismic assessment and conservation of historical monuments – Selectedpapers of the 2 <sup>nd</sup> AID Monuments Conference 2015"Guest EditorSpecial Issue (Journal of Earthquake Engineering – Taylor and Francis) in"Displacement-based seismic loss assessment of existing buildings"
October 2015 - Present	Editorial Board Member Civil Engineering Journal, K.N. Toosi University of Technology, Tehran, Iran
October 2010 - Present	<b>Technical Reviewer for 17 peer-review journals</b> Earthquake Spectra, Engineering Structures, Earthquakes and Structures, Bulletin of Earthquake Engineering, Journal of Earthquake Engineering, Journal of Bridge Engineering, International Journal of Disaster and Risk Reduction, Algorithms, Geosciences, Materials, Computers and Concrete, Earthquake Engineering and Engineering Vibration, Structures and Buildings, International Journal of Geo-Information, Arabian Journal Science Engineering, NED University Journal of Research, Civil Engineering Journal

# 9. OTHER APPOINTMENTS

January 2020 – Present	Member of the Joint Commission Italian Department of Civil Protection and Eucentre Foundation			
October 2019	<b>Invited Theme Speaker</b> Fifth International Conference on Earthquake Engineering and Seismology (5ICEES), Ankara, Turkey Evaluation of different approaches for computation of expected annual seismic losses of RC bridge portfolios			
September 2019	Member of Scientific Committee and Session Co-Organiser SECED 2019 Conference - Society for Earthquake and Civil Engineering Dynamics, Greenwich, UK <i>Risk assessment in developing countries</i>			
May 2019	<b>Chairman</b> 4 <sup>th</sup> Second International Workshop on Seismic Performance of Non-Structural Elements (SPONSE), Pavia, Italy <i>Seismic demand on non-structural elements</i>			
January 2018 – Present	Senior Advisor Department of Education and Training Eucentre Foundation, Pavia, Italy			
December 2017	Invited Speaker Integrated seismic risk in Mediterranean and Middle-East countries - The case- studies of Palestine and Algeria The XXXVII International Workshop on Seismicity and Seismic Hazard Mitigation in the Extended Mediterranean Region UNESCO-RELEMR 2017, Madrid, Spain			

April 2017	Invited Speaker Seismic Vulnerability and Loss Assessment of Italian School Buildings Vulnerability and Loss Estimation Workshop USAID and GEM Foundation, Pavia, Italy			
August 2016	Scientific Committee Member 6 <sup>th</sup> International Disaster and Risk Conference IDRC Davos 2016			
July 2016	Seismic Risk Consultant/Expert International Agency for Atomic Energy (IAEA), United Nations			
November 2015 – Today	<ol> <li>Invited PhD Examining Committee Member         <ol> <li>Tuba Tatar (Advanced Methodology for Estimation of Economic Losses in RC Buildings) PhD in Civil Engineering, University of Porto, Portugal, September 2019</li> <li>Junaid Akbar (Strengthening of RC Frames using Haunch Retrofit Solutions), PhD in Civil Engineering, University of Engineering and Technology, Peshawar, Pakistan, February 2019</li> <li>Luís Martins (Earthquake Damage and Loss Assessment of Reinforced Concrete Buildings) PhD in Civil Engineering, University of Porto, Portugal, May 14, 2018</li> <li>Rita Peres (Performance Based Seismic Design and Assessment of Irregular Steel Structures) PhD in Civil Engineering, Technical University of Lisbon, Portugal, June 6, 2017</li> <li>Fabrizio Cornalli (Evaluation of the Expected Annual Loss for Precast Concrete Industrial Structures) PhD in Civil Engineering, University of Bergamo, Italy, May 10, 2017</li> <li>Luís Sousa (Development of innovative methodologies for the treatment of uncertainties in the earthquake loss assessment of building portfolios) PhD in Civil Engineering, University of Porto, Portugal, May 5, 2017</li> </ol> </li> </ol>			
May 2015	Chairman 2 <sup>nd</sup> 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 Contributions to seismic assessment of populations of bridges Workshop "Field testing and seismic vulnerability assessment", Austrian Institute of Technology, Vienna, Austria			
August 2014	<b>Chairman</b> 2 <sup>nd</sup> European Conference on Earthquake Engineering and Seismology, Istanbul, Turkey Assessment and Design of Bridges			
May 2014 - Present	<b>Rector</b> International College for Civil Protection "Cardinale Agustino Riboldi", Pavia, Italy (appointed by the Eucentre Foundation)			
May 2013	<b>Chairman</b> The 13 <sup>th</sup> International ROSE Seminar and The 1 <sup>st</sup> International UME School Seminar, Pavia, Italy			

September 2012	<ul> <li>Chairman</li> <li>15<sup>th</sup> World Conference on Earthquake Engineering, Lisbon, Portugal</li> <li>Assessment and Retrofitting of Existing Structures (Reinforced concrete structures and Isolation and anti-seismic devices)</li> <li>Preparedness and Emergency Management of Large Earthquakes</li> </ul>	
October 2010 – August 2014	Collaborator Seismosoft Ltd – Earthquake Engineering Software Solutions Main Tasks: User Support, Licensing and Sales Management, Marketing and Outreach	

### **10. PUBLICATIONS**

#### **BIBLIOMETRIC INDICATORS**

NUMBER OF JOURNAL ARTICLES:	48	
NUMBER OF CITATIONS:	614 (Scopus)	814 (Google Scholar)
H-INDEX:	16	

#### **Journal Articles**

#### [2020]

- 48. Perdomo, C., Monteiro, R. (2020) Extension of Displacement-Based Simplified Procedures to Seismic Loss Assessment of Multi-Span RC Bridges, Earthquake Engineering and Structural Dynamics. In-Press.
- 47. Perdomo, C., Abarca, A., Monteiro, R. (2020) Estimation of Seismic Expected Annual Losses for Multi-Span Continuous RC Bridge Portfolios using a Component Level Approach, Journal of Earthquake Engineering. In-Press.
- 46. Perdomo, C., Monteiro, R., Sucuoğlu, H. (2020) Development of Fragility Curves for Single-Column RC Italian Bridges using Nonlinear Static Analysis, Journal of Earthquake Engineering. In-Press.
- 45. Grigoratos, I., Monteiro, R., Ceresa, P., Di Meo, A., Faravelli, M., Borzi, B. (2020) Crowdsourcing Exposure Data for Seismic Vulnerability Assessment in Developing Countries, Journal of Earthquake Engineering. In-Press.
- 44. Mucedero, G., Perrone, D., Brunesi, E., Monteiro, R. (2020) Numerical Modelling and Validation of the Response of Masonry Infilled RC Frames Using Experimental Testing Results, Buildings, 10, 182.
- 43. Silva, A., Castro, J.M., Monteiro, R. (2020) A Rational Approach to the Conversion of FEMA P-58 Seismic Repair Costs to Europe, Earthquake Spectra, 36(3), 1607-1618.
- 42. Carofilis, W., Perrone, D., O'Reilly, G., Monteiro, R., Filiatrault, A. (2020) Seismic Retrofit of Existing School Buildings in Italy: Performance Evaluation and Loss Estimation, Engineering Structures, 225, 111243.
- 41. Bellah Nafeh, A.M., Beldjoudi, H., Yelles, A. Karim, Monteiro, R. (2020) Development of a Seismic Social Vulnerability Model for Northern Algeria, International Journal of Disaster Risk Reduction, 50, 101821.
- 40. Silva, A., Castro, J.M., Monteiro, R. (2020) Brace-to-frame connection modelling effects on seismic loss assessment of steel concentrically-braced frames, Journal of Constructional Steel Research, 172, 106230.
- 39. O'Reilly, G., Monteiro, R., Bellah Nafeh, A.M., Sullivan, T.J., Calvi, G.M. (2020) Displacement-Based Framework for Simplified Seismic Loss Assessment, Journal of Earthquake Engineering, 24(S1), 1-22.
- 38. Perdomo, C., Monteiro, R. (2020) Simplified Damage Models for Circular Section Reinforced Concrete Bridge Columns, Engineering Structures, 217, 110794.

- Lenjani, A., Bilionis, I., Dyke, S., Yeum, C.M., Monteiro, R. (2020) A Resiliencebased Method for Prioritizing Post-event Building Inspections, Natural Hazards, 100, 877-896.
- 36. Bellah Nafeh, A.M., O'Reilly, G., Monteiro, R. (2020) Simplified seismic assessment of infilled RC frame structures, Bulletin of Earthquake Engineering, 18, 1579-1611.
- 35. Silva, A., Macedo, L., Monteiro, R., Castro, J.M. (2020) Earthquake-induced loss assessment of steel buildings designed to Eurocode 8, Engineering Structures, 208, 110244.
- 34. Perrone, D., O'Reilly, G., Monteiro, R., Filiatrault, A. (2020) Assessing seismic risk in typical Italian school buildings: from in-situ survey to loss estimation, International Journal of Disaster Risk Reduction, 44, 101448.

#### [2019]

- 33. González, I., Silva, A., Macedo, L., Monteiro, R., Castro, J.M. (2019) Critical Assessment of Estimation Procedures for Floor Acceleration Demands in Steel Moment-Resisting Frames, Frontiers in Built Environment, 5(139).
- Silva, V., Akkar, S., Baker, J., Bazzurro, P., Castro, J.M., Crowley, H., Dolsek, M., Galasso, C., Lagomarsino, S., Monteiro, R., Perrone, D., Pitilakis, K., Vamvatsikos, D. (2019) Current Challenges and Future Trends in Analytical Fragility and Vulnerability Modelling, Earthquake Spectra, 35(4), 1927-1952.
- 31. Monteiro, R., Zelaschi, C., Silva, A., Pinho, R. (2019) Derivation of Fragility Functions for Seismic Assessment of RC Bridge Portfolios Using Different Intensity Measures, Journal of Earthquake Engineering, 23(10), 1678-1694.
- 30. Jiang, Y., Silva, A., Macedo, L., Castro, J.M., Monteiro, R., Chan, T.-K. (2019) Concentrated-plasticity modelling of circular concrete-filled steel tubular members under flexure, Structures, 21, 156-166.
- 29. Zelaschi, C., Monteiro, R., Pinho, R. (2019) Critical Assessment of Intensity Measures for Seismic Response of Italian RC Bridge Portfolios, Journal of Earthquake Engineering. 23(6), 980-1000.
- 28. Silva, A., Castro, J.M., Monteiro, R. (2019) Practical considerations on the design of concentrically-braced steel frames to Eurocode 8, Journal of Constructional Steel Research, 158, 71-85.
- 27. Calvi, G.M., Moratti, M., O'Reilly, G., Scattarreggia, N., Monteiro, R., Malomo, D., Calvi, P.M., Pinho, R. (2019) Once upon a Time in Italy: The Tale of the Morandi Bridge, Structural Engineering International, 29(2), 198-217.
- 26. O'Reilly, G., Monteiro, R. (2019) Probabilistic models for structures with bilinear demand-intensity relationships, Earthquake Engineering and Structural Dynamics, 48(2), 253-268.
- 25. Segura, R., Bernier, C., Monteiro, R., Paultre, P. (2019) On the Seismic Fragility Assessment of Concrete Gravity Dams in Eastern Canada, Earthquake Spectra, 35(1), 211-231.
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- Delgado, R., Marques, M., Monteiro, R., Delgado, P., Romão, X., Costa, A. (2006) Setting Up Real or Artificial Earthquake Records for Dynamic Analysis. *Proceedings* of the 1<sup>st</sup> European Conference on Earthquake Engineering and Seismology, 7, 4840-4849, Paper no. 899.
- 4. Delgado, P., Marques, M., Monteiro, R., Delgado, R., Costa, A. (2006) Two Ways of Assessing the Seismic Vulnerability of Bridges. *Proceedings of the 1<sup>st</sup> European Conference on Earthquake Engineering and Seismology*, 7, 4868-4877, Paper no. 903.
- Delgado, P., Monteiro, R., Marques, M., Costa, A., Delgado, R. (2006) Probabilistic Seismic Safety Assessment of Bridges – Application to a Real Case. *Proceedings of the 1<sup>st</sup> European Conference on Earthquake Engineering and Seismology*, 9, 6244-6253, Paper no. 1144.
- 2. Delgado, P., Marques, M., Monteiro, R., Delgado, R., Costa, A. (2006) Avaliação Expedita da Segurança Sísmica de Pontes. *Proceedings of the 4<sup>as</sup> Jornadas Portuguesas de Engenharia de Estruturas*, Lisbon, Portugal, 13-16 December. (in Portuguese)
- Delgado, P., Monteiro, R., Marques, M., Costa, A., Delgado, R. (2006) Avaliação Probabilística da Segurança Sísmica de Pontes. Aplicação a um Caso Prático. *Proceedings of the 4<sup>as</sup> Jornadas Portuguesas de Engenharia de Estruturas*, Lisbon, Portugal, 13-16 December. (in Portuguese)

### **10.** LANGUAGES

- Portuguese: Mother tongue
- English: *First Certificate in English (Grade A)*, Cambridge University, June 2006
- Italian: Fluent

### 11. PRIZES

- 2020 Outstanding Paper Award International Association for Bridge and Structural Engineering (IABSE) Scientific Paper: "Once upon a Time in Italy: The Tale of the Morandi Bridge"
- 2019 Blind Prediction Competition QuakeCoRE – New Zealand Centre for Earthquake Resilience Winner

#### • 2018 - Best Paper Award

Springer Nature - Best Paper (Track 5) entitled "Preliminary Seismic Hazard Modelling in Northern Algeria" presented at the 1<sup>st</sup> Conference of the Arabian Journal of Geosciences (CAJG) Hammamet, Tunisia, 12–15 November 2018

- 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 2<sup>nd</sup>.

#### 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 1<sup>st</sup> European Conference in Earthquake 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