

# Francesco Graziotti

## *Curriculum Vitae*

### PERSONAL INFORMATION

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*Name* Francesco Graziotti  
*Place and Date of birth:* Padova, Italy – 04/04/1984  
*Nationality:* Italian  
*Place of Residence:* Pavia, Italy  
*Email:* francesco.graziotti@unipv.it

### EDUCATION AND TRAINING

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September 2010 – December 2013      **Doctor of Philosophy** in Earthquake Engineering and Engineering Seismology

*Institution:* IUSS – University School for Advanced Studies, UME School, Pavia (IT)  
*Thesis title:* Contribution towards the displacement-based assessment of masonry structures  
*Contents:* Design, execution and reporting of full-scale testing campaign on stone masonry spandrels. Definition of a reliable single degree of freedom model for fast calculation of seismic demand of masonry structures. Application of the model in vulnerability studies and proposal of new displacement prediction formulations.  
*Supervisors:* G. Magenes, A. Penna  
*Relevant courses:* Seismic Analysis of Non-Structural Components (A. Filiatrault), Engineering Seismology (A. Papageorgiou), Earthquake Geotechnical Engineering (S. L. Kramer), Masonry Structures (G. Magenes, M. Griffith), Seismic Reliability Analysis of Structures (P. Pinto, P. Franchin), Dynamic Soil-Structure Interaction (E. Kausel).  
*Grade:* Excellent

September 2009 – September 2010      **Master of Science** in Structural Engineering

*Institution:* Jacobs School of Engineering, University of California San Diego (USA)  
*Thesis title:* Seismic bridge response modification due to degradation of viscous dampers performance  
*Contents:* Numerical investigation analyzing the variation of the seismic response of a bridge in the case of degradation of installed viscous fluid dampers. The study was conducted with nonlinear time-history analyses of a detailed three-dimensional FE model of the Vincent Thomas Bridge in Los Angeles.  
*Supervisors:* P. B. Shing, C. M. Uang, F. Lanza di Scalea, G. Benzoni  
*Relevant courses:* Advanced Solid Mechanics (V. A. Lubarda), Matrix Structural Analysis (P.B. Shing), Composite Structures (H. Kim), Structural Dynamics (E. Luco), Earthquake Engineering (A. Elgamal), Displacement-based Seismic Design (J. Restrepo), Steel Structures (C. M. Uang), R.C. Structures (R. E. Englekirk), Non-destructive Structural Evaluation (F. Lanza di Scalea).  
*Grade:* 3.94/4.00

October 2006 –  
December 2008

**Master degree (Laurea Specialistica)** in Civil Engineering

*Institution:* University of Pavia (IT)  
*Thesis title:* Design of a laboratory setup for testing full-scale masonry spandrels  
*Contents:* Complete design of a test setup (from 2010 effectively used to test full-scale spandrel specimens).  
*Supervisors:* G. Magenes, A. Penna  
*Relevant courses:* Bi-dimensional Structures, Finite Elements, Risk Analysis, Structural Dynamics, Earthquake Engineering, Steel Structures, Masonry Structures, Bridges, Foundations, Snow and Avalanches.  
*Grade:* 110/110 *cum laude*

October 2006 –  
December 2008

**Bachelor degree (Laurea)** in Civil Engineering

*Institution:* University of Pavia (IT)  
*Thesis title:* First interpretation of full-scale cyclic tests on AAC masonry infills  
*Supervisors:* G. Magenes, A. Penna  
*Relevant courses:* Physics, Chemistry, Solid Mechanics, Hydraulics, Fundamentals of Steel Structures, R.C. Structures, Geotechnical Engineering, CAD, Economics.  
*Grade:* 110/110 *cum laude*

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RESEARCH EXPERIENCE

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August 2021 –  
current

**Assistant professor (Ricercatore a tempo determinato “B”** - art. 24 Legge 240/2010) at the Civil Engineering and Architecture Department - DICAr, University of Pavia (IT).

Development and validation of an innovative timber retrofit solution for unreinforced masonry buildings: conceptualization, design, and shake-table validation. Definition of design procedures and guidelines for its practical application. Studies on the environmental sustainability of the system. Development of simplified numerical models for rapid vulnerability assessment of masonry structures in the framework of a project aimed at developing a typology-based approach for out-of-plane wall assessment. Numerical and experimental studies to evaluate the seismic performance of non-structural components, such as display cases and museum installations, as well as innovative isolation devices. Studies on human-induced vibrations on museum artifacts. Tests executed to define the dynamic behavior of a timber altarpiece using laser vibrometers. Shake-table tests involving industrial steel racks isolated with innovative modular devices, as well as a shake table testing campaign on electrical cabinets. Participation to the work of the Italian Electrotechnical Committee (CEI) for the development of a guide for the correct design and installation of low-voltage systems and components in environments subject to seismic risk. Close collaboration with laboratories including TU Delft, University of Patras, and University of Trento, as well as firms and organizations such as Shell, TNO, Goppion, Julight, IEC, Kyneprox, and the Gallerie dell'Accademia of Venice.

January 2017 –  
July 2021

**Assistant professor (Ricercatore a tempo determinato “A”** - art. 24 Legge 240/2010) at the Civil Engineering and Architecture Department - DICAr, University of Pavia (IT).

Studies on the risk of gas extraction induced seismicity. Responsible for laboratory and *in-situ* testing campaigns: design, execution, data elaboration and reporting of 20+ full-scale shaking table tests (mono- and multi-directional) on unreinforced masonry buildings, on structural components and on sub assemblages; in-lab and *in-situ* material characterization and quasi-static tests. Development of simplified numerical models for fast vulnerability assessment of masonry structures (fragility functions) and studies of the seismic performances of structural and non-structural masonry components. Numerical and experimental studies on the seismic performance of non-structural components (*e.g.* display cases and museum installations) and innovative isolation devices. Collaboration with international laboratories (*e.g.* TU Delft, TU Eindhoven, LNEC Lisbon) and international firms (*e.g.* ARUP, Shell, P&P, Goppion).

October 2014 – December 2016	<b>Post-doctoral researcher (Assegnista di ricerca)</b> at the Civil Engineering and Architecture Department - DICAr, University of Pavia (IT).  Studies on the risk of gas extraction induced seismicity. Development of simplified numerical models for fast vulnerability assessment of masonry structures (fragility functions) and studies of the seismic performance of masonry components.
September 2013 – October 2014	<b>Post-doctoral researcher (Assegnista di ricerca)</b> at IUSS – University School for Advanced Studies, Pavia (IT).  Studies on methodologies to assess the resilience of urban systems. Detailed study on the vulnerability of two strategic unreinforced masonry buildings in Sicily. <i>In-situ</i> testing, dynamic identification, macro-element modelling, dynamic analyses, definition of local and global limit states and vulnerability functions.
January 2009 – August 2009	<b>Post-graduate researcher</b> at EUCENTRE, Pavia (IT).  Design and construction supervision of a laboratory test setup for masonry spandrels. Collaboration with the STEP project (Strategies and Tools for Early Post-Earthquake Assessment) for surveys of strategic structures after 2009 L'Aquila earthquake.

## RESEARCH PROJECTS

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2023- current	Wandenaanpak Groningen, a typology-based approach for out-of-plane wall assessment. Granted by: TNO - Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek, in collaboration with TU Delft. <b>Funding: € 200'000</b> - <i>Principal Investigator: F. Graziotti</i>
2023-current	ERIES: Engineering Research Infrastructures for European Synergies. SUPREME, MDOF Shake-table testing campaign on gable walls subjected out-of-plane top and bottom differential motions. <i>Principal Investigator: F. Messali.</i> <i>Scientific responsible for the physical testing: F. Graziotti</i>
2023-current	ERIES: Engineering Research Infrastructures for European Synergies. STRONG, Testing campaign on sustainable timber retrofit of reinforced concrete buildings. At STRULAB – University of Patras. <i>Principal Investigator: I. Giongo. Role: Research Collaborator</i>
2023-current	ERIES: Engineering Research Infrastructures for European Synergies. RESTORING, Testing campaign on stone masonry walls strengthened with CRM. <i>Principal Investigator: R. Bento. Role: Research Collaborator</i>
2019- 2024	RELUIS Executive Project 2019-2021, 2021-2024, WP4: Risk maps and seismic damage scenarios (MARS). <b>Funding: € 175'000</b> - UNIPV <i>Principal Investigators: A. Penna, F. Graziotti</i>
2019- 2024	RELUIS Executive Project 2019-2021, 2021-2024 WP5: Integrated, low-impact and rapid retrofit intervention. <b>Funding: € 25'000</b> - UNIPV <i>Principal Investigators: F. Graziotti, A. Penna</i>
2019- 2024	RELUIS Executive Project 2019-2021, 2021-2024 WP10: Contribution towards code procedures for seismic assessment of existing URM structures. <b>Funding: € 50'000</b> - UNIPV <i>Principal Investigators: A. Penna, F. Graziotti</i>
2018- 2021	KYNEPROX Project: Numerical and feasibility study on an innovative seismic isolation system (Studio di fattibilità numerico e sperimentale su un sistema antisismico innovativo). <i>Principal Investigator: A. Penna. Role: Research Collaborator</i>
2014 - 2020	NAM Project: “Study of the vulnerability of masonry buildings in Groningen”. Responsible of the entire experimental campaign on URM structures (20+ shake table tests on full scale buildings and components) executed in EUCENTRE, Pavia and LNEC, Lisbon. Granted by: Nederlandse Aardolie Maatschappij BV. <b>Funding: € 10'808'500</b> - <i>Principal Investigator: R. Pinho.</i> <i>Scientific responsible for the physical testing: F. Graziotti</i>

- 2019  
 GOPPION Project: Bidirectional shake-table test on fixed and isolated museum showcase (Test bidirezionale su tavola vibrante di vetrina museale con e senza isolamento sismico).  
**Funding: € 5'000** - *Principal Investigator: F. Graziotti*
- 2018- 2019  
 MOBARTECH project: Development of a technological platform for the conservation and enhancement of historical-artistic assets. Bidirectional shaking table tests on museum installations.  
*Principal Investigators: R. Nascimbene and M. Rota.*  
*Scientific responsible for the physical testing: F. Graziotti*
- 2019  
 Verification of equivalent-frame based software for the seismic assessment of masonry buildings according to annex G of NPR9998:2018. Research project in collaboration with TU Delft.  
**Funding: € 45'000** - *Principal Investigator: F. Graziotti*
- 2018  
 Verification of equivalent-frame based software for the seismic assessment of masonry buildings according to annex G of NPR9998:2017. Research project in collaboration with TU Delft.  
**Funding: € 80'000** - *Principal Investigator: F. Graziotti*
- 2015 - 2018  
 Research project on the assessment of the Seismic Response of Natural Stone Masonry Buildings in Basel, Co-PI of UNIPV, subcontracted by École Polytechnique Fédérale de Lausanne.  
*Principal Investigators: K. Beyer, G. Magenes, A. Penna. Role: Research Collaborator*
- 2014 - 2016  
 EUCENTRE Executive Project 2014-16: Topic C.2.1.2 – “Improvement of the seismic assessment of existing masonry buildings by improving structural analysis and assessment procedures”.  
*Principal Investigators: G. Magenes, A. Penna. Role: Research Collaborator*
- 2014  
 RELUIS Executive Project 2014: Masonry Structures line.  
*Principal Investigators: C. Modena, G. Magenes, S. Lagomarsino. Role: Research Collaborator*
- 2014  
 MATILDA Project: “Multinational module on damage assessment and countermeasures”, CE – FP7.  
*Principal Investigator: A. Pavese. Role: Research Collaborator*
- 2012 - 2014  
 PRISMA Project: “Piattaforme cloud interoperabili per smart-government”, funded by Italian Ministry of University and Research.  
*Principal Investigator: A. Pavese. Role: Research Collaborator*
- 2011 - 2014  
 REAKT Project: “Strategies and tools for Real Time EArthquake RiSk ReducTion”.  
*Principal Investigator: P. Gasparini. Role: Research Collaborator*
- 2011 - 2013  
 EUCENTRE Executive Project 2012-2014: “Seismic vulnerability of masonry buildings”.  
*Principal Investigator: G. Magenes. Role: Research Collaborator*
- 2011 - 2012  
 Bilateral project between Italy and Slovenia: “Protection of cultural heritage from earthquakes” in collaboration with the Engineering and Geodesy Faculty of the University of Ljubljana, Slovenia (funded by the Ministry of Foreign Affairs as a high relevance scientific cooperation project).  
*Principal Investigators: M. Dolšek, G. Magenes. Role: Research Collaborator*
- 2010 - 2013  
 DRHOUSE – Development of Rapid Highly-specialized Operative Units for Structural Evaluation (EC, GA 070405/2010/565717/SUB/C3)  
*Principal Investigator: A. Pavese. Role: Research Collaborator*
- 2009 - 2013  
 RELUIS Executive Project 2009-2013: Tools for the assessment and management of seismic risk of the existing building stock. “New aspects in the assessment of existing structures and retrofit interventions and evaluation of seismic risk of the existing building stock at the regional scale. Vulnerability assessment of masonry buildings, historical centres and cultural heritage”.  
*Principal Investigators: C. Modena, G. Magenes, S. Lagomarsino. Role: Research Collaborator*
- 2009  
 EUCENTRE: Technical-scientific supporting activities for the emergency phase and the beginning of the reconstruction in the Abruzzo region hit by the earthquake – item 12, Ordinance 15<sup>th</sup> of April 2009 of the Presidency of the Council of Ministers.
- 2008 - 2011  
 EUCENTRE Executive Project 2008-2011: Research Programme e5/1 “Displacement-based methods for the seismic assessment of masonry buildings and possible implications for design”.  
*Principal Investigator: G. Magenes. Role: Research Collaborator*

- 2006 - 2008 STEP Project: “Strategies and Tools for Early Post-earthquake assessment”, CE – FP7.  
*Principal Investigator: A. Pavese. Role: Research Collaborator*
- 2005 - 2008 RELUIS Executive Project 2005-2008: “Assessment and reduction of the seismic vulnerability of masonry buildings”.  
*Principal Investigators: C. Modena, G. Magenes, S. Lagomarsino. Role: Research Collaborator*

## TEACHING EXPERIENCE

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- February 2024 – current Lecturer of **“Seismic Assessment and Retrofit of Existing Structures”** (“Valutazione e rinforzo sismico delle strutture esistenti”). Master course (Laurea Magistrale in Ing. Civile) at University of Pavia, Italy. In Italian.
- October 2020 - current Co-lecturer of **“Structural Engineering”** (“Tecnica delle Costruzioni”). Bachelor course (Laurea triennale in Ing. Civile) at University of Pavia, Italy. In Italian.
- October 2023 – January 2024 Lecturer of **“Seismic Design of Structures”** (“Progettazione sismica delle strutture”). Master course (Laurea Magistrale in Ing. Civile) at University of Pavia, Italy. In Italian.
- January 2023 Co-lecturer of **“Masonry Structures”**. Master course of Civil Engineering for Mitigation of Risk from Natural Hazard (ROSE programme) at University of Pavia and IUSS, Italy. In English.
- March 2020 – June 2023 Lecturer of **“Theory and Design of Steel Structures”** (“Teoria e progetto delle costruzioni in acciaio”). Master course (Laurea Magistrale in Ing. Civile) at University of Pavia, Italy. In Italian.
- March 2020 – June 2023 Lecturer of **“Structural Engineering Laboratory”** (“Laboratorio di tecnica delle costruzioni”). Master course (Laurea Magistrale in Ing. Edile/Architettura) at University of Pavia. In Italian.
- February 2017 – June 2019 Lecturer of **“Structural Engineering”** Master course at University of Pavia, Italy in the framework of the double degree in Building Engineering/Architecture with Tongji University, Shanghai, China. In English.
- September 2011 – December 2016 Teaching assistant of **“Design of Structures”** (“Progetto di strutture”, A. Penna). Bachelor’s course (Laurea in Ing. Civile) at University of Pavia, Italy. In Italian.
- March – April 2013 Teaching assistant of **“Seismic Design and Assessment of Masonry Structures”** (G. Magenes). M.Sc. course at UME School, IUSS, Pavia, Italy. In English.
- April – June 2010 Teaching assistant of **“Design of Prestressed Concrete”** (P. B. Shing). B.Sc. course at University of California San Diego, USA. In English.
- January – March 2010 Teaching assistant of **“Solid Mechanics”** (F. Lanza di Scalea). B.Sc. course at University of California San Diego, USA. In English.
- October 2005 – September 2009 Teaching assistant of **“Physics”** (“Fisica I” - A. Agnesi, G. Reali). B.Sc. course at University of Pavia, Italy. In Italian.

## MASTERS, PHD AND POSTDOC TUTORING

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From 2019, Faculty Board Member for the doctoral programme on Understanding and Managing Extremes (UME school) at the University School for Advanced Studies (IUSS) – Pavia, Italy.

Supervisor (and co-) of 30+ Master’s theses (Lauree Magistrali) in Civil Engineering and Building Engineering/Architecture in the field of masonry buildings and experimental testing at University of Pavia and of 4 M.Sc. theses in Earthquake Engineering at IUSS, Pavia.

Supervisor of 5 Ph.D. theses:

- “Seismic performance of framed retrofit solutions for unreinforced masonry buildings” N. Damiani, 2023, UME school, IUSS – Pavia, Italy;
- “An innovative timber retrofit for unreinforced masonry structures: impacts on seismic performance and preliminary considerations on environmental sustainability” M. Miglietta, 2022, UME school, IUSS – Pavia, Italy;

- “Investigations into the seismic out-of-plane two-way bending behaviour of unreinforced masonry walls” S. Sharma, 2020, UME school, IUSS – Pavia, Italy;
- “Tools and strategies for combined local and global seismic vulnerability assessment of URM structures” U. Tomassetti, Civil Engineering and Building/Architecture doctoral school of DICAr, 2018, University of Pavia, Italy;
- “Contributions to the seismic vulnerability assessment of unreinforced masonry buildings under induced seismicity” S. Kallioras, 2018, UME school, IUSS – Pavia, Italy.

Currently tutor of one doctoral student at PhD program in Design, Modeling and Simulation in Engineering of the University of Pavia.

Responsible for 9 postdoctoral fellows since 2017.

#### ACADEMIC SERVICE

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2021 - current, Member of the board of the Department of Civil Engineering and Architecture (DICAr) of University of Pavia.

2021 - current, Member of the steering committee of the Engineering Faculty of University of Pavia.

2021 - current, Responsible for the Structures and Materials Section of DICAr.

#### PEER REVIEW AND REFEREE ACTIVITIES

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Peer reviewer for the following scientific journals:

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| <ul style="list-style-type: none"> <li>- Engineering Structures;</li> <li>- Earthquake Engineering and Engineering Vibration;</li> <li>- Journal of Earthquake Engineering;</li> <li>- International Journal of Structural Engineering;</li> <li>- Earthquake Spectra;</li> </ul> | <ul style="list-style-type: none"> <li>- Journal of Structural Engineering;</li> <li>- Construction and Building Materials;</li> <li>- Materials and Structures;</li> <li>- Bulletin of Earthquake Engineering;</li> <li>- Structures;</li> <li>- International Journal of Architectural Heritage.</li> </ul> |
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Doctoral Examination Committee member for the University of Trento (2020, 2023) and the University of Auckland (2020).

External expert reviewer for a Postdoctoral fellowship application commissioned by ETH Zurich Research Commission for scientific evaluation (2018).

#### AWARDS AND ACHIEVEMENTS

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- Best Paper Award (2<sup>nd</sup> place) of the 17<sup>th</sup> International Brick/Block Masonry Conference (17<sup>th</sup> IB<sup>2</sup>MaC 2020), July 5-8, 2020, Kraków, Poland with the manuscript: “An innovative timber system for the seismic retrofit of unreinforced brick masonry buildings” Damiani, N., Miglietta, M., Guerrini, G., Graziotti, F.
- Best Paper Award (1<sup>st</sup> place) of 13<sup>th</sup> North American Masonry Conference (13NAMC), June 16-19, 2019, Salt Lake City, USA with the manuscript: “Shake-Table Tests on a URM Building with Chimneys” Graziotti, F., Kallioras, S., Correia, A. A.
- Selection of the paper presented at the 10<sup>th</sup> International Masonry Conference, July 9-11, 2018, Milan, Italy for a special issue of the Bulletin of Earthquake Engineering. Final Paper “Experimental Seismic Performance of a Half-Scale Stone Masonry Building Aggregate” Senaldi, I., Guerrini, G., Comini, P., Graziotti, F., Magenes, G., Beyer, K., Penna, A. (DOI: 10.1007/s10518-019-00631-2).
- Selection of the paper presented at the 11<sup>th</sup> International Conference on Structural Analysis of Historical Constructions, September 2018, Cusco, Peru for a special issue of the International Journal of Architectural Heritage. Final Paper “Shake-table test of a strengthened stone masonry building aggregate with flexible diaphragms” Guerrini, G., Senaldi, I., Graziotti, F., Magenes, G., Beyer, K., Penna, A. (DOI: 10.1080/15583058.2019.1635661).
- “Key scientific article certificate” for the paper on Engineering Structures: “Detailed micro-modelling of the direct shear tests of brick masonry specimens: The role of dilatancy” Andreotti, G., Graziotti, F., Magenes, G., 2018, by “Advances In Engineering”. Recognition of the studies on “The interdisciplinary role of dilatancy in the unifying approach for the interpretation of direct shear tests of masonry” <https://advanceseng.com/interdisciplinary-dilatancy-interpretation-direct-shear-tests-masonry/>.

## FURTHER SCIENTIFIC, TEACHING AND CONSULTING EXPERIENCE

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2017 - current	Consulting activities for structural dynamics and seismic risk prevention of museum installations. Client: Goppion S.p.A.
November 2023	Lecturer of Existing Masonry Buildings and Intervention Criteria, Professional development course for the Board of Engineers, Province of Pavia, Italy.
2020-2022	Participation to the work of the Italian Electrotechnical Committee (CEI) for the development of a guide for the correct design and installation of low-voltage systems and components in environments subject to seismic risk.
April 2021	Organizer of the 40-hour workshop on the Seismic Assessment of Existing Masonry Buildings using 3Muri and NPR9998-2018-2020: from Theory to Practical Applications, by Sismica360 S.r.l. and EconStruct, Leeuwarden, NL.
February - April 2020	Consulting for the development of a simple nonlinear computational tool to assess URM building retrofitted with innovative solutions. Client: Sismica360 S.r.l.
January 2020	Consulting for the interpretation of <i>in-situ</i> tests data on URM buildings in the Netherlands. Client: Arup.
2019 - 2020	Peer reviewer for two retrofit interventions on irregular URM buildings in Wellington (NZ) (volume of approx. 4'000+ m <sup>3</sup> and 12'000+ m <sup>3</sup> ) assessed by means of nonlinear time-history analyses according to NZSEE guidelines. Client: Wellington city council.
November 2019	Lecturer of Local Mechanism Analysis in Masonry Structures According to the 2018 Italian Building Code, Seminar for S.T.A. Data S.r.l. at Digital & BIM Italia fair, Bologna, Italy.
December 2018	Consulting on prioritization of retrofit interventions on a building stock of more than 100 URM structures subjected to induced seismicity. Client: EconStruct B.V.
December 2016	Damage analysis and vulnerability assessment of a school complex (approx. 15'000 m <sup>3</sup> ) in Montalto delle Marche (AP, Italy), subjected to Central Italy 2016 earthquake events. Study conducted in the ReLUIS-project framework supporting the Italian Civil Protection and the Commissioner for Reconstruction.
2014 - 2016	Scientific assistance to various <i>in-situ</i> tests on URM houses in Groningen region (NL) and in Sicily (IT).
August – December 2016	Reconnaissance mission (10 weeks) in the areas hit by the seismic sequence of 2016 in Central Italy covering the most damaged centres. Post-earthquake usability surveys supporting the activities of the Department of Civil Protection on strategic structures.
May 2014	Lecturer of “Seismic performance of churches during recent Italian earthquakes” (“Il comportamento sismico delle chiese durante i recenti terremoti italiani”). Short course for professional engineers, Kore University, Enna, Italy. In Italian.
June 2013	Lecturer of “Damage reconnaissance survey and seismic vulnerability of buildings”. Short course for professional engineers, EUCENTRE, Pavia, Italy. In Italian.
May – June 2012	Reconnaissance mission (4 weeks) in the areas hit by the seismic sequence of 2012 (main events on the 20 <sup>th</sup> and 29 <sup>th</sup> of May 2012, M 5.9 and 5.8, respectively), covering the most damaged centres in the provinces of Modena, Ferrara and Bologna and damage survey of masonry and historical buildings. Post-earthquake usability surveys supporting the activities of the Department of Civil Protection.
April 2009	Mission supporting the Department of Civil Protection for post-earthquake usability surveys: starting from the 7 <sup>th</sup> of April 2009, survey teams working on the assessment of strategic structures (including

the S. Salvatore hospital), public structures (*e.g.* schools) and structures hosting relevant production activities.

August 2006 – October 2006 Civil engineering internship: Collaboration with the Design department (enlargement of Tenaris-Campana plant oil pipes and field engineer at Caracoles earth dam construction).  
TECHINT Engineering and Construction S.A., Buenos Aires, (AR).

## LANGUAGES

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Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C1
Spanish	C1	C1	B2	B2	A2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

## PARTICIPATION TO CONFERENCES

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### Chairman

2018 Session “Retrofitting and Strengthening” of “10<sup>th</sup> Australasian Masonry Conference”. February 11<sup>th</sup> – 14<sup>th</sup> 2018, Sydney, Australia.

### Invited speaker

2018 The Masonry Society 2017 Annual Meeting. Presentation: “Out-of-Plane Dynamic Collapse Tests of URM Walls” in the special session “TMS Research Masonry Giants, Session in honour of Professor Nigel Priestley”. November 3<sup>rd</sup> – 7<sup>th</sup>, La Jolla, San Diego, California, USA.

### Speaker

2023 9<sup>th</sup> COMPDYN - International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering.  
June 12<sup>th</sup> -14<sup>th</sup>, Athens, Greece.

2022 17<sup>th</sup> World Conference on Seismic Isolation.  
September 11<sup>th</sup> – 15<sup>th</sup>, Tourin, Italy.

2022 19<sup>th</sup> ANIDIS – Associazione Nazionale di Ingegneria Sismica.  
September 11<sup>th</sup> – 15<sup>th</sup>, Tourin, Italy.

2021 16<sup>th</sup> WCEE – World Conference on Earthquake Engineering.  
September 9<sup>th</sup> – 13<sup>th</sup>, Sendai, Japan.

2019 18<sup>th</sup> ANIDIS – Associazione Nazionale di Ingegneria Sismica.  
September 15<sup>th</sup> – 19<sup>th</sup>, Ascoli Piceno, Italy.

2019 13<sup>th</sup> North American Masonry Conference – 13NAMC.  
June 16<sup>th</sup> – 19<sup>th</sup>, Salt Lake City, Utah, USA.

2018 10<sup>th</sup> International Masonry Society Conference.  
July 9<sup>th</sup> – 11<sup>th</sup>, Milan, Italy.

2018 16<sup>th</sup> European Conference on Earthquake Engineering.  
June 18<sup>th</sup> – 21<sup>st</sup>, Thessaloniki, Greece.



- 2018 10<sup>th</sup> Australasian Masonry Conference.  
February 11<sup>th</sup> – 14<sup>th</sup>, Sydney, Australia.
- 2017 IF CRASC 17 – 4<sup>th</sup> Congress on Forensic Engineering and 6<sup>th</sup> Congress on Collapses, Reliability and Retrofit of Structures.  
September 14<sup>th</sup> – 16<sup>th</sup>, Milan, Italy.
- 2017 13<sup>th</sup> Canadian Masonry Symposium: 13<sup>th</sup> CMS.  
June 4<sup>th</sup> – 7<sup>th</sup>, Halifax, Canada.
- 2017 16<sup>th</sup> WCEE – World Conference on Earthquake Engineering.  
January 9<sup>th</sup> – 13<sup>th</sup>, Santiago, Chile.
- 2016 16<sup>th</sup> International Brick and Block Masonry Conference: IBMAC.  
June 26<sup>th</sup> – 30<sup>th</sup>, Padua, Italy.
- 2015 16<sup>th</sup> ANIDIS – Associazione Nazionale di Ingegneria Sismica.  
September 13<sup>th</sup> – 17<sup>th</sup>, L’Aquila, Italy.
- 2014 9<sup>th</sup> IMC – International Masonry Conference.  
July 7<sup>th</sup> – 9<sup>th</sup>, Guimarães, Portugal.
- 2013 Vienna Congress on Recent Advances in Earthquake Eng. and Structural Dyn.: VEESD2013.  
August 28<sup>th</sup> – 30<sup>th</sup>, Vienna, Austria.
- 2013 15<sup>th</sup> ANIDIS – Associazione Nazionale di Ingegneria Sismica.  
June 30<sup>th</sup> – July 4<sup>th</sup>, Padua, Italy.
- 2012 15<sup>th</sup> WCEE – World Conference on Earthquake Engineering.  
September 24<sup>th</sup> – 28<sup>th</sup>, Lisbon, Portugal.
- 2011 14<sup>th</sup> ANIDIS – Associazione Nazionale di Ingegneria Sismica.  
September 18<sup>th</sup> – 22<sup>nd</sup>, Bari, Italy.

## PUBLICATIONS

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Orcid ID: 0000-0002-0223-0139

Scopus indices: Documents by author - 59; Total citations - 1049 by 622 documents; *h*-index - 20.

*\*Corresponding author*

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