

**EUROPEAN
CURRICULUM VITAE
FORMAT**



PERSONAL INFORMATION

Name

GIULIA MISSERI

Address

29, VIA DELLO STECCUTO 50141 FIRENZE

Telephone

+39 333 13 70 684

Fax

E-mail

giulia.misseri@unifi.it

Nationality

ITALIAN

Date of birth

25 DECEMBER 1985

WORK EXPERIENCE

• 15/10/2018 –

Research grant "Analytical and numerical modelling of fibre reinforced composites compatible with earthen-base structures"

• Name and address of employer

Prof. Ugo Tonietti, Department of Architecture – Materials and Structures Division, University of Florence – Florence, IT

• Type of business or sector

University

• Main activities and responsibilities

Management and coordination to the drafting of technical reports within international research agreements. Scientific paper editing, analytical routine coding, FE modelling of FRCM materials and masonry structures; support to teaching activities with specific lectures within the courses of "Structural mechanics", "Strength of materials" and "Statics and stability of masonry structures"

• 01/02/2017 – 31/01/2018

Research grant "Structural modelling strategies for historical masonries exposed to seismic risk"

• Name and address of employer

Prof. Mario De Stefano, Department of Architecture – Materials and Structures Division, University of Florence – Florence, IT

• Type of business or sector

University

• Main activities and responsibilities

Management and coordination to the drafting of technical reports within National research projects (PRIN2015). Scientific paper editing, FE modelling of FRCM materials and masonry structures

• 28/02/2016 – 31/05/2016

Visiting researcher

• Name and address of employer

Prof. Mathew Justin DeJong, Department of Engineering – Division D, University of Cambridge - Cambridge, UK

• Type of business or sector

University

• Main activities and responsibilities

DEM for the modelling of the dynamic response of pointed arches subjected to quasi-static and acceleration inputs

• 01/03/2013 –30/11/2013

• Name and address of employer

• Type of business or sector

• Main activities and responsibilities

Research grant "Developing and testing a Web ontological application for the collection of information on cultural heritage resources"

Media Integration and Communication Center (MICC) - University of Florence - Florence, IT

University

Domain Expert for the definition of the intentional model of the ontology scheme

EDUCATION AND TRAINING

• 12/2016-12/2016

• Name and type of organisation providing education and training

• Principal subjects/occupational skills covered

PhD Course in Architecture - curriculum "Structures and conservation of architecture and Cultural Heritage" XIX cycle

Department of Architecture – Materials and Structures Division, University of Florence – Florence, IT

Partial Differential Equations of Mathematical Physics, Theoretical and operational issues of Finite Elements Method, Variational approach to fracture and other inelastic phenomena, Mechanics of porous media, Mechanics of heterogeneous media. Statics of masonry structures.

• Level in international classification

Doctor of Philosophy – Doctor Europeus – Full marks with honours

SSD ICAR/08

"Dynamics of pointed arches under rigid body assumption. Numerical and experimental evaluations"

• 09/2004 – 07/2012

• Name and type of organisation providing education and training

• Principal subjects/occupational skills covered

• Level in national classification (if appropriate)

Master in Architecture

University of Florence – Department of Architecture

Via della Mattonaia 14, 50121 Firenze (Italy)

Architectural design, Urban design, Structural Design, Conservation of Cultural Heritage

Master degree - Full marks with honours

"A proposal for the recovery and implementation of safety of the monumental complex "Le Gualchiere di Remole" (XIV sec)"

TEACHING ACTIVITIES

2013-

Guest lecturer at the undergraduate courses in Structural mechanics and Strength of Materials

Guest lecturer at the master course of Restoration and Structural rehabilitation

Guest lecturer at the master seminar Masonry and Earthen Architectures. Structural safety, conservation, design and innovation

Guest lecturer at the master seminar Earthquake-resistant structures and architectures

• Mentoring as co-tutor of master degree thesis

- C.N. Palazzi; S. Soldaini (2013). "Conservation and restoration of historical buildings damaged by the earthquake. Structural investigations and hypothesis of intervention in Casentino (l'Aquila)". (Master Thesis in Italian) Department of Architecture, University of Florence.

- M.S. Simone (2014). "S. Eusanio Martire and its apses system. An investigation for the reduction of seismic vulnerability of a testimony of the constructive Benedictine culture". (Master Thesis in Italian) Department of Architecture, University of Florence.

- S.Bontà (2015). "Stone-paved streets of Florence city centre. Design for restoration integrated with sustainable urban mobility". (Master Thesis in Italian) Department of Architecture, University of Florence.

- M. Pellicciari; E.Renieri (2015). "Benedictine Basilicas in Abruzzo. Historic, technological and constructive survey for the seismic assessment and the case study of S. Liberatore a Majella" (Master Thesis in Italian) Department of Architecture, University of Florence.

-Ficeli M., FEM modelling of FRM strengthening systems. 2017

PUBLICATIONS ON SCOPUS INDEXED JOURNALS

- ▣ Barducci, S., Alecci, V., De Stefano, M., Misseri, G., Rovero, L. & Stipo, G., (2019). Experimental and analytical investigations on the bond behavior of Basalt-FRCM systems. *Journal of Composites for Construction*, 10.1061/(ASCE)CC.1943-5614.0000985
- ▣ Misseri, G., Rovero, L., Stipo, G., Barducci, S., Alecci, V., & De Stefano, M. (2019). Experimental and analytical investigations on sustainable and innovative strengthening systems for masonry arches. *Composite Structures*, 210, 526-537.
- Boostani, A., Fratini, F., Misseri, G., Rovero, L., Tonietti, U., (2018) A masterpiece of early Islamic architecture: The Noh-Gonbad Mosque in Balkh, Afghanistan. *Journal of Cultural Heritage*, <https://doi.org/10.1016/j.culher.2018.02.001>
- ▣ Misseri, G., DeJong, M. J., & Rovero, L. (2018). Experimental and numerical investigation of the collapse of pointed masonry arches under quasi-static horizontal loading. *Engineering Structures*, 173, 180-190.
- ▣ Galassi, S., Misseri, G., Rovero, L., & Tempesta, G. (2018). Failure modes prediction of masonry voussoir arches on moving supports. *Engineering Structures*, 173, 706-717.
- ▣ Misseri, G., & Rovero, L. (2017). Parametric investigation on the dynamic behaviour of masonry pointed arches. *Archive of Applied Mechanics*, 87 (3), 385-404.
- ▣ Jorquera, N., Misseri, G., Palazzi, N.C., Rovero, L. & Tonietti, U. (2017) Structural characterization and seismic performance of San Francisco church, the most ancient monument in Santiago, Chile. *The International Journal of Architectural Heritage*. <http://dx.doi.org/10.1080/15583058.2017.1315620>
- ▣ Galassi, S., Misseri, G., Rovero, L., & Tempesta, G. (2017). Equilibrium analysis of masonry domes. on the analytical interpretation of the Eddy-Lévy graphical method. *International Journal of Architectural Heritage*, 11(8), 1195-1211.
- ▣ Bove, A., Misseri, G., Rovero, L., & Tonietti, U. (2016) Experimental and numerical analyses on the antiseismic effectiveness of fibre textile for earthen buildings. *J. Mater. Environ. Sci.* 7 (10), 3548-3557
- ▣ Feo, L., Luciano, R., Misseri, G., & Rovero, L. (2016). Irregular stone masonries: Analysis and strengthening with glass fibre reinforced composites. *Composites Part B: Engineering*, 92, 84-93.
- ▣ Alecci, V., Misseri, G., Rovero, L., Stipo, G., De Stefano, M., Feo, L. & Luciano, R. (2016). Experimental investigation on masonry arches strengthened with PBO-FRCM composite. *Composites Part B: Engineering*, 100, 228-239

• CONFERENCE PROCEEDINGS AND OTHER PUBLICATIONS

- ▣ Misseri, G., Stipo, G., Galassi, S., Rovero, L. (2019) Bond behaviour and reinforcement of masonry arches with PBO and carbon based TRM systems: testing and modelling. Accepted to XXIV Congresso Aimeta (Associazione Italiana Meccanica Teorica e Applicata) – Roma, 15-19 Settembre
- ▣ Galassi, S., Misseri, G., Rovero, L., Tempesta, G. (2019) Analysis of masonry pointed arches on moving supports: a numerical predictive model and experimental evaluations. Accepted to XXIV Congresso Aimeta (Associazione Italiana Meccanica Teorica e Applicata) – Roma, 15-19 Settembre
- ▣ Misseri, G., Stipo, G., Galassi, S., Rovero, L. (2019) Experimental investigation on the bond behaviour of basalt TRM systems. Influence of textile configuration and multi-layer application. Accepted to 6th MECHANICS OF MASONRY STRUCTURES strengthened with composite materials: Modeling, testing, design, monitoring, control (MuRiCo) – Bologna, 26-29 Giugno 2019
- ▣ Alecci V., Misseri G., Rovero L., Stipo G., De Stefano M., (2018) FE investigation of bond behaviour of PBO-FRCM composite for the strengthening of masonry structures. Accepted to 13th World Congress in Computational Mechanics, 22nd-27th July, New York
- ▣ Jorquera, N., Misseri, G., Palazzi, C., Rovero, L., Tonietti, U. (2018) 400 years of San Francisco church in Santiago, Chile: a multi-disciplinary approach to reveal its seismic performance. Accepted to SAHC18 - 11th International Conference on Structural Analysis of Historical Constructions
- ▣ Misseri, G., Rovero L. (2017) Response of pointed arches subjected to horizontal loading. Experimental and numerical evaluations. Accepted for “XXIV Congresso - Associazione Italiana di Meccanica Teorica e Applicata – Salerno
- ▣ Alecci, V., De Stefano, M., Luciano, R., Misseri, G., Rovero, L. (2017) Natural fibre textile composites for earthen buildings. An experimental campaign. Accepted for the 25th International Conference on Composites / Nano Engineering (ICCE-25) – Rome
- ▣ Alecci, V., Barducci, S., Bove, A., De Stefano, M., Luciano, R., Misseri, G. & Rovero, L. (2017) Bond behaviour of PBO-FRCM composite for the strengthening of masonry structures. Experimental campaign and numerical investigation. Accepted for the 3rd International Conference on Mechanics of Composites (MECHCOMP3) – Bologna

- ▣ Alecci, V., De Stefano, M., Luciano, R., Misseri, G., Rovero, L. & Stipo, G. (2017) Experimental investigations on sustainable and innovative strengthening systems for masonry arches. Accepted for the 3rd International Conference on Mechanics of Composites (MECHCOMP3) – Bologna
- ▣ Boostani, A., Misseri, G., Rovero, L. & Tonietti, U. (2017) A masterpiece of early Muslim Architecture: the Noh-Gunbad Mosque, Balkh (Afghanistan). Safety assessment and strengthening interventions. 1st Symposium on SEISMIC REHABILITATION of HERITAGE STRUCTURES, Teheran
- ▣ Giovinco, G., Luciano R., Misseri G., Rovero L. (2015). FE analysis of mechanical behaviour of masonry walls with irregular texture. "XXII Congresso - Associazione Italiana di Meccanica Teorica e Applicata - Genova
- ▣ Fratini F., Misseri G., Stipo G., Rovero L., Tonietti U. (2015). Reconstructions plans for historical built heritage damaged by the earthquake: methodology and challenges through the l'Aquila 2009 experience. "Les Sixièmes Rencontres Internationales sur le Patrimoine Méditerranéen - RIPAM6" – Tunis
- ▣ A. Bove; G. Misseri; L. Rovero; U. Tonietti (2015). Experimental and numerical analyses on the antiseismic effectiveness of fibre textile for earthen buildings. "The International Congress on Earth Architecture in North Africa" - Marrakesh, 06-09 October 2015
- ▣ De Stefano M., Focacci F., Mechelli J., Misseri G., Palazzi N.C., Rovero L., Soldaini S., Tonietti U. (2014). Problematiche strutturali dei centri storici esposti al rischio sismico. In: G.A. Centauro (editor). Lineamenti per il restauro post-sismico del costruito storico in Abruzzo. Piano di Ricostruzione di Casentino (AQ). Roma: DEI-Tipografia del Genio Civile, ISBN:9788849605112. (in Italian)
- ▣ Abdessemed-Foufa a., Misseri G., Rovero L. (2013) Effects of the Boumerdes earthquake of May 21st, 2003 on the great mosque of Dellys (Algeria). Adam C., Heuer R., Lenhardt W. & Schranz C. (eds.) "Wien Congress on Recent Advances in Earthquake Engineering and Structural Dynamics - VEESD 2013 - Wien. Paper No. 108. ISBN: 978-3-902749-04-8

REVIEWER TO SCOPUS JOURNALS

International Journal of Architectural Heritage
Key Engineering Materials

INTERNATIONAL AND NATIONAL SOCIETIES AFFILIATION

05/2018

ICOMOS – International Council on Monuments and Sites), ISCEAH – International Scientific Committee of Earthen Architectural Heritage
Membership Nr. 121

09/2017

Affiliation ORDINE DEGLI ARCHITETTI PIANIFICATORI PAESAGGISTI CONSERVATORI DI FIRENZE - Settore A Sezione A Matr. 8750

04/2015

Qualification to the profession of Architect

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

Italian

OTHER LANGUAGES

English

• Language Certification Level

C2 (CPE – CAMBRIDGE ENGLISH LANGUAGE ASSESSMENT – 07/2005)

TECHNICAL SKILLS AND COMPETENCES

Good knowledge of structure modelling SW (SAP2000, TNO Diana, Strand7, FTool, 3Muri, CDM), good knowledge of Wolfram Mathematica. Very good knowledge of Mac OS and MS Windows, individual productivity SW, Adobe applications (Photoshop, Illustrator, In-design, Bridge). Very good knowledge of CAD SW (AutoCAD, ArchiCAD). Good knowledge of modelling and rendering SW (Cinema 4D, 3Dstudiomax, Google Sketch up).

OTHER SKILLS AND COMPETENCES

Ability to cooperate with others, good team spirit developed during different experiences: professional studio work, political activity in scholar environment and as volunteer. Ability to adapt to multicultural environments, gained during a studying period abroad and during political and volunteering activities in Italy. Good ability to organize workflow, also very urgent.

PERSONAL HOBBIES AND INTERESTS

I like to go trekking and swimming, and I am fascinated by 20s Russian art, architecture, literature and handicraft.