

# MICHELINA MONACO

## CURRICULUM VITAE

### GENERAL INFORMATION

Address	DING- Department of Engineering – University of Sannio Piazza Roma, 21 – 82100 Benevento (BN)
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Nationality	Italian
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Languages	Italian, English, French



### ACTUAL POSITION

Associate professor, s.s.d. ICAR/08-Structural and Continuum Mechanics, University of Sannio since 02/11/2022.

### EDUCATION

1988	Master of Science (5 year Degree) cum laude in Civil Engineering - University of Pisa.
1992-1995	Ph.D in Structural Engineering, VII Cycle, University of Naples "Federico II". Final Dissertation on "Constitutive models for masonry. An approach with internal variables"
1995	Fellowship C. R. as Research Assistant on "Intervention methodologies on Cultural Heritage" at IRIS-CNR Bari
1997-1998	Postdoctorate student with scholarship in Structural Engineering at University of Naples "Federico II"

### TEACHING ACTIVITIES IN ITALY

1998-2002	Lecturer in <i>Experimental mechanics</i> at Faculty of Architecture, Second University of Naples
2002-2020	Assistant professor teaching <i>Statics, Structural Mechanics, Experimental Mechanics, Structural Engineering, Laboratory Assessment of Materials and Structures, Scientific Basis of Constructions, Structure Design (in English), Assessment of Structures and Materials</i> at Department of Architecture and Industrial Design, University of Campania "Luigi Vanvitelli".
2020-today	Assistant professor teaching <i>Rational Mechanics, Structural Mechanics</i> at Department of Engineering, University of Sannio
2002-today	Lecturer in PhD Courses. Teacher in professional specialization course for Architects and Engineers. Supervisor for Master's Degree and PhD theses.

### TEACHING ACTIVITIES ABROAD

2007	<i>Safeguard of Cultural Heritage</i> , Escuela Politecnica Superior, Universidad San Pablo CEU, Madrid
2008	<i>On the assessment of masonry arch bridges</i> , University of Minho, Guimarães, Portugal
2009	<i>Assessment of masonry arch bridges: from empirical formulae to finite element methods</i> , Universitat Politecnica de Catalunya, Barcelona, Spain
2017	<i>Masonry buildings: key aspects for the seismic assessment</i> , NTUA - National Technical University of Athens, Greece
2019	<i>Seismic assessment of masonry buildings. Experiences from recent Italian earthquakes</i> , Aristotle University of Thessaloniki, Thessaloniki, Greece

### ACADEMIC ACTIVITY

2003-2009	Member of the Teaching Board of the Doctorate Course in "Seismic strengthening and retrofit of structures".
2008-2009	Erasmus Commission Member– R.D. 110/2008 and 84/2009
2008-2018	Member of the International Relations Committee - Department of Architecture and Industrial Design DADI - University of Campania "Luigi Vanvitelli"
2008	Member of the Selection Board for an Assistant Professor in Structural Mechanics at Faculty of Architecture – Sapienza University of Rome (R. D. 1207/2008)
2009-2014	Delegate of Assistant Professors in the Faculty Board – Faculty of Architecture SUN
2009-	Member of the Teaching Board of the Doctorate Course in "Representation, safety of structures and environment" Second University of Naples since 2009

2013	Referee for the FIRB – Future in Research Program by MIUR – Italian Ministry for University and Education
2015-2016	Head of the evaluation panel for the Small Grant Scheme of Polish-Norwegian Research Programme 2103 by NCBR Poland - National Center for Research and Development
2020	Referee <i>ex ante</i> for Research Projects in the framework FISR-COVID Program by MIUR – Italian Ministry for University and Education
2021-today	Member of the Teaching Board of the Doctorate Course in “ <i>Information Technologies for Engineering</i> ”, University of Sannio in Benevento

#### EDITORIAL ACTIVITY

2002-oggi	Reviewer for the international journals: <i>International Journal of Architectural Heritage, Journal of Computing in Civil Engineering – ASCE, International Scholarly Research Notices, Journal of Earthquake Engineering, Journal of Vibration and Control, Engineering Structures, Energies, CivilEng, Geomatics, Natural Hazards and Risk, Materials, Buildings, European Physical Journal Plus, Applied Sciences, Crystals.</i>
2017	Sacco E., Monaco M. (eds.) (2017) <i>Mechanics of Masonry Construction</i> , Edizioni Università di Cassino, ISBN 978-88-8317-155-0
2019	Sacco, E., Monaco, M. (Eds) (2019). <i>An Italian Contribution to the Analysis of Masonry Structures</i> , Journal of Masonry Research and Innovation, 4, 1/2
2019	Trovalusci, P., Monaco, M., Reccia, E., Portioli, F. (Eds) (2020) <i>Fracture and Damage Detection in Masonry Structures</i> , International Journal of Fracture and Structural Integrity, 14, 51

#### SCIENTIFIC ACTIVITY

1995-2004	Fellow BMS - British Masonry Society
1995 - today	Fellow A.I.M.E.T.A.
1995	Invited at RILEM Committee 127MS Padua
1998	Fellow Italian Group Computational Mechanics - GIMC
1999	Fellow Italian Association for restoration of Built Heritage (ARCo)
2017-today	Fellow SISCO – Italian Society of Structural Mechanics
2021	Fellow Association Francaise de Génie Civil
	Research Programs joined as Research Team Member:
	<ul style="list-style-type: none"> <li>• PRIN 2006 (Italian Ministry of University and Research) <i>Smooth diagnosis and intervention techniques for the seismic rehabilitation and enhancement of timber structures in historic buildings.</i></li> <li>• CNR (National Research Council) research program <i>Seismic protection of art objects.</i></li> <li>• CNR (National Research Council) research program <i>Intervention techniques of structural engineering for restoration and safeguard of archaeological sites</i></li> <li>• CNR-GNDT (National Research Council - National Group on Earthquake Protection) research program on <i>Structural conception, building methodologies and intervention techniques for restoration and conservation of monumental architecture of XIX century.</i></li> <li>• CNR (National Research Council) research program <i>Vulnerability and intervention techniques for restoration and conservation of archaeological sites</i></li> <li>• MURST (Italian Ministry of University and Scientific and Technological Research) research program on <i>Science and technique of monumental masonry structures of XIX century in Southern Italy.</i></li> <li>• MURST (Italian Ministry of University and Scientific and Technological Research) research program on <i>Methodological strategies for identification, design and realization of traditional techniques for the conservation of historic masonry buildings.</i></li> <li>• Research contract with Cultural Heritage Ministry on <i>Building materials and constructive technologies in Campania with particular reference to volcanic materials.</i></li> <li>• Research contract with Cultural Heritage Ministry on <i>Strategic criteria for interventions on the Coliseum.</i></li> <li>• MIUR (Italian Ministry of University and Research) research program on <i>Diagnosis and intervention techniques on timber structure for seismic retrofitting of historical buildings</i></li> <li>• Research Project “<i>CADS - Creazione di un Ambiente Domestico Sicuro</i>”, ARS01_00920, funded by PON “<i>RICERCA E INNOVAZIONE</i>” 2014 - 2020 and FSC, with D.D. July 13, 2017 n. 1735, research unit at DING- Dipartimento di Ingegneria Università degli Studi del Sannio</li> <li>• Research Project ReLUIS 2022/2024, WP16 <i>Geotechnics- Contribute to codes and Standards</i>, research unit at DING- Dipartimento di Ingegneria Università degli Studi del Sannio</li> <li>• Research Project ReLUIS 2022/2024, WP5 <i>Fast execution interventions, integrated and low impact</i>, research unit at DING- Dipartimento di Ingegneria Università degli Studi del Sannio</li> </ul>
1998-today	

Solid Mechanics

- Elastoplastic constitutive models with internal variables
- Strength of quasi-fragile materials

Mechanics of Materials and Fracture

- Damage Mechanics
- Homogenization Techniques

Dynamics

- Nonlinear dynamics
- Dynamics of rigid objects

Assessment and safeguard of Cultural Heritage

- Numerical techniques for the analysis of masonry structures
- Constitutive models for masonry
- Structural modelling of masonry arch and vaults
- Out of plane behaviour of masonry walls
- Behaviour of timber structures
- Vulnerability of museum contents and archaeological areas

Experimental Mechanics

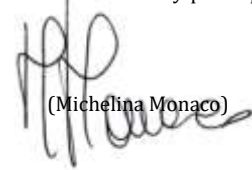
- Mechanical characterization of materials
- Development of test methodologies for traditional materials
- Laboratory and in-situ tests for masonry structures
- Identification of masonry structures
- Dynamics of rigid objects

Historical development of structural mechanics

- Evolution of structural modelling
- Structural analysis of traditional building technologies

Research activity is testified by more than 100 papers, several of them published on international journals, scientific monographs and proceedings of national and international conferences as well as by participation and/or organization of international conferences and scientific meetings

Vallata, June 8 2022



(Micheline Monaco)