

| PERSONAL<br>INFORMATION   |   | Engineering and Architecture, o II, via Claudio 21, 80125, Naples, Italy  958   Nationality Italian   |
|---|---|---|
| CURRENT POSITION  | Full Professor of Structural Me   | echanics at University of Naples "Federico II"  |
| RESEARCH TOPICS / EXPERIENCES   | <ul> <li>Numerical analysis of RC bear</li> <li>Computational problems in no</li> <li>Ultimate limit state analysis of</li> <li>Analysis of open cell biphasic</li> <li>Fiber-free nonlinear analysis of</li> <li>Thermo-mechanical contact present analysis of isotropic and trans</li> <li>Phenomenological modelling of</li> </ul> | posite plates and shells sonry structures analysis of interface problems ms retrofitted with FRP nlinear continuum mechanics reinforced and prestressed concrete sections media of RC structures roblems in half-spaces versely isotropic half-spaces of hysteresis phenomena |
| KEYWORDS  | Solid and Structural Mechanic   |   |
| SCIENTIFIC / TECHNICAL<br>QUALIFICATION<br>(source: please specify i.e.<br>Scopus, Google Scholar,<br>IRIS) | <ul> <li>H-index (if applicable)</li> <li>No. publications (relevant with respect to the "KEYWORDS"):</li> <li>No. citations (if applicable):</li> </ul>  | • 22 (Scopus)<br>• 96 (Scopus)<br>• 1498 (Scopus)   |

## EDUCATION AND TRAINING

| 1989 | Ph.D. in structural mechanics at the University of Naples 'Federico II' discussing the dissertation: <i>Problems in mechanics of structures with convex constraints</i> |
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| 1985 | TOEFL diploma in English (marks 570/700) at the American Study Center in Naples   |
| 1984 | B.S. and M.S. degree in civil engineering (with honours) at the University of Naples 'Federico II'  |
| 1983 | Qualification to the profession of civil and environmental engineer with full marks   |
| 1982 | B.S. and M.S. degree in mechanical engineering (with honours) at the University of Naples 'Federico II'   |
| 1976 | FIRST certificate diploma in English at the British Council in Naples   |
| 1976 | Scientific High School diploma with full marks  |



#### **WORK EXPERIENCE**

| 2021 – CURRENT | President of SISCO - Italian Society of Scienza delle Costruzioni  |
|----------------|--|
| 2021 – CURRENT | Head of C.I.BE.C - Interdepartmental Center of Engineering for Cultural Heritage   |
| 2016 – 2021    | Representative of full professors in civil engineering and architecture within CUN - Consiglio Universitario Nazionale   |
| 2001 – CURRENT | Full professor of structural mechanics University of Naples 'Federico II'  |
| 1998 – 2001    | Associate professor of structural mechanics University of Naples 'Federico II'   |
| 1997           | two-months NATO-CNR grant for research activity at the Imperial College in London (UK). Department of aeronautics. Supervisor: prof. M. Crisfield. Topic: development and implementation of finite element models for large strain elastoplasticity – NATO-CNR |
| 1990 – 1998    | Researcher in structural mechanics University of Naples 'Federico II'  |

### MAIN ROLES AND RESPONSIBILITIES

| 2021 – CURRENT | President of SISCO - Italian Society of Scienza delle Costruzioni  |  |
|----------------|--|--|
| 2021 – CURRENT | <ul> <li>Head of C.I.BE.C - Interdepartmental Center of Engineering for Cultural<br/>Heritage</li> </ul>                                       |  |
| 2016 – 2021    | <ul> <li>Representative of full professors in civil engineering and architecture within<br/>CUN - Consiglio Universitario Nazionale</li> </ul> |  |

# SERVICE TO NATIONAL AND INTERNATIONAL

COMMUNITY (i.e. editor of national or international journals, Chair-person of national or international committees, member of ISC or Advisory Boards, other relevant positions in national or international bodies, etc.)

| 2021 – CURRENT | President of SISCO - Italian Society of Scienza delle Costruzioni  |  |
|----------------|--|--|
| 2021 – CURRENT | <ul> <li>Head of C.I.BE.C - Interdepartmental Center of Engineering for Cultural<br/>Heritage</li> </ul>                                       |  |
| 2016 – 2021    | <ul> <li>Representative of full professors in civil engineering and architecture within<br/>CUN - Consiglio Universitario Nazionale</li> </ul> |  |



### TEACHING EXPERIENCE

| 2001 – present | <ul> <li>Courses of "Structural Mechanics", "Computational Mechanics" and<br/>"Nonlinear Structural Analysis".</li> </ul> |
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| 1994 - 1998    | Courses of "Mechanics of Solids", "Computational Mechanics".  |
| 1989 - 1998    | Teaching assistant in courses of "Structural Mechanics".  |

#### MAIN RESEARCH EXPERIENCE

 Research project (RP) titled 'Advanced mechanical modeling of new 2016 materials and structures for the solution of 2020 Horizon challenges" funded by MIUR. Value: € 47.000. Research project (RP) titled 'Models and algorithms for nonlinear structural 2012 analysis and validation of performance-based design rules" funded by MIUR. Value: € 45.000. Research project (RP) titled 'Numerical algorithms for nonlinear modelling of 2007 reinforced concrete structures" funded by MIUR. Value: € 49.000. Research project (RP) titled 'Setting of guidelines for the strengthening of 2005 reinforced concrete structures by means of composite materials, funded by the Regione Campania (regional institution). Value: € 15.000. RP titled 'Development of numerical algorithms and constitutive models for 2004 the analysis of fiber-reinforced composite laminates', jointly funded by the 'Italian Ministry for Education, University and Research' (MIUR) and the Spanish Ministry for Education and Science. Value: € 11.000. RP titled 'Numerical Modelling of reinforced-concrete structures retrofitted 2002 with fiber-reinforced polymer materials' funded by MIUR. Value: € 31.500. RP titled 'Modelling and analysis of adhesively bonded structural joints', 2001 jointly funded by MIUR and the French 'Ministère des Affaires Etrangères' (France Foreign Office) within the framework of the program 'Galileo'. Value: € 8.000. RP titled 'Retrofitting of the mechanical behaviour of monumental 1998 constructions', funded by C.N.R. (National Research Council). Value: £ 5.000.000 RP titled 'Theoretical-experimental study on the mechanical behaviour of 1997 monumental constructions', funded by C.N.R. Value: £ 5.000.000. RP titled 'Theoretical-experimental study on the mechanical behaviour of 1996 monumental constructions', funded by C.N.R. Value: £ 10.000.000. RP titled 'Analysis of masonry structural models', funded by C.N.R. Value: £ 1995 15.000.000. RP titled 'Analysis of masonry structural models', funded by C.N.R. Value: £ 1994 20.000.000. RP titled 'Constitutive equations in elastoplasticity with internal variables' 1994 funded by MIUR-60%. Value £ 2.200.000 RP titled 'Analysis of structural models with damage', funded by C.N.R. 1993 Value: £ 5.000.000. RP titled 'Dynamic behaviour of masonry structures' funded by MIUR-60%. 1992 Value £ 2.400.000



### OTHER RELEVANT EXPERIENCES

| - Coordinator of the PhD programme in Structural, Geotechnical Engineering |
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| and Seismic Risk at the University of Naples Federico II                   |

#### HONOURS, AWARDS, MEMBERSHIPS, OTHER QUALIFICATIONS

| <ul> <li>Component of the National University Council (CUN) as representative of<br/>Full Professors in Civil Engineering and Architecture</li> </ul>   |
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| <ul> <li>Coordinator of the PhD programme in Structural, Geotechnical Engineering<br/>and Seismic Risk</li> </ul>   |
| Member of the Italian branch of the Natural Society of Philosophy   |
| <ul> <li>Member of the Excellence National Center "Structural composites for<br/>innovative applications"</li> </ul>  |
| <ul> <li>Member of the Regional Center of Competence "Analysis and monitoring of<br/>Environmental Risk"</li> </ul>   |
| <ul> <li>Member of the Research Task Committee "Instructions for the Design,<br/>Construction and Control of Static Strengthening by means of fiber-<br/>reinforced composites", hosted by C.N.R. (National Research Council).</li> </ul> |
| Past Member of the National Secretary of the scientific area ICAR/08     "Mechanics of Structures"  |
| <ul> <li>Member of the Professor Council of the Ph.D. in Structural Engineering.</li> </ul>   |
| <ul> <li>Member of the Professional Institution of Engineers in Naples (since 1983).</li> </ul>   |

### ADDITIONAL INFORMATION

#### **Publications**

List of the most relevant publications (up to 5)

- Pellecchia, D., Lo Feudo, S., Vaiana, N., Dion, J.-L., Rosati, L. (2021) A
  procedure to model and design elastomeric-based isolation systems for
  the seismic protection of rocking art objects. Computer-Aided Civil and
  Infrastructure Engineering.
- 2) Pellecchia, D., Sessa, S., Vaiana, N., Rosati, L. (2020) Comparative assessment on the rocking response of seismically base-isolated rigid blocks. *Procedia Structural Integrity*.
- 3) Marmo, F., Ruggieri, N., Toraldo, F., Rosati, L. (2019) Historical study and static assessment of an innovative vaulting technique of the 19th century. *International Journal of Architectural Heritage*.
- 4) Vaiana, N., Sessa, S., Marmo, F., Rosati, L. (2019) An accurate and computationally efficient uniaxial phenomenological model for steel and fiber reinforced elastomeric bearings. *Composite Structures*.
- 5) Marmo, F., Masi, D., Mase, D., Rosati, L. (2019) Thrust network analysis of masonry vaults. *International Journal of Masonry Research and Innovation*.



According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Signature

Leverous Rosalt