CURRICULUM VITAE



PERSONAL INFORMATION

NameSARA FARESDate and place of birth05 October 1991, Albano Laziale (RM), ItalyNationalityItalianE-mailsara.fares@uniroma3.itCertified e-mails.fares@pec.ording.roma.it

RESEARCH INTERESTS AND EXPERTISE

Experimental research [2-10] in structural rehabilitation and structural safety assessment [11]; seismic assessment and retrofit of masonry structures with externally bonded mortar-based composites (FRCM/TRM [3-6,9-10]); laboratory testing of traditional and innovative materials [2-10]; digital image correlation for the measurement of displacements and strains in laboratory tests [2,8]; analytical modelling of masonry constructions reinforced with mortar-based composites [7]; development of rules for the design of masonry structures retrofitted with FRCM/TRM [11].

WORK EXPERIENCE

Jul. 2023 – Sept. 2023	Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy) Research and study activity with the subject: Implementation of a procedure for the automatic
	restitution, by means of photogrammetric survey, of an input model for calculation software to be used in seismic vulnerability analyses.
Mar. 2022	Laboratory Tests and Research on Structures and Materials (PRiSMa) – Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy) Collaboration in experimental activities through mechanical characterization tests of FRCM and SSRG systems for the extrados reinforcement of masonry vaults.
Feb. 2022 – May 2022	Department of Civil Engineering of University of Minho – Campus de Azurém, 4800-058 Guimarães (Portugal)
	FRCM and CRM systems. Supervisors: Prof. Daniel V. Oliveira.
Mar. 2020 – June 2020	Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy)
	Supplementary teaching assignment in Structural Engineering (Tecnica delle Costruzioni - SSD ICAR/09)
Sept. 2020 – Oct. 2020	Laboratory Tests and Research on Structures and Materials (PRiSMa) – Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy) Collaboration on experimental activities on inorganic matrix composite materials for the purpose of their mechanical characterization through bond to substrate and pull-off tests.
Feb. 2019 – Jul. 2019	Laboratory Tests and Research on Structures and Materials (PRiSMa) – Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy) Mechanical characterization tests on composite materials (FRCM – SRG) for structural reinforcement through the MTS universal machine, sample packaging and data analysis

EDUCATION AND TRAINING

2019 – 2023 Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy)

PhD in Civil Engineering - XXXV Cycle

• Specialization field: Rehabilitation of masonry structures and seismic preservation of the built heritage

• Main activities: scientific research.

Experimental investigations on composite materials with inorganic matrix: packaging of specimens, execution of experimental tests to determine their mechanical properties with regard to tensile behaviour, adhesion to support and durability, post processing of test data and interpretation of experimental results, study of the effectiveness of such systems in the long term.

2016 - 2019 Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy)

Master's Degree in Civil Engineering for the Protection of Territory from Natural Risks (DM 270)

- Specialization field: Rehabilitation of masonry structures and seismic preservation of the built heritage
- Mark: 110/110 cum Laude
- Title of the thesis: "Effects of matrix properties and reinforcement density in the mechanical characterization of composites called Steel Reinforced Grout.", supervisor Prof. G. de Felice
- Main activities: scientific research.

Experimental campaign for the characterization of new composite materials, analysis and interpretation of experimental results.

2011 - 2016 Department of Civil Engineering of Roma Tre University – Via Vito Volterra 62, 00146 Rome (Italy)

Bachelor's Degree in Civil Engineering (DM 270)

- Mark: 95/110
- Title of the thesis: "Vasca volano asservita alla fognatura unitaria di Porta di Roma.", supervisor Prof. C. P. Mancini
- *Main activities: design* Design and verification of a flywheel tank and a side drainage of the Porta di Roma sewer.

PROFESSIONAL QUALIFICATIONS

Nov. 2020 - Present Licence to the professional activity of Civil and Environmental Engineer (2019) and Enrolment in the Board of Engineers of Rome, Section A (Civil and Environmental Engineering), no. 39086 (30 November 2020).

CONFERENCES AND MEETINGS

- Sept. 2022 ANIDIS XIX Conference on Associazione Nazionale Italiana di Ingegneria Sismica, Torino (Italy) – 11-15 September 2022. Oral presentation of the paper: "Experimental investigation of FRCM under shear loading" – Rebecca Fugger, Sara Fares, Pietro Meriggi, Francesca Nerilli, Sonia Marfia, Elio Sacco, Gianmarco de Felice.
- Nov. 2021 MURICO7 7th International Conference on Mechanics Of Masonry Structures Strengthened With Composite Materials, 24-26 November 2021. Participation in the online conference with the paper: "Durability of stainless-steel reinforced grout against salt attack" – Sara Fares, Rebecca Fugger, Stefano De Santis, Gianmarco de Felice.
- Apr. 2021 EM4SS'21 International online workshop on Engineered Materials for Sustainable Structures, 26-28 April 2021. Participation in the online conference with the paper: "Tensile and pull-out behavior of steel reinforced grout connectors" – Sara Fares, Rebecca Fugger, Stefano De Santis, Gianmarco de Felice.

COURSES AND SEMINARS ATTENDED

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[•] Title of the thesis: "Experimental long-term behaviour of FRCM systems.", tutors: Prof. G. de Felice, Prof. S. De Santis

Aug Sept. 2021	International summer school on historic masonry structures (90h). Prof. Maurizio Angelillo,
	Prof. Philippe Block, Prof. Gianmarco de Felice, Prof. Matthew DeJong, Prof. Santiago
	Huerta, Prof. John Ochsendorf and other. Anagni (Italy) – 30 August-10 September 2021.

- May June 2021 Costruzioni esistenti in muratura (48h). Prof. Franco Bontempi, Prof. Patrizia Trovalusci, Prof. Domenico Liberatore, Prof. Daniela Addessi, Prof. Luigi Sorrentino, Dr. Francesco Petrini, Prof. Ivo Caliò, Prof. Maura Imbimbo, Prof. Ernesto Grande and Prof. Maria Laura Santarelli, Department of Structural and Geotechnical Engineering. La Sapienza University of Rome, Rome (Italy) – 24 May-03 June 2021.
 - May 2021 Finite element course (12h). Prof. Daniela Addessi, Department of Structural and Geotechnical Engineering. La Sapienza University of Rome, Rome (Italy) – 3-7 May 2021

PERSONAL SKILLS

LANGUAGE SKILLS

Italian mother tongue

• English reading: good, writing: good, speaking: good

COMPUTER SKILLS

OS Windows
Other SWs AutoCAD, SAP2000, UDEC, MathCad
Programming skills in Matlab, Wolfram Mathematica the following languages

PUBLICATIONS AND WORKS

- 1. Meriggi P., De Santis S., Fares S., de Felice G. (2021). Design of the shear strengthening of masonry walls with fabric reinforced cementitious matrix. Construction and Building Materials, 279, 122452.
- Meriggi P., Fares S., Fugger R., Ricci M. (2021). Direct shear tests on fabric reinforced cementitious matrix composites without substrate. fib Symposium, 2021-November, pp. 241– 248.
- 3. Fares S., Fugger R., De Santis S., de Felice G. (2022). Strength, bond and durability of stainless Steel Reinforced Grout. Construction and Building Materials, 322, 126465.
- 4. Fares S., Fugger R., De Santis S., de Felice G. (2022). Tensile and Pull-Out Behavior of Steel Reinforced Grout Connectors. Key Engineering Materials, 919 KEM, pp. 72–79.
- Fares S., Fugger R., De Santis S., de Felice G. (2022) Saltwater and Alkali Resistance of Steel Reinforced Grout Composites with Stainless Steel. Lecture Notes in Networks and Systems, 482 LNNS, pp. 2183–2191.
- Fugger R., Fares S., Meriggi P., Nerilli F., Marfia S., Sacco E., de Felice G. (2022) Experimental investigation of FRCM under shear loading. Procedia Structural Integrity, 44, pp. 2166–2173.
- 7. De Santis S., Meriggi P., Fares S., de Felice G. (2022) Design relationships for the strengthening of masonry walls with mortar-based composites. World Congress in Computational Mechanics and ECCOMAS Congress.
- Fugger R., Fares S., Meriggi P., Nerilli F., Marfia S., Sacco E., de Felice G. (2022). Testing of fabric reinforced cementitious matrix in shear without substrate. Key Engineering Materials, 916 KEM, pp. 105–111.
- 9. Fares S., Fugger R., De Santis S., de Felice G. (2022). Durability of Stainless-Steel Reinforced Grout against Salt Attack. Key Engineering Materials, 916 KEM, pp. 43–49.
- 10. Meriggi P., Nerilli F., Fares S., Marfia S.,Sacco E., De Felice G. (2023) Shear Mechanisms in Fabric-Reinforced Cementitious Matrix Overlays: Experimental and Numerical Investigation. Journal of Composites for Construction, 27(4), 04023032.

I authorize the use of my personal data (DL 196/2003: "Code concerning the protection of personal data"). Aware that false statements are punishable under the Criminal Code and the special laws on the subject, I declare that the present document constitutes declaration in lieu of certification and affidavit (DPR n.445/2000 art. 19,46,47).

Rome

Sara Fares