BIOGRAPHICAL SKETCH

NAME: **Riccardo ANGIULI**

POSITION TITLE: Civil Engineering Area Manager - CETMA

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
University of Salento (Italy)	B.S	07/2007	Material engineering
University of Salento (Italy)	Ph.D.	07/2012	Material and structures engineering

Personal Statement

My work and professional experience has led me to explore research sectors related to traditional or innovative building materials, non-destructive diagnostic techniques and composite materials. Over the years I have studied the performance characteristics and environmental sustainability of the most common materials used in the construction sector such as concrete, mortar, wood, natural stone and metal. The activities carried out as a researcher have allowed me to study and develop smart, ultra-performing and environmentally sustainable innovative materials. One of the topics that most fascinated me is the recycling of materials otherwise destined for landfill within cement mixtures and concretes with excellent mechanical and thermal properties. Starting from these experiences, research activities have increasingly focused on the environmental sustainability of building materials thanks to collaborations with other RTOs, companies and universities involved in the same topic.
Among the non-destructive techniques, however, over the years I have become an expert in infrared thermography; this technique makes it possible to analyze materials and production processes by identifying anomalies and defects in real time and is useful for evaluating the thermal properties of materials or building components.
I have involved in dozens of funded research projects, both at national and European level, I have written dozens of project proposals that have been funded and for which I was responsible for CETMA activity.

Here my recent works:

1. Pappadà S., Salomi A., Passaro A., Angiuli, R., Caruso A., Montanaro J., “Finite element simulation to support continuous induction welding of PPS-Carbon Composite” Proceeding of 34th Sampe. Europe Conference - Paris, France March 11-12, 2013.
2. Angiuli, R., Corvaglia P., Largo A., Cardone D., “Design and development of a SMA-based device for the protection of masonry arches and vaults: investigation on the use of different types of SMAs” Proceedings of the International Conference on Shape Memory and Superelastic Technologies pp. 378-379 - Prague, Czech Republic, May 20-24, 2013.
3. Pappadà S., Salomi A., Angiuli, R., Passaro A., Montanaro J., Maffezzoli A., Caruso A., “Saldatura per induzione di compositi a matrice termoplastica rinforzati con fibre di carbonio” Proceeding of 3° Convegno Nazionale Assocompositi - Torino, Italy May 22-24, 2013.
4. Lignola G.P., Angiuli, R., Prota A., Aiello M.A., “Confinement of masonry: Analytical Modeling” Springer Netherlands - Materials and Structures June 2014 DOI 10.1617/s11527-014-0323-6 Online ISSN 1871-6873.
5. Micelli F., Angiuli, R., Corvaglia P., Aiello M.A., “Passive and SMA-activated confinement of circular masonry columns with basalt and glass fibers composites” Composites Part B: Engineering Volume 67, December 2014, Pages 348–362

6. Tinti A., Tarzia A., Passaro A., Angiuli, R. “Thermographic analysis of polyurethane foams integrated with phase change materials designed for dynamic thermal insulation in refrigerated transport” Applied Thermal Engineering Volume 70, Issue 1, 5 September 2014, Pages 201–210
7. Angiuli, R., Corvaglia P., Largo A., Coricciati A. “Defect identification and acceptance of FRP and FRCM masonry reinforcement by IRT survey” - Key Engineering Materials 09/2014; 624:80-87. DOI: 10.4028.
8. Micelli F., Aiello M.A., Di Ludovico M., Prota A., Manfredi G., Angiuli, R. “Experimental tests on full scale FRP/FRCM confined masonry columns subjected to axial load” Proceeding of International Conference Structural Faults & Repair 2014 - 9th – 10th July 2014 Edinburgh, Scotland ISBN No: 0-947664-75-10.
9. Tinti A., Rizzo M., Angiuli R., Raganato U., Giodice G., Spina U., Deodati A. “Study and development of a carbon fiber heatsink for LED road lamps” Compositi Magazine (Marzo 2017)
10. Cardone. D., Angiuli. R, Gesualdi G., “Development, testing and implementation of a SMA-based device prototype for historical constructions – Proceeding of 11th International Conference on Structural Analysis of Historical Constructions – 11-13 Settembre 2018 Cusco - Perù
11. Cardone D., Angiuli R., Gesualdi G. “Application of Shape Memory Alloys in Historical Constructions” International Journal of Architectural Heritage, (2019) DOI: 10.1080/15583058.2018.1563225
12. Cardone D., Angiuli R., Gesualdi G. “Developing Solutions Based on Shape Memory Alloys for Historical Constructions: An Interdisciplinary Approach” Chapter in book: Structural Analysis of Historical Constructions (2019) DOI: 10.1007/978-3-319-99441-3_40
13. Angiuli R., Franchi R., Giannuzzi M., Papadia G “Experimental thermographic investigation for a dry and highspeed turning of SAF2507 Steel” Proceeding of 22nd International Conference on Material Forming (ESAFORM 2019) Vitoria-Gasteiz 8th-10th May 2019
14. Angiuli R., Dell’Anno F., Cosma L., Raganato U. and Passaro A.: “SPARE project – improvement of continuous compression moulding process for the production of thermoplastic composite beams” 2021 IOP Conf. Ser.: Mater. Sci. Eng. 1024 012024 DOI 10.1088/1757-899X/1024/1/012024
15. A. Attanasio, A. Ramirez, V. Tarantino, R. Angiuli et al. “Trasformare materiali riciclati in nuove risorse: soluzioni sostenibili isolanti per edifici” / Atti ICC2022.
16. V. Tarantino, I. Ingrosso, R. Angiuli “Calcestruzzo sostenibile per l’industria eolica offshore: valutazione della durabilità di materiali innovativi nelle strutture offshore” / Atti ICC2022.
17. M. A. Aiello, R. Angiuli, I. Ingrosso, V. Tarantino “Legame di aderenza di calcestruzzi geopolimerici con barra in fibra di carbonio (CFRP) e di vetro (GFRP)” / Atti ICC2022.
18. I. Ingrosso, V. Tarantino, R. Angiuli “SMART reinforced and geopolymer concrete with enhanced durability: MAREWIND solution, a case study” / Atti NBSC2022.

Complete List of Published Work in My Bibliography:
https://www.researchgate.net/profile/Riccardo-Angiuli/research

Recent projects

- Exploit4innomat - An Open Innovation Ecosystem for exploitation of materials for building envelopes towards zero energy buildings. Role: responsible for CETMA activities

- SensMat: Preventive solutions for Sensitive Materials of Cultural Heritage - https://www.sensmat.eu/. Role: responsible for CETMA activities

- METABUILDING Project: European cluster collaboration platform - METABUILDING | European Cluster Collaboration Platform. Role: responsible for CETMA activities

- MAREWIND Project: MAterials solutions for cost Reduction and Extended service life on WIND off-shore facilities - MAREWIND. Role: responsible for CETMA activities

- ICLIMABUILT Project: An open innovation test bed for building envelope materials - Iclimabuilt – Advanced insulation and energy harvesting. Role: responsible for CETMA activities

- RE_4 Project: REuse and REcycling of CDW materials and structures in energy efficient pREfabricated elements for building REfurbishment and construction (Home | re4.eu). Role: NDT analysis of new material, mechanical testing

- RESIELP Project: Recovery of Silicon and other materials from End-of-Life Photovoltaic Panel (ReSiELP - Welcome). Role: NDT analysis of new material, mechanical testing

- CIRCE Project: seCondary raw materIals foR a cirCular Economy in buildings - (CIRCE - Home (weebly.com). Role: NDT analysis of new material, mechanical testing

- ECO- SMART BREAKWATER Project: Calcestruzzi ecosostenibili per elementi di mantellata “smart” ecosmartbreakwater.com. Role: NDT analysis of new material, mechanical testing