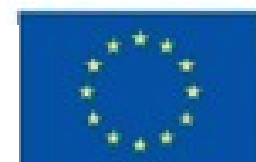
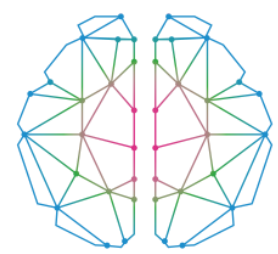


- **Project : Additive Manufacturing of Lime-based Mortars for Architectural Heritage.**



- **Company: TESELA, MATERIALS INNOVATION AND HERITAGE S.L.**
- **Country: SPAIN**
- **Sector: Professional, scientific, and technical activities**
- **Partners: CETIM Technological centre (A Coruña, Galicia, Spain)**
- **Contacts: Gaspar Carrasco-Huertas, Ph.D. (Project Manager)**





ABOUT TESELA (COORDINATOR)

- Technology-Based Company SME
- Since 2015
- Padul, Granada, Spain.
- Born as SPIN-OFF (Granada University)



HEADQUARTERS



SUSTAINABLE
CONSTRUCTION
CLUSTER OF ANDALUSIA
- PADUL -



GRANADA UNIVERSITY.
SCIENCE FACULTY
- GRANADA -

MAIN TEAM FOR LIM3PRINT



Eugenio Navarro
CEO



Gaspar Carrasco-Huertas, PhD
R&D Project Manager

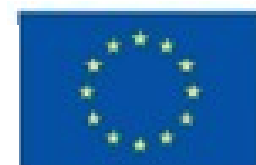
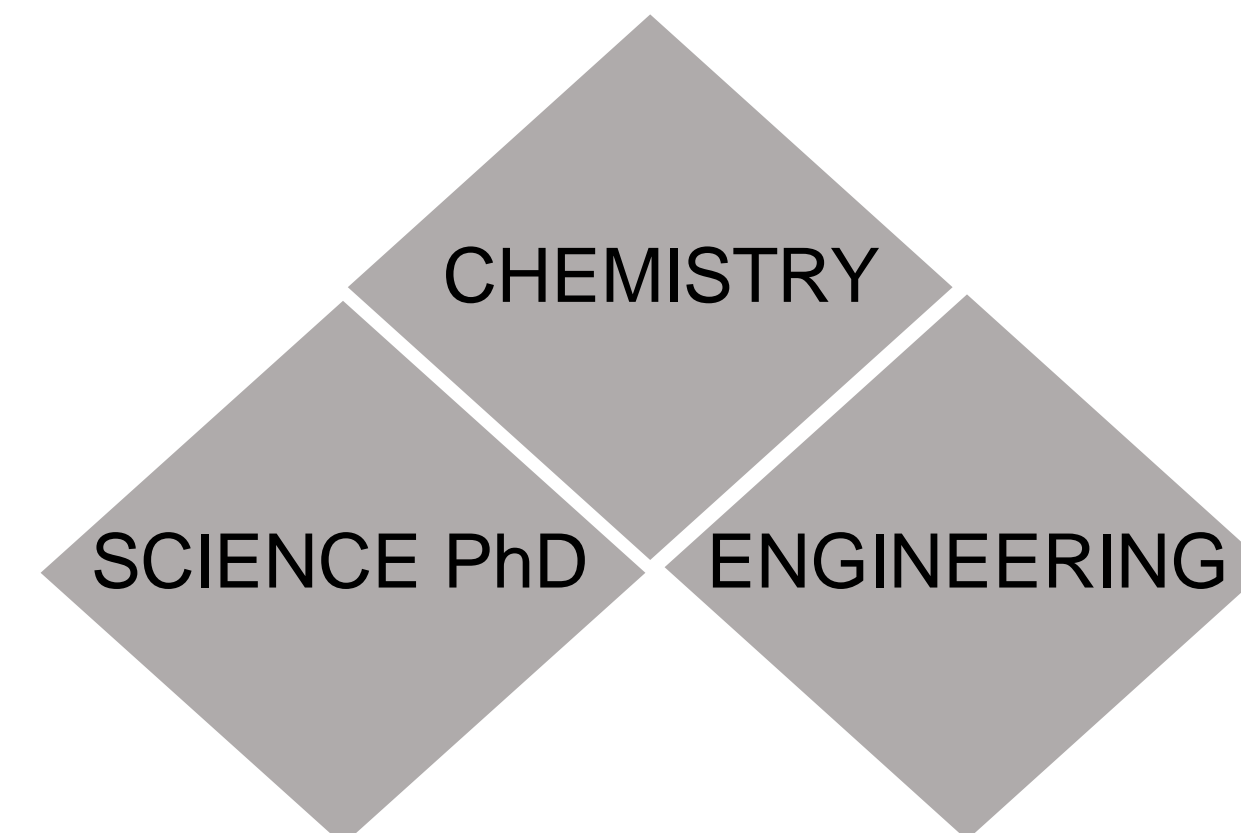


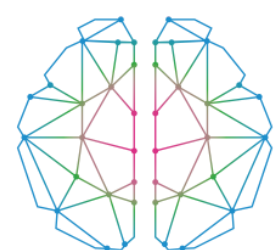
Gabriela Tarifa
R&D Researcher



Miriam Alguacil
R&D Technician

MEMBERS BACKGROUND





ABOUT CETIM (SERVICE PROVIDER)

- Private non-profit Technology Centre located in A Coruña (Galicia, Spain).
- Promote R&D in different economic sectors.
- Expertise area: Sustainable Building Materials & development of adv. construction materials.
- Role in the project: Optimization of formulation developed to make it suitable to be 3D printed at laboratory scale.



Technological Centre



HEADQUARTERS



A Coruña
- GALICIA, Spain-

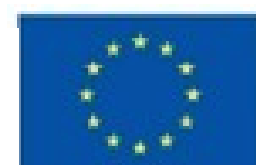
MAIN TEAM FOR LIM3PRINT



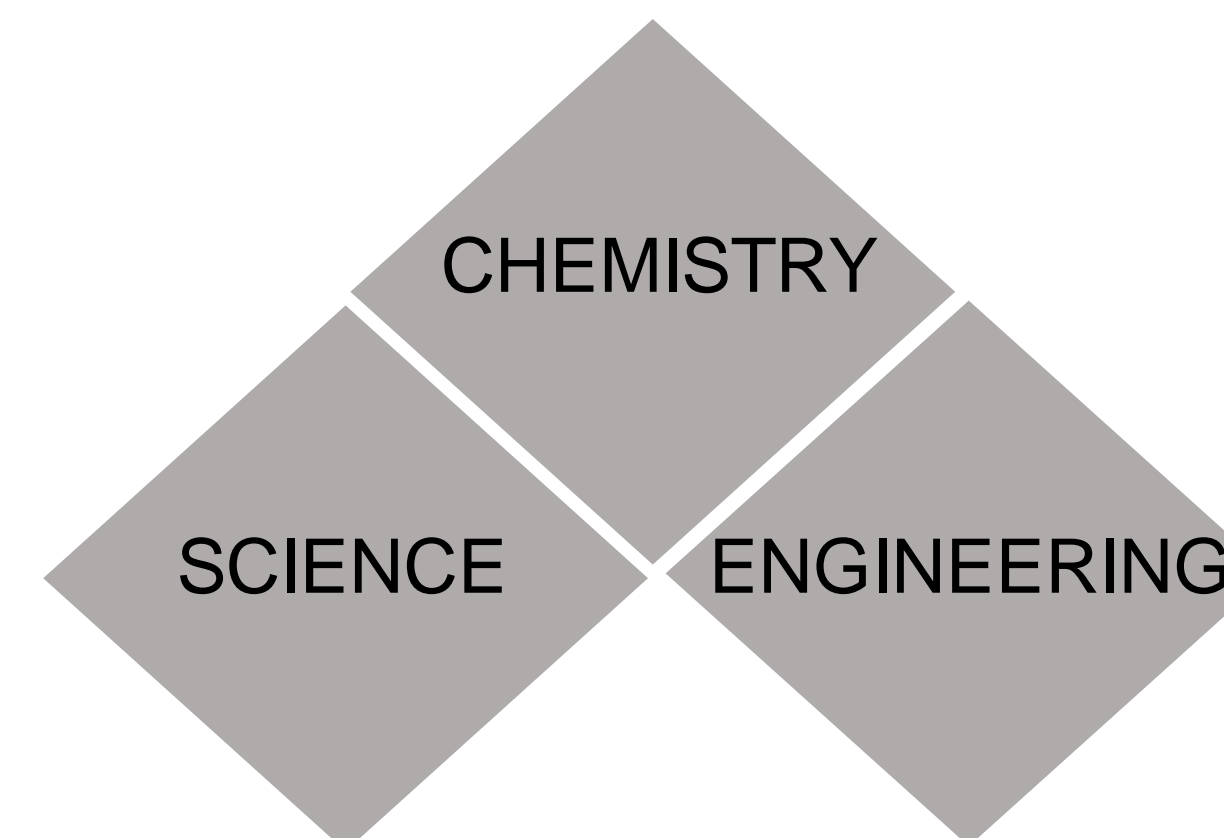
M. Alberto Miguéns Blanco
Lead Researcher of Sustainable Building Materials

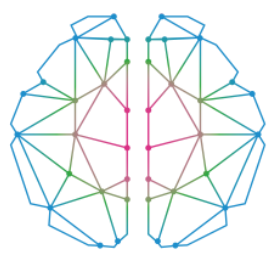


Cintia Pérez Battistessa
Researcher of Sustainable Building Materials



MEMBERS BACKGROUND



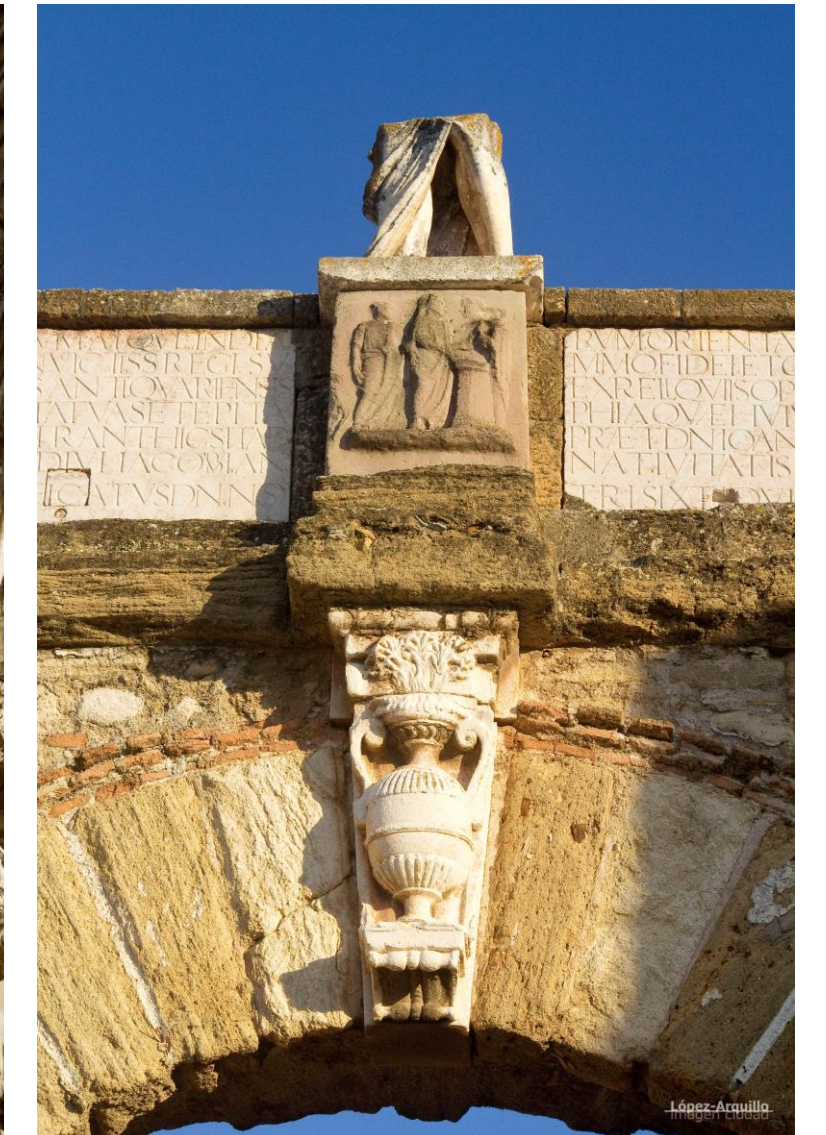


THE CHALLENGE:

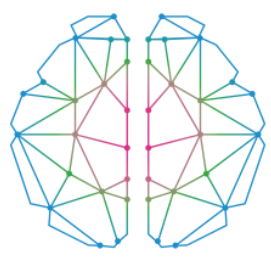
Expand the potential of a new generation of lime-mortars materials in a 3D additive manufacturing (AM) process in a similar way to 3D Concrete Printing for repairing Historical Heritage Singular Artifacts.

THE SOLUTION

Develop mortars based on hydraulic lime-mortar materials currently used in heritage applications in combination with new binders, additives, and 3D printing process.



Left: Building materials 3D printer to be used in the project.
Mid: Jamb statues. Santiago de Compostela cathedral (Spain)
Left: Damaged heritage artifact



IMPORTANCE FOR THE BUILDING & CRAFT SECTOR

- Increase the knowledge-based economy and at the same time, it will increase European innovation-based assets.
- Improve the existing repairing solutions for built heritage using lime-based mortars and 3D printing approaches.

IMPORTANCE FOR TESELA

- Accelerate European expansion and internationalization process, growth and employment generation.
- Opportunity for Europe towards the adoption of a new green economy model through the integration of the additive manufacturing in craft sectors dedicated to restoring built heritage.

