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# Azores Ecoblue

Architecture and Construction Latest Developments

Paulo Mendonça

*Associate Professor, Project Coordinator in University of Minho*



**Research team in University of Minho School of Architecture, Art and Design and Lab2PT:**

**Paulo Mendonça, Associate Prof.** School of Architecture, Art and Design  
**Harish Darvari, Architect** School of Architecture, Art and Design

**Other contributors in EAAD:**

**Mohammad Fouad Hanifa, PhD Student** School of Architecture, Art and Design

**Collaborations of EAUM with other institutions:**

**CDRSP** - Center for Rapid and Sustainable Product Development, IP-  
Leiria.

**Florindo Gaspar, Prof**

**Artur Mateus, Prof**

**Ana Peixinho, Engineer**

**Marco Coutinho, Engineer**

**PIEP** - Centre for Innovation in Polymer Engineering

**CVR** - Centre for Waste Valorization, Guimaraes, Portugal

# Building materials Research Map

## Marine Litter



## Byproducts



### Mineral Composites with Plastic



### Plastic with Sodium Silicate



### Thermal conductivity test



### proposed Fisherman cabins



### Digital fabrication materials



### Cryptomeria Insulation Panels



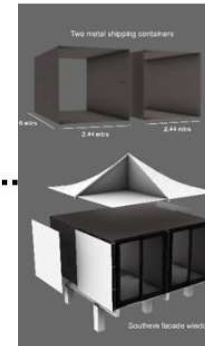
### Mechanical tests



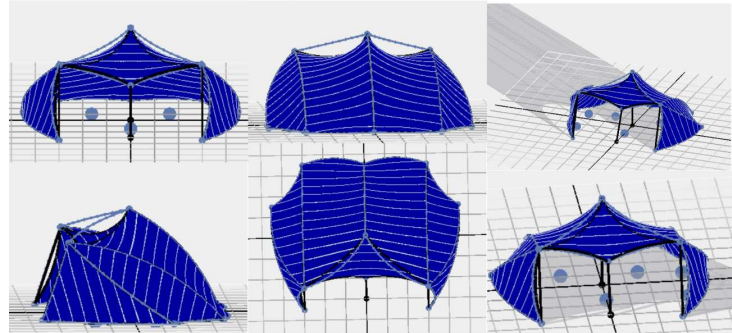
### 3D printing earthen composites



### Test cells for research



## Estrutura de apoio a pescadores/artesãos



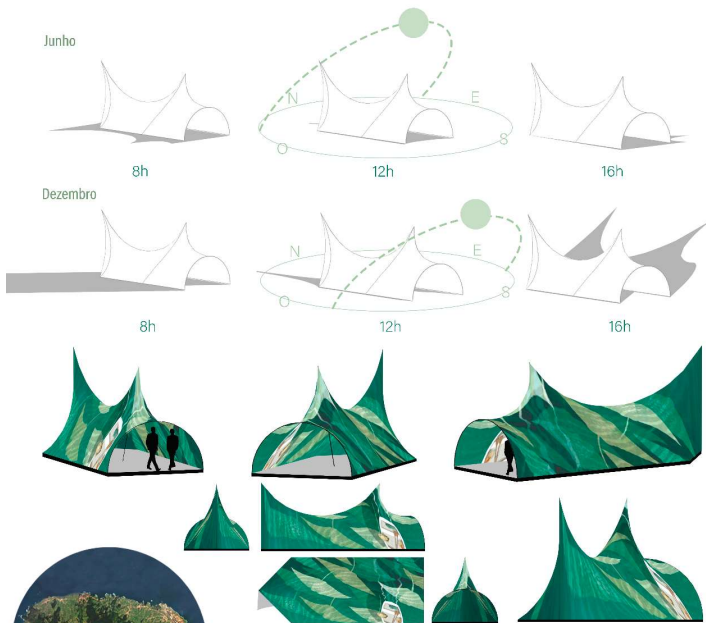
Uma estrutura efêmera de apoio a artesãos é um projeto ou iniciativa que tem como objetivo ajudar artesãos a desenvolver e promover suas habilidades e trabalhos. Isso pode incluir a disponibilização de espaço de trabalho, acesso a ferramentas e equipamentos, etc.  
A ideia é fornecer aos artesãos os recursos necessários para que eles possam se estabelecer e ter acesso aos seus mercados.  
O nosso objetivo com este projeto é, através de construções efêmeras com materiais reutilizados, prestar apoio a pescadores/artesãos, na freguesia de São Mateus da Calheta, na ilha Terceira, Açores, com uma cobertura.



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## Estrutura efêmera modular Apoio a pescadores / apoio a artesãos / oficina para triagem de resíduos

100123 Opção UMinho - Instalações Efêmeras com Materiais Reutilizados  
Anaís Pinto A88513 | Andreia Madaleno A91882 | Beatriz Pires A31838 | Delcy Mascarenhas A93651 | Inês Gomes A96742



## M(ANTA) EMBRANA

**LOCAL DE INTERVENÇÃO**

**PROPOSTA DE PROJECTO**

**IDEIAS INICIAIS**

**CARACTERÍSTICAS MATERIAIS**

- Materiais ecológicos
- Elasticos
- Têxtil
- Leve
- Proteção acústica
- Proteção UV
- À prova d'água
- Resistente ao vento
- Facilmente reparável
- Resistente ao fogo

**DETALHES DA CONEXÃO**

**Opção UMinho - Instalações Efêmeras com Materiais Reutilizados**

Ano escolar: 2022/2023  
Docente: Paulo Mendonça - pmendonca@uaa.uminho.pt

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Karlene Trópica - E10644

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Proposals for fishermen shelters for São Mateus village port done by students on the Curricular Unit Ephemeral Installations with reused materials, 2022/2023 Coordinator: Paulo Mendonça

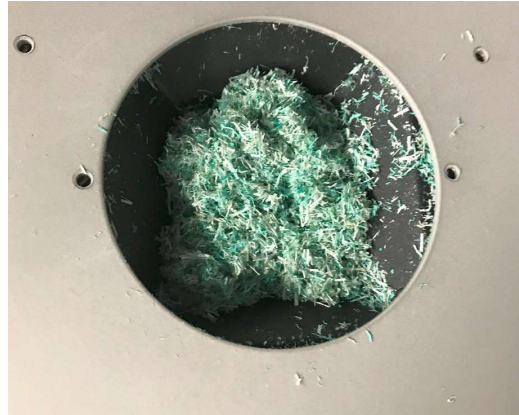
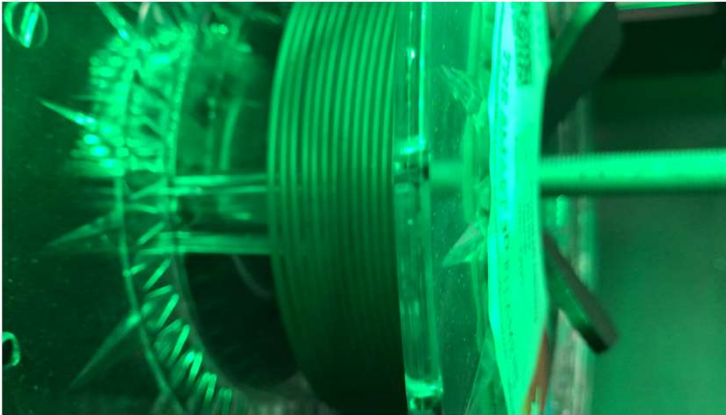
# 40% - 70% recycled and byproduct materials



# *Cryptomeria Insulation*



# *Filaments for 3D printing*



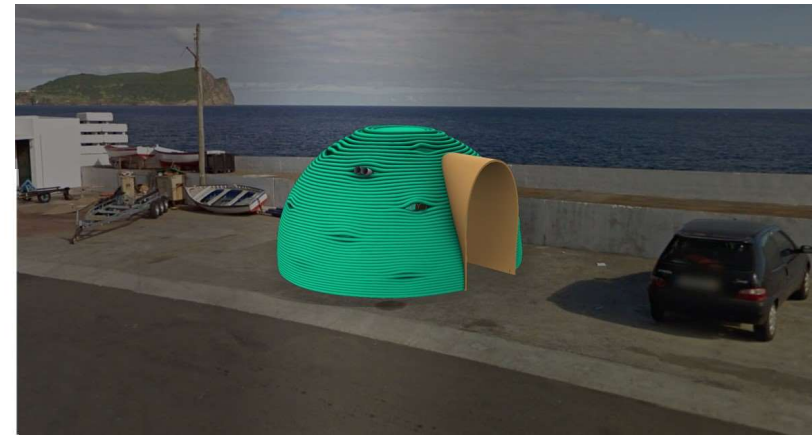
# 3D printing Earthen composites using byproducts





***Prototypes produced with reused mooring cables and other wastes***

Fisherman shelter proposal for São Mateus v1  
Fisherman shelter proposal for São Mateus v2

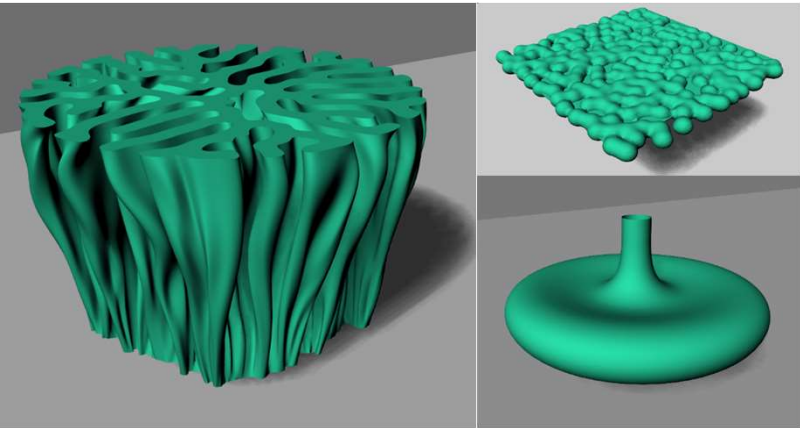




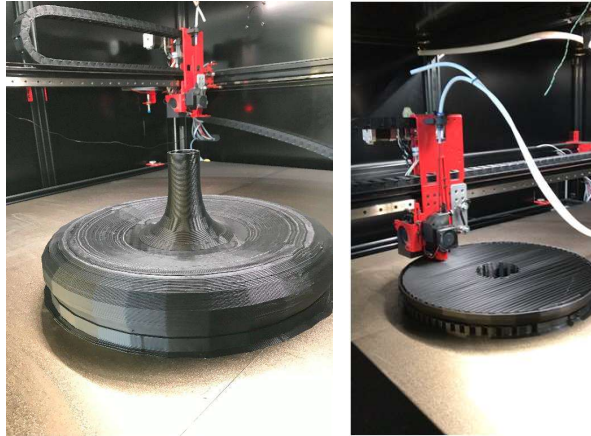


Recycling oceanic plastic for product design products

3d printing with recycled plastic



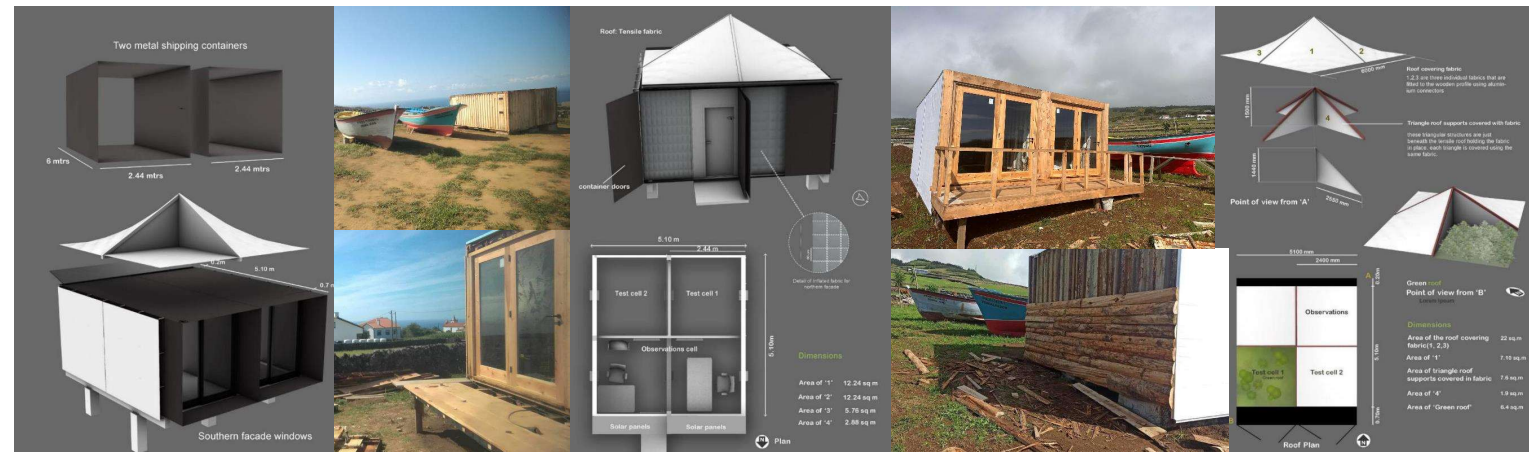
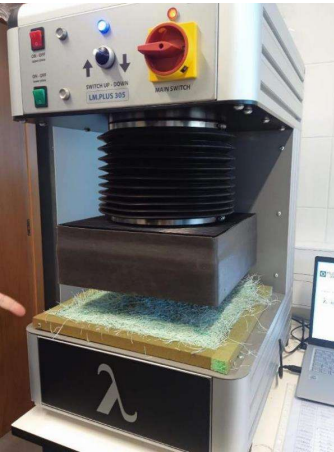
4 ecoproducts – AZORES ECOBLUE





Laboratorial tests carried out in Materials's Lab of Civil Engineering Department UM

Equipment available in UM Schoop of Architecture for In situ tests to be carried out in Test Cells built in Azores Terceira Island



Laboratorial tests carried out in Center for Rapid and Sustainable Product Development, IP- Leiria.

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THANKS!

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[www.ecobluegroup.com](http://www.ecobluegroup.com)



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EcoBlue