

THEMATIC PRIORITY



RESOURCE AND  
MATERIALS EFFICIENCY



## CIRMAP 1st Public Meeting : 3D printed concrete with recycled fine aggregates

March 24th and 25th, 2022  
University of Liège

*Sponsored by Interreg North-West-Europe*

[www.nweurope.eu/cirmap](http://www.nweurope.eu/cirmap)

## The Cirmap projects

3D Printing (3DP) is developing rapidly in the field of construction. Fast realisation of customized or complex geometries and optimization of shapes are amongst the main advantages of the process that could allow significant breakthroughs.

However, mortars used in 3DP contain very large amounts of cement and natural sand in comparison to ordinary concrete and the overall ecological and economic balance seems unfavourable to 3DP.

Meanwhile, Construction and Demolition Wastes (C&DW) are produced locally in urban centres and some of them, in particular Recycled Concrete Aggregates (RCA), could be used as a local resource of granular materials. The coarse fraction of RCA (larger than 4mm) can be reused efficiently for the manufacture of new concrete. On the contrary, adherent cement paste concentrates in fine RCA during crushing which makes it much harder to valorise into concrete. However, recycled sand and recycled fine particles could be re-used as raw materials for the manufacture of 3D printing mortars for urban furniture where high mechanical behaviour is not required

PROJECT  
AREA



Budget : €6.98 Million

EU funding : € 4.19 Million

Duration : 36 months (April 2020 – March 2023)

## Invitation

We are pleased to invite you to the 1<sup>st</sup> public meeting of the EU funded Interreg NWE project CIRMAP on the design and manufacture of customized 3D printed urban concrete furniture using recycled fine aggregate.

This event aims at presenting the preliminary results obtained in the framework of this project as well as showcasing the results of the experimental printing campaigns conducted. The event is free of charge and will be held in English. We are looking forward to welcoming you in Liège on March 24<sup>th</sup> and 25<sup>th</sup>, 2021.

## Registration and accommodation

Registration is possible until March 21st, 2022 via the conference website : [www.tobecreate.be](http://www.tobecreate.be).

A list of hotels is also available on the conference website

## Venue

**University of Liège**  
Building B37 – Room 01  
Allée de la Découverte 12, 4000 Liège

## Organization and contact

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## Consortium

The project is led by ARMINES and gathers 17 partners and sub-partners. Several associate partners also support the project.



## PROGRAM

Thursday 24<sup>th</sup> of March 2021

### Public Meeting

Building B37 – Room 01

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|-------|---|
| 12:30 | Arrival, registration                                 |
| 13:00 | Lunch   |
| 14:00 | Welcome – ULiège                                      |
| 14:10 | Opening and general introduction to CIRMAP – ARMINES  |
| 14:30 | WP T1 presentation – ULiège                           |
| 14:45 | WP T2 presentation – MMU                              |
| 15:00 | WP T3 presentation – ULille                           |
| 15:15 | Student workshop and first prototypes printed – video |
| 15:25 | Public meeting Closure – ARMINES                      |
| 15:30 | Coffee break  |

### Advisory Board

Building B37 – Room 01

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|-------|----------------|
| 15:45 | Advisory board |
|-------|----------------|

### Dinner

CIRMAP Network members only - Restaurant to be determined

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|-------|-----------------|
| 19:30 | Dinner in Liège |
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