

THEMATIC PRIORITY



RESOURCE AND
MATERIALS EFFICIENCY



CIRMAP 3rd Public Meeting : 3D printed concrete with recycled fine aggregates

October 5th , 2023

IMT Nord Europe (Villeneuve D'Ascq)

Sponsored by Interreg North-West-Europe

www.nweurope.eu/cirmap

The Cirmap project

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 : €7.032 Million

EU funding : € 4.22 Million

Duration : 44 months (April 2020 - December 2023)

Invitation

We are pleased to invite you to the 3rd and last 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 final results obtained in the framework of this project.

The event is free of charge and will be held in English.

We are looking forward to welcoming you in Lille on October 5th 2023.

Registration

Registration is possible until September 29th, 2023 via attached form

Contact: **Maria Taleb**

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Venue

IMT Nord Europe

Rue Guglielmo Marconi, 59650 Villeneuve-d'Ascq

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 5th of October 2023

Public Meeting

12:30	Arrival, registration (IMT Nord Europe)
13:00	Lunch
14:00	Welcome and opening - ARMINES
14:10	Public meeting: <ul style="list-style-type: none"> • General introduction to CIRMAP - UOrléans • WP T1 presentation – ULiège • WP T2 presentation – MMU • WP T3 presentation – ULille • Video of the pilots' 3D printing campaign and the main CIRMAP achievements • Public meeting closure – ARMINES
15:30	Coffee break
16:00	3D printing demo (Polytech Lille)

CIRMAP Network members only

Advisory Board

17:00 Advisory board

Dinner

Restaurant will soon be determined

19:45 Dinner in Lille

CIRMAP public meeting access

IMT Nord Europe (Rue Guglielmo Marconi, 59650 Villeneuve-d'Ascq) might be easily accessed by metro: "Cité Scientifique Pr. Gabillard" or "4 Cantons" station of metro line 1



Accommodation

- **Ibis**, Lille Centre Gares
(https://all.accor.com/hotel/0901/index.en.shtml?utm_campaign=seo+maps&utm_medium=seo+maps&utm_source=google+Maps)
- **Ibis**, Lille Centre Grand Place
(https://all.accor.com/hotel/0902/index.en.shtml?utm_campaign=seo+maps&utm_medium=seo+maps&utm_source=google+Maps)
- **The Originals City, Hotel Ascotel**, Lille East
(https://www.ascotel.fr/fr/?utm_campaign=uberall&utm_source=googlelisting&utm_medium=organic)
- **Ibis**, Lille Villeneuve-d'Ascq Grand Stade
(https://all.accor.com/hotel/0614/index.en.shtml?utm_campaign=seo+maps&utm_medium=seo+maps&utm_source=google+Maps)