







# International Workshop CO<sub>2</sub> Storage in Concrete CO<sub>2</sub>STO<sub>2</sub>019



24-25 June 2019, Marne la vallée, France

co2sto2019.ifsttar.fr



# International Workshop CO<sub>2</sub> Storage in Concrete (CO<sub>2</sub>STO<sub>2</sub>019)

#### Welcome & scope

Decreasing natural resources of sand and gravel and increasing problems with waste management support the recycling of the accumulating waste materials. If the vision of a sustainable material flow is to be realized, the amount of recycled waste has to be increased. The building industry in particular is a major consumer of materials and at the same time a major producer of waste and CO<sub>2</sub> emissions by production of Portland cement which represents 5 to 8% of CO<sub>2</sub> emissions worldwide. CO<sub>2</sub>STO2019 « CO<sub>2</sub> storage in concrete » focuses on the ability of concrete to store CO<sub>2</sub> during its life cycle. Concrete undergoes carbonation during service life of structures. At the end of its service life, accelerated of recycled concrete carbonation aggregates for new concretes can take place, to improve the properties of recycled concrete aggregates (RCA) and reduce the environmental impact of concrete.

This workshop is focused on the study of accelerated carbonation of recycled aggregates in laboratory and under realistic conditions. **Presentations** industrial experimental studies and modelling are expected. Economic and environmental analyses are also necessary to implement a database of the manufacture of concretes based on carbonated recycled concrete aggregates. Impact of natural carbonation on existing structures will complete the topics of the workshop.

In conclusion, the workshop CO2STO2019, which will take place in France, on 24-26 June 2019, will bring together experts in the field of carbonation of concrete and recycling of construction and demolition waste (CDW) from around the world.

#### **Topics**

- Natural CO<sub>2</sub> uptake in concrete structures
- Fast and Natural carbonation of RCA (experimental results and modelling, including improvement of RCA), Life Cycle Analysis (LCA).

#### **Deadlines & submission**

Abstracts submission: 31th October 2018

Abstract approval: 20th November 2018

Full papers submission: 31th January 2019

Papers approval: 28th February 2019

Final papers approval: 31th March 2019

# **Registration & fees**

Paying categories	Early bird rate	Standard rate (from 2 <sup>nd</sup> March)	On site
AUGC, fib,RILEM Members	350 €	450€	500€
Non members	400€	500€	550€
Students	150€	200€	200€
Accompanying person Gala dinner	85€	85€	100€

Registration fees include participation in the conference, proceedings, participation in coffee breaks, lunches and gala dinner, and compensation of CO<sub>2</sub> emissions due to travel.



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#### **Keynote Lecturers**

- Prof. Valérie Masson-Delmotte IPCC - Université Paris Saclav Cities and climate change science
- Prof. Chi Sun Poon Hong Kong Polytechnic University **Enhancement of properties of** recycled aggregate concrete by accelerated CO2 curing
- Prof. Carmen Andrade Polytechnic University of Catalonia Substantial global carbon uptake by cement carbonation
  - Prof. François De Larrard Lafargeholcim

**Concrete Recycling: Research** and Practice

# Organized by

IFSTTAR « The French institute of science and technology for transport, development and networks » and supported by Fastcarb project. www.ifsttar.fr http://fastcarb.fr

# **Organizing committee**

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