# ACCOMODATION

The closest hotel is: Hotel ibis Marne la Vallée Champs

## WORKSHOP LOCATION

Amphitheater IFSTTAR, Bienvenüe Building, 9 Boulevard Copernic, 77420 Champs-sur-Marne



#### WEBSITE

For detailed information including workshop program and online registration: concarb2019.sciencesconf.org

# About ENPC

École des Ponts ParisTech, created in 1747, is a higher education establishment that trains engineers to a high level of scientific, technical and general competency. Apart from civil engineering and spatial planning, the School develops high-quality <u>programs and research</u> <u>associated with the energy transition</u>.

## About LH R&D

LafargeHolcim R&D is driven by our customers, who face today's major challenges: achieving energy efficiency, lowering cost of construction, reducing our environmental footprint, and meeting high standards of aesthetics, health, comfort, and well-being. Together with our partners and customers, our best-in-class R&D teams develop the most innovative products, solutions, and services, as well as advanced manufacturing processes.





#### International workshop on

#### **MECHANISMS OF**

## CONCRETE

#### CARBONATION

ENPC Champs-sur-Marne June 27, 2019



#### SCOPE

Controlling and evaluating concrete carbonation are key steps towards the construction of sustainable cement based structure with low environmental impact.

**ENPC** and **LafargeHolcim R&D** are inviting world leading experts to discuss the physics and chemistry at play during carbonation of concrete from various perspectives and using different methods. Invited scientists will share the latest development in their field.

Discussions between guest lecturers and attendees will be fostered so the group can draw future research needs necessary to solve applied challenges regarding concrete carbonation.

# WORKSHOP ORGANIZERS

Francois Delarrard, LH R&D Matthieu Vandamme, ENPC Patrick Dangla, ENPC, Navier Bruno Huet, LH R&D

## REGISTRATION

Online registration on the conference website: <u>concarb2019.sciencesconf.org</u> Number of attendees is limited to 100.

Registration deadline: **April 28th, 2019** 

#### FEES

The participation to the workshop is **free** of charge but registration is mandatory (limited to the first 100 attendees).

## PROGRAM

Effect of carbonation on hydrate assemblage and pore solution - **Barbara Lothenbach**, EMPA

Water Sorption of cement paste: effect of carbonation and temperature - **Stéphane Poyet**, CEA

Carbonation in OPC and Alternative Cement Concrete: Impact of Real Climate versus Accelerated Testing and Implications on Service Life - **Kimberly Kurtis**, Georgia Tech

Microstructure and transport properties of partially saturated concrete - **Hong Wong**, Imperial College

Gas diffusion as a function of microstructure - **Karen Scrivener**, EPFL

Advanced ultrasonic techniques to characterize changes in microstructure due to carbonation and microcracking - **Laurence J Jacobs**, Georgia Tech

Probing the links between mineral reactivity and water availability - **Anna Harrison**, Queen's University

Reactive transport modeling of coupled concrete carbonation and drying - **Olivier Bildstein**, CEA