

H2020 TERRE - Europe wants to train engineers...sustainably



The SIAME research centre is taking part in a European training programme for engineers and researchers, concentrating on the development of low-carbon civil engineering structures.

Mudbricks, concrete breeze blocks, a high-pressure press...welcome to Domenico Gallipoli's lair in Anglet, in the SIAME (Applied Mechanical and Electrical Engineering Sciences) research centre workshop. Here, researchers from UPPA develop projects involving low-carbon construction materials.

"We are working on mudbricks", explains Domenico Gallipoli. "By compacting clay, we manage to obtain a hard brick, with a mechanical resistance of 10 MPa, comparable to that of a traditional fired brick. The first challenge is to develop methods to prevent erosion without the application of chemical products. The second is to improve the mechanical resistance by adding fibres from plants or from industrial recycling."

The industrial and environmental stakes are significant, on condition that engineers and researchers specialising in geotechnics are trained first. This is the objective of the European research programme H2020 TERRE (Training Engineers and Researchers to Rethink geotechnical Engineering for a low carbon future) in which the SIAME research centre is taking part. Launched in November 2015 for a period of four years, the programme brings together 14 partners from throughout Europe, coordinated by the University of Strathclyde in Scotland. UPPA is the only French university taking part in the programme. In France, the INRA, the CIRAD and the Nobatek technological resources centre in Anglet are also involved.

As part of the programme, in June 2017 the Anglet campus will play host to the summer school: "Advanced geotechnical design and fundamentals of carbon cycle and greenhouse effects." Well-merited European recognition.

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