

## Concrete Structures: New Trends for Eco-Efficiency and Performance

The 2021 fib Symposium will take place from 14th to 16th June 2021 in Lisbon, Portugal.

## www.fiblisbon2021.pt

# Students' Competition

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The *fib* Symposium 2021 embraces a students' competition within the spirit of the event: eco-efficiency and performance. Thus, the competition will be devoted to the 'Prediction of the behaviour of reinforced recycled aggregates concrete (RAC) beams'.

#### Organized by







ABORATÓRIO NACIONAL DE ENGENHARIA CIVIL



ORDEM DOS ENGENHEIROS

#### Media Partner



## Objective

The objective of this competition is to predict the load-deflection response of two equal beams. To participate in this contest, each team should propose a mechanical model to describe the nonlinear behaviour of the beams. The principles and the theoretical background supporting the proposed global models should be described objectively, using a formal and scientific style. The accuracy of the predicted loaddisplacement response, the innovative character of the proposed model, the creativity and the theoretical soundness of the model principles described will be object of evaluation by an international *fib* Jury.

## Beams' testing

The beams will be produced and tested according to the geometry presented in Figure 1. All the information and the detailed rules related with the competition (teams' registration, beams' geometry and reinforcement, materials' characterization, testing procedure, reporting and awards) are provided on the symposium website:

https://fiblisbon2021.pt/#awards



Figure 1. Geometry of the beams: (a) Front view; (b) Cross-section. All units in [mm]

### Chronogram for the competition

Reception of the registration forms up to the 1st of February 2021 Confirmation of registration acceptance 5th of February 2021 Production of the two beams and concrete specimens 8-19 of February 2021 Announcement of detailed information 15th of March 2021 Announcement of the remaining details 1st of May 2021 Delivery of report-paper and the presentation up to 9th of May 2021 Test of the beams 10-21 of May 2021 Announcement of the winners

16th of June 2021







## Symposium Secretariat

Av. do Brasil, 101, 1700-066 Lisboa – PORTUGAL E-mail: info@fiblisbon2021.pt www.fiblisbon2021.pt