

## Venue

Eduardo Torroja Institute for Construction Science (Instituto de Ciencias de la Construcción Eduardo Torroja – IETcc-). Madrid.

## Co-sponsors

The conference is co-sponsored by the following organisations:

IABSE, International Association for Bridge and Structural Engineering.

FIB, International Federation for Structural Concrete.

IASS, International Association for Shell and Spatial Structures.

IStructE, Institution of Structural Engineers.



The *Institution*  
of *Structural*  
*Engineers*

# INTERNATIONAL CONFERENCE ON STRUCTURAL ENGINEERING EDUCATION WITHOUT BORDERS

# IV

20-22 June 2018  
Madrid, Spain

CSIC

INSTITUTO  
EDUARDO  
TORROJA

ACHE

# IV INTERNATIONAL CONFERENCE ON STRUCTURAL ENGINEERING EDUCATION

## “STRUCTURAL ENGINEERING EDUCATION WITHOUT BORDERS”

Madrid, Spain, 20 – 22 June 2018

### Introduction

The skills required by structural engineer in the past were always well defined and remained mainly within the technical domain, however the situation has now changed. The modern structural engineer must be creative, communicative, and able to work with others in an international setting involving social and environmental issues. This means that a new type of education is needed. This conference will examine how the training of both engineers and architects has changed to face these new challenges.

### Themes

The main themes of the Conference are the following (the list is not restrictive):

#### - Innovations in education

- Active learning methodologies.
- New assessment tools.
- Multidisciplinary education.
- Internet based teaching (MOOCs, webinars, etc.).
- New learning spaces.
- Outreach activities to promote structural engineering and architecture.
- Other innovations.

#### - New challenges and topics in the education of the structural engineer.

- Development of transversal skills such as critical thinking, creativity and communication abilities.
- Conceptual design.
- Engineering and the arts.
- Structural engineering, society and entrepreneurship.
- Sustainability.
- Structural Art, Construction History, Philosophy of Structures.
- Cooperation with the developing countries
- Ethics in structural design.
- New construction materials.
- Computational design tools (BIMs...).
- Other topics and challenges.

### Program of Events

The events will include workshops, keynote lectures, seminar sessions and traditional oral presentations. Special sessions on specific topics can be proposed and organised by those attending, subject to approval by the scientific committee.

### Organisation

The conference is organised by the Spanish Structural Engineering Association (ACHE) and the Eduardo Torroja Institute for Construction Science, Spanish National Research Council (IETcc, CSIC).

The Spanish Structural Engineering Association is composed of professionals interested in research and practical applications in the field of structural engineering. It was founded in 1999, under the name of the Scientific and Technical Structural Concrete Association, as a result of the merger of the Spanish Concrete Group (GEHO) and the Spanish Technical Prestressing Association.

The Eduardo Torroja Institute for Construction Science (IETcc), under the aegis of the Spanish National Research Council (CSIC), is a research and scientific-technical support centre serving the construction industry. IETcc carries out interdisciplinary studies on construction methods and is also involved in the development of national and international codes and standards in different construction fields. The IETcc is a member of most European and international construction associations and was a founding member of other associations, such as ENBRI, CIB, RILEM, EOTA and FIB.

### Important dates

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|---|-----------------------|
| - Call for abstracts:                       | 9th October 2017      |
| - Deadline for the submission of abstracts: | 17th December 2017    |
| - Notification of acceptance of abstracts:  | 29th January 2018     |
| - Submission of full papers:                | 4th April 2018        |
| - Notification of acceptance of papers:     | 27th April 2018       |
| - Final submission of papers:               | 15th May 2018         |
| - Conference:                               | 20th – 22nd June 2018 |

### Website with updated info

<http://se-education.e-ache.com>