



# IALCCE 2018

October 28–31, 2018

## Special Session SS-6: TRUSS ITN Reducing uncertainty in structural safety

### IALCCE and IALCCE 2018

The IALCCE 2018 symposium is organized on behalf of the International Association for Life-Cycle Civil Engineering (IALCCE) under the auspices of Ghent University on 28-31 October 2018 in Ghent, Belgium. The IALCCE activities encompass all aspects of life-cycle assessment, design, maintenance, rehabilitation, and monitoring of civil engineering systems. The IALCCE 2018 symposium provides an opportunity for academics, engineers, consultants, architects, constructors and decision makers from around the world to keep themselves up to date with the latest developments in the field of life-cycle civil engineering. Within this symposium several Special Sessions and Mini-Symposia are organized.

### Objective of the Special Session SS-6

**Arturo González, University College Dublin, Dublin, Ireland**



Buildings, energy and transport infrastructure are key elements for supporting society in their day to day activities. The infrastructure network is ageing and deteriorating rapidly under an increasing demand in operational and environmental loads. For infrastructure to remain effective and structurally safe, a management strategy that guarantees proper maintenance and best use of the resources available is needed. However, this is a complex task due to uncertainties associated to the structural capacity and to the demand on a structure. Therefore, this Special Session reports on advances by TRUSS (Training in Reducing Uncertainty in Structural Safety) Marie Skłodowska-Curie ITN (<http://trussitn.eu>) in developing reliable modelling, inspection, monitoring and testing systems that will contribute to more efficient infrastructure management.

The contents are divided in two sessions dealing with: (1) Buildings, wind turbine towers, nuclear structures, ships and ship unloaders, characterized by the aggressive environments that are subjected to (corrosive, radioactive, non-linear structural responses) or relatively high uncertainties regarding materials and modelling; and (2) road and rail transport infrastructure characterized by the variable traffic load. The individual projects in TRUSS are quite diverse. Nonetheless, the need to overcome uncertainty in material, load and structural performance represents a core thread that ties all projects together.

### Submitting abstracts

Authors willing to present a paper at the symposium are kindly invited to submit a 300 word abstract in accordance with the themes and topics **before June 30** through the online submission system available on the symposium website ([www.ialcce2018.org](http://www.ialcce2018.org)). Please indicate in the submission system if you would like to submit an abstract to this particular Special Session.