



FIRST INTERNATIONAL *fib* YMG COMPETITION FOR MASTER'S STUDENTS

GOALS

The International *fib* YMG Award is an initiative of the Young Members Group of the *fib* (The International Federation for Structural Concrete, *Fédération international du béton*). This contest has the following objectives:

- Give exposure to works on the scope of structural concrete developed by Bachelor's and Master's students of civil engineering around the world;
- Increase the reach of the *fib* to younger people working on subjects related to concrete;
- Encourage the participation of young students in conferences related to structural concrete;
- Provide professional opportunities to students closer to getting into the job market;
- Establish new connections between students and national *fib* YMGs;
- Solidify existing connections between national and international *fib* YMGs.

SCOPE

The scope of the work must focus on concrete materials or/and concrete structures. The topics include but are not limited to:

Concrete and innovative materials:

- Cementitious composite materials
- Durability and sustainable design
- Circularity in construction
- Testing and assessment methods
- Digital construction with concrete
- Low carbon building materials for green construction

Structural performance and conceptual design:

- Structural behaviour and design
- Experimental investigations
- Sustainability and life cycle assessment
- Structural health monitoring
- Structural reliability and risk analysis
- Numerical modelling
- Codes and regulations
- Strengthening and repair

AWARDS

In the scope of this contest, the following awards will be granted to the best works. The participants rewarded based on the scientific panel choice will receive:

- Participation and winner certificates
- Invitation for the *fib* Symposium 2023 in Istanbul (free registration)
- Free *fib* Young Engineer membership for one year
- Practice contracts with international companies (to be announced)

Award based on people's choice:

• Free access to one PDF <u>fib Bulletin</u>

ELIGIBILITY

The competition is for Bachelor's and Master's students who developed research or projects related to concrete during their courses. The entries for this competition have to respect the following conditions:

- The participant is still a Bachelor's or a Master's student by the end of the call for entries (<u>24th of</u> <u>December 2022</u>);
- The subject of the research or project has to be amongst the topics mentioned in the Scope section;
- The participant must be no older than 36 years old;
- Only individual candidates are eligible; group candidates will not be accepted.

APPLICATION PROCESS

Each application has to be submitted in *fib* website and has to include the following documents:

- Electronic copy of the original work report (<u>no need</u> to be written in English or Published);
- A written summary in English (max. 2 pages) including relevant information to assess the technical level, importance, and innovative quality of the work. The <u>layout template</u> has to be used.
- The <u>entry form</u> must be properly filled out and signed by the author and supervisor.

All the documents have to be submitted before the 24^{th} of December 2022, in digital format - Portable Data Format (.pdf) - with a limit of 1MB¹.

¹ For larger documents, please send them by email to <u>up201206018@edu.fe.up.pt</u> after completing your registration in the <u>fib</u> <u>website</u>

SELECTION PROCESS

The selection process and ordering of submitted applications to the contest are organised into the following phases:

<u>Phase 1</u>: Check for conformity to the eligibility criteria and scope of the contest. Incomplete applications and applications that do not comply with eligibility criteria and scope are withdrawn from the contest. The applications that are admissible for the contest move to the selection phase 2. <u>Phase 2</u>: This phase aims to select the best works based on the predefined selection criteria.

<u>Phase 3</u>: The authors of the selected works are called to prepare a short video presentation in English. The selection process will result from cooperation between national and international *fib* YMGs. The works under assessment in Phases 1 and 2 are managed by the national *fib* YMGs. The international *fib* YMG will assume the selection process of participants of countries where there is still no national *fib* YMG.

JURY

The Jury is chaired by the fib Immediate Past President of the year of the awards. (Akio Kasuga) The Jury members are:

- Commission 9 "Dissemination of Knowledge" Chair. (György Bálazs)
- YMG Chair in the year of the prize. (Jemma Ehsman)
- YMG Immediate Past Chair. (Motohiro Ohno)
- YMG Deputy Chair. (TBC)
- Up to 10 members of the YMG (international and national level), to be defined by the YMG Chair.

For the selection process members of the National YMGs will be engaged in coordination with the International YMG.

CLASSIFICATION CRITERIA

The classification given by the scientific panel is based on the following criteria:

The following criteria will be used to grade the works during Phase 2 (C₂):

- 25% Order and clarity of the summary;
- 25% Novelty and relevancy of the work;
- 25% Soundness of the research methodology;
- 25% Depth and the level of detail of the analysis and discussion.

The following criteria will be used to grade the work during Phase 3 (C_3):

- 30% Presentation structure, layout and clarity;
- 30% Thoroughness of the ideas presented and the analysis;
- 40% Level of the discussion after the presentation.

The final classification (C) combines the classifications attributed to the document and the presentation and is calculated according to the following expression:

$$C = 0.5 C_2 + 0.5 C_3$$

In the case of a draw, the president of the scientific panel of the contest will decide the winner.

The video presentations will be available online on the <u>fib YouTube channel</u>. The engagement with the audience will be measured by the total number of *likes*. The author of the video with more *Likes* will be awarded the people's choice prize.

CALENDAR

Phase	Beginning	End	Duration	Observations
Call for entries	1 st of October 2022	24 th of December 2022	3 Months	During this period, the participants have to prepare and submit the required documents.
Selection: Phases 1 and 2	24 th of December 2022	28 th of February 2023	2 Months	Selection of the works are carried out at the national level.
Preparation of online presentations	1 st of March 2023	31 st of March 2023	1 Month	Divulgation of the selected participants who are called to prepare a short video presentation in English.
Selection: Phase 3	1 st of April 2023	30 th of April 2023	1 Month	The online presentations will be uploaded. Announcement of scientific panel choice. The number of <i>likes</i> will be logged on the 30 th of April (12h00 - CEST).
Winner of people's choice	1 st of May 2023			Announcement of people's choice winner.
Winner of scientific panel choice	5, 6, 7 of June 2023			Award ceremony during a YMG event in the <i>fib</i> Symposium 2023 in Istanbul.