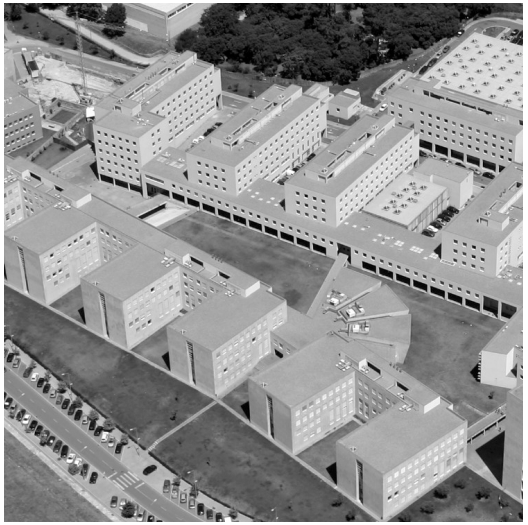


IRAS19

FIRST INTERNATIONAL SYMPOSIUM ON RISK ANALYSIS AND SAFETY OF COMPLEX STRUCTURES AND COMPONENTS

PORTO . PORTUGAL
1 > 2 JULY 2019



AIM AND SCOPE

The First International Symposium on Risk Analysis and Safety of Complex Structures and Components (IRAS 2019) is organised by ESIS TC12 on Risk Analysis and Safety of Large Structures and Components (in-team TC12), which will take place in the Faculty of Engineering of the University of Porto, in the City of Porto, located at seaside in the northwest region of Portugal, in 1-2 July 2019. This Symposium is intended to be a forum of discussion of the recent advances in maintenance, safety, risk analysis, probabilistic assessment, life-cycle performance, fatigue, fracture, damage mechanics, numerical simulation of a wide range of infrastructures, such as, engineering technical systems, transportation systems, bridges, buildings, dams, railways, underground constructions, wind and transmission towers, offshore platforms, pipelines, naval vessels, oceanic structures, nuclear power plants, airplanes and other types of structures including aerospace and automotive structures are considered. It is expected contributions from engineers, metallurgists, material scientists, among others, allowing a very multidisciplinary discussion.

The topics of the conference include, but not limited, the following:

- › Methods for reliability and probabilistic safety assessment;
- › Sensitivity analysis;
- › Data collection and analysis;
- › Design and evaluation of technical systems and structures;
- › Design innovation for safety and reliability;
- › Codes, standards and safety criteria;
- › Engineering Structures;
- › Structural Integrity and durability;
- › Management and life-cycle performance;
- › Models for ageing and life extension;
- › Fatigue, fracture and damage mechanics;
- › Damage evaluation and fatigue design;
- › Dynamic and fatigue reliabilities;
- › Safety assessment (loads and environmental effects; material properties; prediction of response and performance);
- › Analytical and numerical simulation;
- › Structural health monitoring;
- › Rock and soil structural integrity.

The ESIS technical committee "TC12 - Risk Analysis and Safety of Large Structures and Components" supports this International Symposium. The annual meeting of the TC12 will be performed during the conference event.

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IMPORTANT DATES

Start of Thematic Sessions and abstracts submission: **15 October 2018**
Abstracts due: **15 January 2019**
Acceptance notification: **31 January 2019**
Paper/extended abstract due: **15 March 2019**
Early registration: **31 March 2019**
Final submission/full conference papers: **15 May 2019**

ABSTRACT

Abstracts (1 page, 1.5-spaced) are invited in e-form (as a docx file) before 15 January 2019, to be submitted at iras2019@fe.up.pt. They should contain the title of the presentation, full names and addresses of the authors, objectives of the study, methods and the most significant results. Copies of abstracts of all accepted papers will be available in booklet form on the first day of the Symposium. All contributions in the form of extended abstracts will be peer reviewed by the members of IRAS 2019 Scientific Committee.

PUBLICATIONS

The peer-reviewed papers presented at this Symposium will be published in a Special Issue of the Open Access *Procedia Structural Integrity*, published by the Elsevier. Extended versions of selected papers will be invited for Special Issues in ESIS affiliated journals (Elsevier).

REGISTRATION FEE

All participants of the Symposium are required to register and to pay the registration fee. The details of the registration and payment will be included into our Second Announcement. Early Registration Fee (paid before 31 March 2019): Regular participants: € 350.00
ESIS members: € 300.00
Students: € 250.00
Accompanying persons: € 125.00
The Registration Fee covers admission to sessions, coffee breaks, lunches, social programme and preprints of the abstracts.

SECRETARIAT

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