

A symposium on
**Multidisciplinary Optimization and
Uncertainty Quantification**

Organised by

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Under the auspices of

**7th International Conference on
INTEGRITY - RELIABILITY - FAILURE**

Funchal/Madeira, Portugal

14-18 June, 2020

(<https://paginas.fe.up.pt/~irf/IRF2020/index.htm>)

This Symposium will present some new opportunities for scientists and engineers from academia and industry to share their scientific findings on optimization of systems under different levels of uncertainty. The scope of this event is to offer a forum including scientific presentations and discussions on academic and industrial aspects of uncertainty modelling supported by optimization for engineering applications. Furthermore, it aims also to identify some new research topics and to propose some innovative solutions. The main topics for this session are as follows:

- Uncertainty Analysis
- Model Developments, Calibration and Validation
- Sensitivity Analysis
- Reliability and Robustness Assessment
- Quality-Assurance
- Robust Design Optimization (RDO)
- Reliability-Based Robust Design Optimization (RBRDO)
- Multi-objective Approaches for RDO and RBRDO
- Classical and evolutionary methods for RDO and RBRDO
- Uncertainty Management & Quantification in Industrial Design and Analysis
- Structural optimization applications
- Interdisciplinary applications
- Case Studies and Case Histories

Abstracts of two full pages should be written in the following format (the template is available in the web site specific section).

Paper Size:

A4, single column

Margins:

Top page 3,0 cm; Bottom 2,5 cm, Left & Right 2,5 cm

Font and line spacing:

Times New Roman; single space

First 3 lines:

Should be left blank, size 10, reserved for the editors

Title:

Begins at the 4th line, capital letters, size 14, bold, left alignment

Authors Names:

Size 10, left alignment, two lines interval from title above

Authors affiliation:

Size 10, left alignment, two lines interval from text below

Main Text:

Size 12, full justification, 6 pt space after paragraph, no indentation

Headings:

Capital letters, size 12, bold, one line interval from text above

Legends (Figs & Tables):

Size 10, one line interval from text above and below

References:

References to cited literature should be identified in the text with author(s) name(s) and year of publication (ex: Mascarenhas, 1997). Full citations should be grouped at the end of the paper and in alphabetical order of first author's name. Always give inclusive page numbers for references to journal articles and a page range for books. Each reference must be cited in the text.

A sample abstract is available for download at:

https://paginas.fe.up.pt/~irf/IRF2020/irf2020abstract_sample.docx

which can also be used as template.

Deadline for Extended Abstracts: 15 December, 2019

Accepted contributions will appear in a book and USB-card, which will be made available to the delegates at the event.

For additional information, please contact either of the following:

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