

A Symposium on

OPTIMIZATION AND UNCERTAINTY QUANTIFICATION

Organizers

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Affiliated with

IRF2018
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(<http://paginas.fe.up.pt/~irf/IRF2018/>)

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
- Decision-Making under Uncertainty
- 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

Extended abstracts of **two full pages** should be written in the same format as the full papers for the USB-card (no limitation in length for these):

<i>Paper Size:</i>	A4, single column
<i>Margins:</i>	Top page 3,0 cm; Bottom 2,5 cm, Left & Right 2,5 cm
<i>Font and line spacing:</i>	Times New Roman; single space
<i>First 3 lines:</i>	Should be left blank, size 10, reserved for the editors
<i>Title:</i>	Begins at the 4 th line, capital letters, size 14, bold, left alignment
<i>Authors Names:</i>	Size 10, left alignment, two lines interval from title above
<i>Authors affiliation:</i>	Size 10, left alignment, two lines interval from text below
<i>Main Text:</i>	Size 12, full justification, 6 pt space after paragraph, no indentation
<i>Headings:</i>	Capital letters, size 12, bold, one line interval from text above
<i>Legends (Figs & Tables):</i>	Size 10, one line interval from text above and below
<i>References:</i>	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:

http://paginas.fe.up.pt/~irf/IRF2018/abstract_sample.doc

which can also be used as template.

The ***Extended Abstracts*** are due by **15 JANUARY 2018**, and those accepted will appear in a book which will be made available to delegates of IRF2018 during the event. Full papers will also be compiled in a USB-card and improved versions of selected papers will be considered for publication in indexed International Journals on the conference main topics.

For additional information, please contact either of the following:

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