UNCERTAINTY QUANTIFICATION AND RELIABILITY ANALYSIS IN ENGINEERING

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MINISYMPOSIUM

It has become a general understanding that uncertainties inherent in practical engineering must be taken into account in the analysis, evaluation and design of structural systems. The aim of this mini-symposium is addressing the advances on theory, methods and computationally efficient tools in the practice of uncertainty quantification, reliability analysis and design optimization of structural systems.
Topics of interest for this session include, but are not limited to:

- Uncertainty modelling, quantification and propagation
- Reliability analysis
- Sensitivity analysis under various uncertainties
- Reliability-based design optimization
- Robust design and optimization
- Simulation-based analysis and design under various uncertainties