



**The 13th International Conference on Quality, Reliability, Risk, Maintenance, and Safety Engineering
(QR2MSE 2023)
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Special Session: Advanced Structural Reliability Methods and Design Under Uncertainty

Uncertainty is ubiquitous in any engineering system and at any stage of system development, due to natural or physical randomness, lack of knowledge or lack of simulation or experimental data. How to deal with uncertainty in engineering is still very challenging.

This special session is aiming to discuss recent advanced structural reliability methods and design under uncertainty. The list of topics includes, but is not limited to:

- Structural reliability methods
- Structural reliability-based optimization
- Uncertainty modelling
- Uncertainty analysis
- Sensitivity analysis
- Design under uncertainty
- Decision-making under uncertainty
- Multidisciplinary Design Optimization (MDO) under Uncertainty
- Their applications in engineering systems

Chair: Hongshuang Li, Nanjing University of Aeronautics and Astronautics, China

Hongshuang Li received his Ph.D. degree at School of Aeronautics from Northwestern Polytechnical University in 2008. He is currently a professor at College of Aerospace Engineering, Nanjing Nanjing University of Aeronautics and Astronautics. He has published more than 60 journal papers, such as Structural Safety, AIAA Journal, Reliability Engineering and System Safety, Mechanical Systems and Signal Processing and etc. His current research interests are focusing on structural reliability methods, design under uncertainty and their applications in engineering systems. (E-Mail: hongshuangli@nuaa.edu.cn)

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Xiukai Yuan is currently an associate professor at School of Aerospace Engineering, Xiamen University. He has published more than 40 journal papers in prime journals (13 of them are JCR Q1), such as Structural Safety, Reliability Engineering and System Safety, Mechanical Systems and Signal Processing and etc. His current research interests are focusing on uncertainty analysis and design, structural reliability analysis, structural reliability-based optimization. (E-Mail: xiukaiyuan@xmu.edu.cn)

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