

An Official Publication of the Society for Risk Analysis

Call for Papers – Risk Analysis:

# Special Issue on "Sensitivity analysis at 30. How sensitivity analysis can help quantifying risks at times of crises"

#### Special Issue Editors:

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#### **Background and Focus:**

Risk Analysis and Sensitivity Analysis have a long history of cooperation. Sensitivity Analysis and Uncertainty Quantification are an integral part of quantitative risk assessment, providing decision-makers with indications about the key model parameters, the direction of change, the presence of interactions. Sensitivity analysis becomes even more important as part of explainable risk assessment, with analysts relying on increasingly complex simulators and artificial intelligence tools. Using models (simulators or machine learning algorithms) to obtain more resilient and adaptive strategies cannot be achieved without careful sensitivity analysis.

The journal is pleased to announce a forthcoming special issue dedicated to the pivotal role of sensitivity analysis in risk assessment. Sensitivity analysis involves exploring how variations in input parameters affect outcomes within a given analysis, providing clarity of how different models or algorithms identify and characterize risks. By identifying which variables most significantly impact risk outcomes, policymakers, scientists, and industry leaders can prioritise data collection, refine models, and make informed decisions that safeguard public well-being and environmental integrity.

This special issue invites contributions from researchers and practitioners who are at the forefront of applying sensitivity analysis within these critical areas. We seek to explore innovative methodologies, case studies, and theoretical advancements that underline the transformative potential of sensitivity analysis. By fostering a deeper understanding of its applications, we aim to equip decision-makers with the tools necessary to navigate the uncertainties that characterise our world. The 11<sup>th</sup> international conference on sensitivity analysis of model output has just finished in Grenoble (FR), marking 30 years of this series of conferences, whose works have been followed by risk analysis practitioners. The issue is open to papers presented at the 11<sup>th</sup> conference of sensitivity analysis in Grenoble as well other papers that deal with sensitivity analysis for the analysis of risks in Health, Safety and Environment.

### **Paper Submission Guidelines:**

Authors are invited to submit original articles that have not been previously published or are not under consideration for publication elsewhere. It is essential for authors to familiarize themselves with and adhere to our submission guidelines, which can be accessed <a href="here">here</a>. Each submission will undergo a rigorous peer review process to ensure the highest quality of scholarly work.

When submitting your paper, please indicate that it is intended for the special issue on "Sensitivity Analysis for the analysis of Risks in Health, Safety, and Environment" in your cover letter.

**Important Note**: To help us plan the review process, we kindly ask you to express your intention to submit a paper at your earliest convenience. Please do so by contacting Stefano Tarantola via email at <a href="mailto:stefano.tarantola@ec.europa.eu">stefano.tarantola@ec.europa.eu</a>.

## **Important Dates:**

Submission Deadline: October 31<sup>st</sup>, 2025
First-Round Reviews: January 31<sup>st</sup>, 2026

Special Issue Published: October 31<sup>st</sup>, 2026