

Special Session 2: Reliability in geotechnical engineering

Summary: Geotechnical engineering is subject to large uncertainties, not only due to spatially variable and uncertain ground conditions, but also due to significant model uncertainties involved in the design and assessment of geotechnical structures. There is increasing awareness that explicit treatment of uncertainties through uncertainty quantification and reliability analysis can be of great benefit to geotechnical engineering practice. Furthermore, the Eurocodes are reliability-based and facilitate reliability verification through probabilistic methods explicitly. This special session strives to highlight recent advances in geotechnical reliability and thereby to further advance the uptake of reliability methods in practical applications.

Organizers:

Dr. Timo Schweckendiek Deltares & Delft University of Technology
timo.schweckendiek@deltares.nl

Dr. Bram van den Eijnden Delft University of Technology
a.p.vandeneijnden@tudelft.nl

Workshop website: ipw2020.com/



IPW 2020

International Probabilistic Workshop 2020

The International Probabilistic Workshop (IPW2020) will take place on September 23-25, 2020 at University of Minho, Guimarães, Portugal.

The workshop aims at providing an international forum for the debate on, among others, issues such as the resilience, robustness and redundancy of systems, risk assessment and management, climate change and loading uncertainties, novel decision-making frameworks, and many other topics related to the fundamentals and application of probabilities.

The Conference is thus targeted to attendees from different stakeholders, respectively, from academia to industry.

Guimarães is a cosy and lively UNESCO city, considered as the cradle of Portugal. Attendees will have the opportunity to increase their network through a set of social events. On behalf of IPW2020, we looking forward to welcoming you to Guimarães for this promising event.

THEMES

- › Resilience, robustness and redundancy of systems;
- › Risk assessment and management;
- › Climate change and loading uncertainties;
- › Novel decision-making frameworks;
- › Fundamentals and application of probability theories.

OBJECTIVES

- › Increase the knowledge on probability theory and corresponding applications;
- › Discuss the topics of resilience, robustness and redundancy of systems;
- › Propose new methodologies for assessment and management of risk;
- › Increase the knowledge on the surrounding environment, especially on how climate change may affect it;
- › Support different stakeholders through the use of advance tools on their decision process.

ABOUT GUIMARÃES

Guimarães is considered the “Cradle of Portuguese nationality”, where the country was founded in the 12th century by King D. Afonso Henriques (1109-1185), Portugal’s first ruler. The city is famous for its architectural heritage, including many traditional buildings from the 15th to the 19th century, the food, popular traditions and handicrafts - features of great importance for attracting visitors to Guimarães.

CONTACTS

Department of Civil Engineering
University of Minho
Campus de Azurém
4800-058 Guimarães
PORTUGAL

Phone: +351 253 510 498

Fax: +351 253 510 217

Email: secretariat@ipw2020.com

URL: www.ipw2020.com



Ducal Palace

KEY DATES

Submission of abstracts: November 30, 2019

Notification of acceptance of abstract: December 31, 2019

Submission of full paper: February 29, 2020

Notification of acceptance of full paper: May 15, 2020

Deadline for presenting author registration: June 15, 2020

Worthwhile visits include: the historical centre, where its unique atmosphere of narrow streets and squares provides a meaning to the cultural heritage; the Ducal Palace, with its unusual roofs and 39 large brick chimneys; the medieval castle, where the Portuguese history began; the Monastery of Santa Maria da Costa and the Penha Sanctuary, with a beautiful landscape.

The conferences facilities in Guimarães are excellent and accommodation for the participants can be found in the city, at very reasonable prices. Participants can easily walk from the conference venue to the city centre and hotels.

COMMITTEES

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