

Special Issue

Sustainable Safety Assessment and Failure Analysis of Urban Underground Pipeline Networks

Message from the Guest Editors

Urban underground pipeline systems, including water supply, drainage, and energy transportation networks, form the backbone of modern cities. However, aging infrastructure, increasing environmental stress, and operational demands pose significant challenges to their safety, sustainability, and reliability. Corrosion defects, coupled with complex loading conditions and surface irregularities, frequently contribute to failures, leading to economic losses, environmental issues, and social disruptions. This Collection aims to address the safety assessment, failure analysis, and sustainable management of underground pipeline systems using advanced computational and analytical approaches. It aligns with the scope of Sustainability by integrating innovative assessment methods, predictive models, and cutting-edge technologies to promote sustainable urban infrastructure solutions. We invite submissions that contribute to understanding underground pipeline safety and management, focusing on topics such as numerical modeling, failure prediction methods, defect characterization, digital twins, and sustainable maintenance strategies.

Guest Editors

Prof. Dr. Bin Li

Dr. Kejie Zhai

Dr. Xueming Du

Deadline for manuscript submissions

30 September 2025



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/228413

Sustainability
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sustainability@mdpi.com

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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario
Institute of Technology, Oshawa, ON L1G 0C5, Canada

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