

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

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Deadline for manuscript submissions

31 May 2026



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/228413

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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. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full 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

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