Special Issue

Computer-Aided Sustainable Development in Underground Engineering

Message from the Guest Editors

Underground engineering has emerged as a critical infrastructure solution for addressing the growing challenges of urbanization, resource scarcity, and environmental sustainability. As global populations continue to concentrate in urban areas, the efficient utilization of underground space becomes increasingly vital for sustainable city development. The integration of advanced computer-aided technologies with sustainable engineering practices represents a paradigm shift in how we design, construct, monitor, and maintain underground infrastructure systems. The convergence of computational methods, artificial intelligence, digital twin technologies, and sustainable engineering principles offers unprecedented opportunities to optimize underground projects while minimizing environmental impact. From smart tunneling systems and automated construction processes to predictive maintenance and lifecycle assessment tools, computer-aided approaches are revolutionizing the field of underground engineering. These technological advances enable engineers to make data-driven decisions, reduce material waste, and enhance structural performance

Guest Editors

Dr. Junling Qiu

School of Highway, Chang'an University, Xi'an 710064, China

Dr. Enlin Ma

School of Architecture and Civil Engineering, Xihua University, Chengdu 610039, China

Prof. Dr. Jinxing Lai

School of Highway, Chang'an University, Xi'an 710064, China

Deadline for manuscript submissions

20 August 2026



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/251576

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

mdpi.com/journal/ sustainability





Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



About the Journal

Message from the Editor-in-Chief

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

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

