

Special Issue

Advanced Technologies in Landfills

Message from the Guest Editors

Over the past few decades, the rapid increase in the global annual production of solid wastes. Up to now, sanitary landfills have been the main method of solid waste disposal all around the world. Advanced landfill technologies have been developed to ensure the safe and stable operation of landfills, and to effectively process the leachate, gas and heat generated by landfills, thereby realizing resource utilization. This Special Issue concerning the advanced technologies in landfills is therefore proposed. The following are some of the major areas which could be addressed in this Special Issue:

- Composite liner performance;
- Closure cover;
- Cutoff wall;
- Slope stability;
- Stabilization of solid wastes;
- Leachate treatment;
- Gas collection;
- Heat recovery;
- Resource utilization;
- Land contamination and remediation;
- Laboratory and field testing methods;
- Field monitoring;
- Environmental assessment;
- New and emerging issues and technologies.

Keywords: landfill; municipal solid waste; fly ash; composite liner; slope stability; closure cover; leachate treatment; gas collection; heat recovery

Guest Editors

Dr. Shi Shu

Geotechnical Engineering Research Institute, Hohai University, Nanjing 210024, China

Dr. Yuping Li

Geotechnical Engineering Research Institute, Hohai University, Nanjing 210024, China

Deadline for manuscript submissions

closed (20 October 2025)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/202277

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

[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)