



## Recent Advances in Waste Management and Recycling

Guest Editor:

**Prof. Dr. Paulo Ferrão**

Center for Innovation,  
Technology and Policy Research,  
Avenida Rovisco Pais, 1049-001  
Lisboa, Portugal

Deadline for manuscript  
submissions:

**closed (30 April 2024)**

### Message from the Guest Editor

Dear Colleagues,

In recent years, the focus of waste management and recycling has shifted towards a circular economy and sustainable practices. This transition, however, is not uniform and varies by region, influenced by factors such as local economies, legislation, and public pressure. To make informed decisions on technological options, optimization and simulation models are necessary. However, there is still much room for improvement, both in technology as well as in modeling dimensions, such as the use of thermo-chemical valorization of waste or exploring waste streams to create marketable co-products. Acknowledging the important role of informal sectors in waste collection and recycling is also critical.

Overall, recent advances in waste management and recycling aim to transition to a circular economy and sustainable practices. In this Special Issue, the submission of manuscripts on the use of rigorous mathematical optimization and simulation models and innovative technologies to support localized waste management strategies, is welcome to contribute towards creating a cleaner and more sustainable future.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Sergio Ulgiati**

1. Department of Science and  
Technology, Parthenope  
University of Naples, Centro  
Direzionale, Isola C4, 80143  
Napoli, Italy  
2. State Key Joint Laboratory of  
Environment Simulation and  
Pollution Control, School of  
Environment, Beijing Normal  
University, No. 19 Xijiekouwai  
Street, Beijing 100875, China

## Message from the Editor-in-Chief

Environmental issues are quickly becoming central political, economic and academic topics of the twenty-first century. A large number of modern challenges are directly or indirectly caused by complex interactions between environmental issues. Such issues require interdisciplinary research, knowledge and insights to understand and, ultimately, for solutions to be found. Through the journal *Environments*, we strive to create a platform for meaningful discourse by accepting contributions from a wide range of fields. We sincerely hope you will consider publishing your distinguished work in this highly-accessible, peer-reviewed journal.

## Author Benefits

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

**High Visibility:** indexed within **Scopus**, **ESCI (Web of Science)**, **PubAg**, **AGRIS**, **GeoRef**, and **other databases**.

**Journal Rank:** CiteScore - Q1 (*Ecology, Evolution, Behavior and Systematics*)

## Contact Us

*Environments* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/environments](http://mdpi.com/journal/environments)  
[environments@mdpi.com](mailto:environments@mdpi.com)  
[X@Environ\\_MDPI](#)