Special Issue

Ecotoxicology and the Fate of Contaminants in the Circular Economy

Message from the Guest Editors

The presence and fate of chemical contaminants in recycled goods pose a significant challenge to the sustainability of the circular economy. This can potentially increase risks to human health and ecosystems. A key challenge in this field is the lack of standard methods for reliably quantifying the presence of contaminants in secondary raw materials and their migration to the exposed environmental median and receptors. The complexity and heterogeneity of these materials, combined with the diverse chemical nature of contaminants, necessitate the development of harmonized methodologies to ensure comparable data for risk assessment. Furthermore, exposure assessments should align as closely as possible with the intended use (or ultimate fate) of recycled materials, balancing hazard-based and risk-based approaches towards more realistic risk estimates.

This Special Issue aims to compile innovative research on the monitoring, ecotoxicological characterization, and environmental fate of contaminants and Non-Intentionally Added Substances (NIAS) in secondary raw materials and recycled products.

Guest Editors

Dr. Giovanni Beggio

Department of Civil, Environmental and Architectural Engineering, Università degli Studi di Padova, Padua, Italy

Dr. Tiziano Bonato

Department of Environmental Sciences, Informatics and Statistics (DAIS), Ca' Foscari University of Venice, Via Torino 155, Venezia Mestre, 30172 Venice, Italy

Deadline for manuscript submissions

30 September 2025

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/232529

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

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, CAPlus / SciFinder, and other databases.

Journal Rank:

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