

## Special Issue

# Emerging Technologies for Waste Treatment, Reuse and Energy Production

### Message from the Guest Editors

There is an urgent need for circular economy and better waste management and for addressing energy demand issues as well as environmental challenges in order to reach and implement the United Nations Sustainable Development Goals (SDGs). In this Special Issue, original research articles and reviews are welcome and research areas may include, but are not limited to:

- Applied novel practices of waste treatment, waste to energy (WtE), biofuels, and value-added products;
- Thermo-chemical conversion for solid, liquid, and gaseous biofuels (e.g., pretreatment, gasification, combustion, torrefaction, pyrolysis, hydrothermal carbonization, etc.);
- Bio-chemical conversion of waste/biomass to liquid and gaseous biofuels;
- Physico-chemical conversion (transesterification);
- Green nano-catalysis for biofuel production;
- Integrated WtE cycles for green energy generation, zero waste, and carbon neutrality;
- Utilization of secondary wastes (e.g., bottom ash and fly ash);

We are looking forward to receiving your contributions.

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### Guest Editors

Dr. Agapi Vasileiadou

Dr. Vasilis Evagelopoulous

Dr. Costas Tsiptsias

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### Deadline for manuscript submissions

20 December 2025



## Applied Sciences

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## 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.

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### Editor-in-Chief

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