Special Issue

Breakthroughs in Anaerobic Digestion: New Trends and Advanced Processes

Message from the Guest Editor

Anaerobic digestion is a well-known and widely applied technology where a microbial consortium facilitates the degradation of organic matter into a number of valuable products, such as energy in the form of methane and/or hydrogen; a digestate with fertilizing properties; and other by-products, such as short-chain fatty acids.

However, the great potential of this technology is yet underexploited, and current facilities are mainly focused on the production of biogas or as a means to reduce the organic load from wastewaters. Furthermore, recent breakthroughs in artificial intelligence present a promising perspective in terms of process control and mechanization, reducing the traditional issues related to the maintenance of anaerobic digesters.

Therefore, the objective of this Special Issue is to consolidate recent breakthroughs in anaerobic digestion processes and energy utilization, thereby advancing the current state-of-the-art through the compilation of pioneering theoretical insights and engineering applications.

Guest Editor

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Deadline for manuscript submissions

20 January 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/239195

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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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