Special Issue

Advanced Technology and Applications of Artificial Intelligence in Wastewater Treatment

Message from the Guest Editors

Artificial intelligence applications have the potential to solve the problems faced by wastewater treatment systems, the results of which manifest as significant cost savings through the accurate prediction of process behavior and efficient operational optimization. We can successfully apply solutions based on advanced technology and artificial intelligence that solve the following problems:

- Optimizing control processes within a wastewater treatment plant.
- The predictive maintenance of assets within treatment plants.
- Intelligent monitoring of quality parameters of treated water.
- Optimizing anaerobic digestion processes to maximize biogas production and reduce carbon footprint.
- Intelligent management of energy-consuming operations based on scheduled operation in the minimum cost period.
- The dynamic optimization of treatment processes by adjusting the operational parameters.
- Optimizing the dosing processes within treatment plants

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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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