



Machine Learning Applied in Wastewater Treatment

Guest Editors:

Dr. Alam Nawaz

School of Chemical Engineering,
Yeungnam University, Gyeongsan
712749, Republic of Korea

Dr. Amjad Riaz

School of Chemical Engineering,
Yeungnam University, Gyeongsan
38541, Republic of Korea

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editors

Machine learning techniques can be applied in wastewater treatment to improve the efficiency, reliability, and cost effectiveness of the treatment process. Here are some ways in which machine learning can be applied in wastewater treatment:

1. **Prediction of Wastewater Characteristics:** Machine learning algorithms can be used to predict the characteristics of incoming wastewater, such as its flow rate, chemical oxygen demand (COD), biological oxygen demand (BOD), and total suspended solids (TSS).
2. **Optimization of Treatment Process:** Machine learning algorithms can be used to optimize the treatment process by adjusting the dosage of chemicals, aeration rate, and other parameters.
3. **Monitoring and Control of Treatment Plant:** Machine learning algorithms can be used to monitor and control the treatment plant's operations in real time.

By analyzing large amounts of data and providing real-time insights, machine learning algorithms can help operators make better decisions, optimize the treatment process, and reduce costs.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and
Technology, University of Turin,
Via P. Giuria 9, 10125 Turin, Italy

Message from the Editor-in-Chief

Processes (ISSN 2227-9717) provides an advanced forum for process/system-related research in chemistry, biology, material, energy, environment, food, pharmaceutical, manufacturing and allied engineering fields. The journal publishes regular research papers, communications, letters, short notes and reviews. Our aim is to encourage researchers to publish their experimental, theoretical and computational results in as much detail as necessary. There is no restriction on paper length or number of figures and tables.

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, AGRIS, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Chemical*) / CiteScore - Q2 (*Chemical Engineering (miscellaneous)*)

Contact Us

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

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/processes
processes@mdpi.com
[X@Processes_MDPI](https://twitter.com/Processes_MDPI)