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Wastewater Treatment in Chemical Engineering

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Editorial

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INTRODUCTION

Wastewater treatment is a crucial area where chemical engineering principles are applied to protect environmental and public health. Modern research emphasizes sustainable and energy-efficient treatment methods.

Key Research Areas

Biological Treatment: Activated sludge and biofilm reactors [1].

Advanced Oxidation Processes (AOPs): Effective for degrading recalcitrant pollutants [2].

Membrane Bioreactors (MBRs): Combining biological treatment with membrane separation [3].

Adsorption Techniques: Activated carbon and nanomaterials for pollutant removal [4].

Zero-Liquid Discharge (ZLD) Systems: Recovering water for reuse [5].

REFERENCES

1. Gates BC. Catalytic Chemistry. Wiley.1912.
2. Levenspiel O. Chemical Reaction Engineering. Wiley.1991.
3. Froment GF, Bischoff KB. Chemical Reactor Analysis and Design. Wiley. 1990.
4. Kunii D, Levenspiel O. Fluidization Engineering. Butterworth-Heinemann. 1991
5. Crowl DA, Louvar JF. Chemical Process Safety. Pearson. 2011.