

RESEARCH NOTES

Fenton氧化法处理填埋渗滤液

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收稿日期 修回日期 网络版发布日期 接受日期

摘要 Central composite design (CCD), the most popular design of response surface methodology (RSM), was employed to investigate the effect of total organic carbon (TOC) ratio of high molecular weight organic matter (HMW) to low molecular weight organic matter (LMW), the LMW strength and molar ratio of hydrogen peroxide to ferrous ion on landfill leachate treatment by Fenton process. Based on the experimental data, a response surface quadratic model in terms of actual factors was obtained through analysis of variance (ANOVA). The model showed that TOC removal increased with the increase of HMW to LMW ratio and the decrease of LMW strength. There existed an optimal hydrogen peroxide to ferrous ion molar ratio for TOC removal.

关键词 [Fenton reagent](#) [landfill leachate](#) [oxidation](#)

分类号

DOI:

Treatment of Landfill Leachate by Fenton Oxidation Process

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Received Revised Online Accepted

Abstract Central composite design (CCD), the most popular design of response surface methodology (RSM), was employed to investigate the effect of total organic carbon (TOC) ratio of high molecular weight organic matter (HMW) to low molecular weight organic matter (LMW), the LMW strength and molar ratio of hydrogen peroxide to ferrous ion on landfill leachate treatment by Fenton process. Based on the experimental data, a response surface quadratic model in terms of actual factors was obtained through analysis of variance (ANOVA). The model showed that TOC removal increased with the increase of HMW to LMW ratio and the decrease of LMW strength. There existed an optimal hydrogen peroxide to ferrous ion molar ratio for TOC removal.

Key words [Fenton reagent](#); [landfill leachate](#); [oxidation](#)

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