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Phosphate recovery from swine wastewater using plant ash in chemical crystallization



Haiming Huang, DingDing Zhang, Jing Li, Guojun Guo, Shoufeng Tang

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Highlights

- Solution pH and the presence of K have a marked effect on the purity of struvite.
- The optimal pH for the formation of K-struvite is 10.
- The competitiveness of K-struvite formation increased with the concentration of K.
- It is feasible to use plant ash as the pH regulator in struvite crystallization.
- Economic evaluation indicated that using plant ash could save 19.6% of the cost.

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