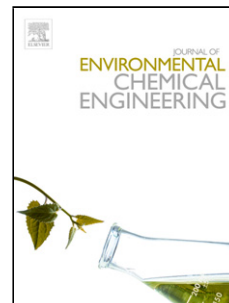


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## SYNTHESIS OF ZEOLITES FROM BRAZILIAN COAL ASH AND ITS APPLICATION IN SO<sub>2</sub> ADSORPTION

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### Highlights

- Synthesis of zeolites derived from Brazilian coal fly ash was carried out
- The zeolites merlinoite and perliaite were identified
- The synthesized zeolites were tested for SO<sub>2</sub> adsorption
- the precursor ash, activated carbon and commercial zeolite were also applied
- The synthesized zeolites presented higher values of maximum adsorption

### Abstract

Coal ash is a waste generated in large quantities in the power plants. Interestingly, ashes can be used for the synthesis of zeolites. In this work, the synthesis of zeolites from fly ash and its application for gas desulfurization was studied. The synthesis was performed by the hydrothermal method using an alkaline solution of KOH. The variables temperature (373

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