Al and Fe Retention Behavior of Coal in Acid Environments. (S02-etter155158-Poster)

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Abstract:

Aluminum and iron adsorption on natural coal was investigated as a function of solution pH and presence of amorphous Al and Fe coatings on coal. Adsorption experiments were carried out in a reaction vessel to determine adsorption envelopes and amount of Al, Fe, or both adsorbed as a function of solution pH. The constant capacitance model was fit to the adsorption data to obtain values of the intrinsic Al and Fe surface complexation constants. Results of Al and Fe adsorption experiments and effects amorphous coatings are discussed.

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