Simple Numerical Solution for Evolution of the Interaction Between Heavy Metals and Sorbent

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To predict particle growth and morphology for gas to particle conversion system, simple numerical method have been developed. The present model is applied to toxic metal capture by sorbent. By comparing with more detalied methods, such as NGDE (Nodal General Dynamic Equation) and discrete sectional methods, the accuracy is evaluated. The present trimodal monodisperse model consists of two fixed mode and one moving mode for each component. The two fixed mode represent monomer mode and nucleation mode and moving mode describes the accumulation mode. The present model well agrees with detailed numerical model and experimental data. The computational load of the present model is alomost same with monodisperse model.