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## Study of Cahn-Hilliard Equation to Simulate Phase Separation

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**Abstract :** An investigation into Cahn-Hilliard equation was carried out through numerical simulation to identify a possible phase separation for one and two dimensional domains. It was observed that this equation can reproduce important mass fluxes necessary for phase separation within the miscibility gap and for coalescence of particles.

**Keywords:** Cahn-Hilliard equation, miscibility gap, phase separation, dimensional domains

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