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**Modeling and Simulation on the Morphological Evolution  
in Complex Flow Field**

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Morphological evolution is an essential problem in the processing of polymer blend. It is a hard task to simulate the morphology of the blend in a quantitative manner. A simple model was suggested to describe the droplet deformation, breakup and coalescence during mixing in this paper. The model was applied to complex flow fields by a finite element method. The spatial distribution of droplet size, deformation and orientation could be well simulated.