

# MODELLING, ANALYSIS AND SIMULATIONS OF COAGULANT FLUIDS

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## ABSTRACT

In the mathematical modelling and simulation of coagulating fluids from real life applications in various fields such as biology (populations evolution), chemistry (polymerization) or medicine (blood flows) the effects of viscosity, damping, diffusion or capillarity relative to the transport mechanisms are of the most importance. We are interested in getting a better understanding of the coagulation and fragmentation phenomena in fluids. Here we will focus on the balance of dissipative/dispersive effects and we will analyse the well-posedness and the limit behaviour of some scalar equations of Korteweg-de Vries-Burgers type.

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## References

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