On the simulation of Sheet Moulding Compound (SMC) forming processes

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ABSTRACT

Most suspension descriptions nowadays employed are based on the Jeffery's model and some phenomenological adaptations of it that do not take into account neither size effects nor mechanisms being able to activate rod bending. New models able to enrich first gradient kinematics as well as to activate rod-bending mechanisms (needed for explaining elasticity experimentally noticed) are needed. In this paper we propose a modelling framework for integrating all these ingredients, that could be then applied for simulating flows of entangled systems of deformable rods, as encountered for example in SMC processes.

REFERENCES

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