

Abstract Submitted  
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**A study of the effect of shear thinning in EOR by surfactant-polymer Flooding**<sup>1</sup> PRABIR DARIPA, Department of Mathematics, Texas AM University, ROHIT MISHRA, Department of Mechanical Engineering, Texas AM University — We have developed an in-house robust hybrid method for multi-component multi-phase flow in porous media arising in the context of enhanced oil recovery. This hybrid method is based on modified method of characteristics and discontinuous finite element method. We use this method to study the effects of a mixing model and effect of shear thinning on the fingering in enhanced oil recovery by surfactant-polymer flooding. This is an ongoing project and results of our study will be presented.

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