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**Flow of Slurry in the Inclined Closed Channel** NARIMAN ASHRAFI KHORASANI, PARASTOO PIROOZRAM, Young Researchers and Elites Club, Science and Research Branch, Islamic Azad University — The flow of slurry in a closed inclined circular channel is examined. The viscoelastic fluid is modeled as a derivative of typical Oldroyd-B relation of stress and velocity gradient. First, gravity is considered as the driving force for the fluid flow to simulate the existing sewage system. The complete flow field is evaluated for this case. Next, a pressure gradient is introduced to observe its effects on the flow. Velocity profile as well as stress distributions are given for different scenarios of the nonlinear fluid flowing in a closed channel with and without pressure gradient.

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