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ELASTO-VISCOPLASTIC FLUID FLOW IN TUBES OF ARBITRARY CROSS-SECTION

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Highlights

- First paper on the elasto-visco-plastic behavior in tubes of arbitrary cross-section.
- New constitutive equation to predict the behavior of elasto-visco-plastic fluids.
- Imparting elasticity to a viscoplastic fluid triggers flow enhancement.
- Effect of the presence of elasticity on the stagnant and plug zones of viscoplastic fluids.
- Versatile analytical approach to produce a large spectrum of arbitrary tube contours.

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