

The transient vaporous and gaseous cavitation phenomena in an elastic pipeline are investigated for homogeneous liquid-gas mixture flow. It has been shown, in the case of two components having the same velocity, that modelling is also possible by considering the continuous character of the medium, i.e. without any location of column separation. The governing equations have been solved by using two finite difference schemes: the Mac Cormack's scheme and an improved new finite difference two-time step scheme. Characteristics method is used at the boundaries. The theoretical results obtained are compared and found to correlate well with similar results