On one modell of natural gas transformation into crystalline substance for gas nonstationary flow

Teimuraz Davitashvili
Meri Sharikadze
E-mail: temuri.davitashvili@viam.sci.tsu.ge
Exact and Natural sciences Faculty, Ivane Javakhishvili Tbilisi State University, I.Chavchavadze Ave. 1,0179. Tbilisi,Georgia

At present pipelines have become the most popular means of transporting natural gas. There are many scientific articles denoted to the problem of prediction of possible points of hydrates origin in the main pipelines for gas stationary flow. In this paper a mathematical model of hydrates origination in the gas main pipeline taking into consideration gas non-stationary flow is studied. For solving the problem of hydrates origination in the gas main pipeline taking into consideration gas non-stationary flow the system of partial differential equations is investigated. For learning the affectivity of the method one general test was created. Numerical calculations have shown efficiency of the suggested method. The results of numerical calculations are given.