

**Department "Applied Mathematics" RMI ANAS  
for the first 6 months of 2022  
Report**

**ABOUT SCIENTIFIC ACTIVITIES**

The department employs 8 researchers and 1 senior laboratory assistant. Two of them are PhDs doctor and four are PhDs.

The department performs scientific work on the topic: "Modeling the movement of gas, liquid and gas-liquid mixture in the reservoir-well system" and "Deformation of inhomogeneous structural elements, stability and use of composite materials."

During the first 6 months, 6 articles and 5 theses were prepared and submitted for publication. Published 4 articles, 4 theses.

E.M. Abbasov in the section "Modeling and control of heat and mass transfer processes" at the "XVI Minsk International Forum on Heat and Mass Transfer", held in Minsk on May 16-19, 2022, made a presentation on the topic "Modeling the heat transfer process". When displacing oil in the coupled reservoir-well system".

The department participated in the competition of the "Science Foundation" in 2022 with the project "Hydrodynamics of the processes of increasing the efficiency of the fight against the manifestation of sand" and won. The duration of the project is from 05/01/2022 to 05/12/2022. The price is 55 thousand manats. Scientific calculations carried out on the topic of the project were formalized in the form of an article and published in the journal indicated below.

1. E.M. Abbasov, G.R.Agayeva, T.S.Kengerli, N.R. Abdullaeva Modeling conclusions about the process of filters operation based on oil and gas production indicators // Journal of Modern Applied Mathematics - ISSN: p. 222-5498, Volume 12, Issue 1, 2022.

The work progress is normal, there are no delays.

**Department head:**

**E.M.Abbasov**