

## **Inverse coefficient problem for mass transfer in two-zone cylindrical porous medium**

### **ABSTRACT**

In the paper posed and solved numerically the inverse problem of mass transfer in a medium consisting of macroporous and microporous cylindrical zones. By solving the direct problem on the basis of the diffusion approach developed initial data, and inverse problem was solved using the identification method to determine the mass transfer coefficient in the kinetic equation. Also solved the direct problem on the basis of the kinetic approach, using the obtained the solution of the inverse problem, and it is shown that the diffusion and kinetic approaches yield similar results.

**Keyword:** Inverse problem; Mass transfer; Cylindrical zones