

ON THE STATISTICAL THEORY OF RELAXATION  
PROCESSES AND MASS TRANSFER PHENOMENA  
IN ASYMMETRIC LIQUIDS

*S. Odinaev, A. Abdurasulov, F. Murodov*

S.U. Umarov Physical-Technical Institute,  
Acad. Sci. of the Republic of Tadjikistan  
(299/1, Aini Str., Dushanbe 734063, Tajikistan)

S u m m a r y

The dynamic process of mass transfer in liquid systems consisting of identical rigid molecules, which have an arbitrary form and possess translational and rotational degrees of freedom, has been studied. General analytical expressions for the dynamic coefficients of diffusion, thermo-diffusion, and convection, as well as for the corresponding dynamic moduli of elasticity, which make allowance for the features of the molecular structure of a liquid, have been obtained.