Frustration of the freezing mechanism using a binary mixture

V. Carrasco-Fadanelli[a], A. Huerta[a] and A. Trokhymchuk[b]

[a] *Universidad Veracruzana, Facultad de Física e Inteligencia Artificial, Departamento de Física, Universidad Veracruzana, Circuito Gonzálo Aguirre Beltrán s/n Zona Universitaria Xalapa, Veracruz, C.P. 91000, México, E–mail: fadanellivc@gmail.com, adrian.huerta@gmail.com*

[b] *Institute for Condensed Matter Physics, National Academy of Sciences of Ukraine, Department of the Theory of Solutions, Lviv 79011 Ukraine, E–mail: adt@icmp.lviv.ua*

Using a binary mixture of the hard disks we study the mechanism of frustration of the freezing phenomenon that takes place in a one-component hard disks system. We report the thermodynamics, structure and transport properties of the hard disks mixture at equimolar conditions and for different disk diameter ratios.