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**ACOUSTICAL EFFECT ON FLUID IN GRANULAR MEDIUM**

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*Results of experimental research of acoustical effect on crude oil flow in granular medium are considered. Crude oil reveals its visco-elastic nature. Viscoelastic properties become more pronounced for the dynamics of confined liquids, where shear stress is essential. At low frequencies elastic media differ from liquids namely by their resistance to shear deformation, which is completely absent in liquids. This is the class of non-Newtonian fluids. For such media shear viscosity modulus generally decreases with the increase in shear tension - in the vicinity of a solid boundary this leads to the facilitated slip of the strained fluid. Numerous experimental and theoretical researches show hysteresis of mesoscale structures essentially changes nonlinear properties of the media. Nonlinear Resonance Acoustical Spectroscopy approach was applied research of visco-elastic phase transition in a granular medium. Nonlinear acoustics response up to the first three harmonics of the primary signal was considered in the dependence on fluid flow velocity are considered. Slow dynamics effect related to memory to acoustical excitation of visco-elastic medium has been investigated. Nonlinear acoustics response up to the first three harmonics of the primary signal at the frequency of several kHz was considered in the dependence of fluid flow rate. In conclusion some considerations of the nature of nonlinear acoustic impact on phase transition in confined visco-elastic fluid are discussed.*