

# INVESTIGATION OF FRICTION JOINTS WORKING IN NUCLEAR PLANT WITH HEAT TRANSFER MEDIUM CONSIST OF HEAVY HIGH TEMPERATURE LIQUID METAL

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The experimental equipment developed for the decision of tribological problems, arising at use of friction joints in the environment of heavy liquid metals is submitted as heat-transfer medium for contours of nuclear power installations. For researches of fretting-corrosion of heat release pipes in contact with spacer grid cell the installation modelling a fretting process in the contacts with the purpose of a substantiation of vibration strength of a steam generator of a reactor on fast neutrons with the lead heat transfer medium is created. Experimental installation for research and resource tests of cylindrical involute gearings and the sliding bearings working in reactors on fast neutrons in the environment of the lead heat transfer is described. Experimental samples of circulating pumps for reactor installations, intended for research of wear process characteristics of steel and cast iron sliding support working in the environment of lead, eutectic alloys lead - bismuth and lead - lithium are developed.

*Friction joints, experimental equipment, nuclear plant, heavy liquid metal heat transfer medium, wear*

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