

Report of “Wave Dynamics” department of the Institute of Mathematics and Mechanics of ANAS for the year of 2015.

On the report period, in the department the research works are carried out on the theme “Investigation of wave problems in elastic and inelastic bodies”. The department consists of 12 collaborators. 10 of them are engaged in scientific work.

On the report period, one of the research associates of the department has given a talk at the institute seminar. 20 scientific papers were submitted to print. 12 of them have been published.

Investigation of free vibration of noncircular membrane,

Investigation of dynamic propagation of cracks in the interface of two media,

Stability of fibres made of nanocomposite materials in infinite elastic matrix surrounded with shells,

Investigation of free oscillations of medium filled spherical shells,

Investigation of three – dimensional problems of wave propagation in half – space,

Free oscillations of fluid – filled reinforced cylinder,

Free oscillations of fluid – filled orthotropic cylinder,

Investigation of fracture problems in sandwich orthotropic materials,

Stability of medium – contactiry, reinforced anisotropic cylindrical shell,

Asymptotic analysis of eigen oscillations of medium - contactiry, reinforced anisotropic cylindrical shell.

Head of “Wave Dynamics” department

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