

**Semi-annual report to the department "Theory of elasticity and plasticity"
IMM ANAS for the years 2021**

About scientific activity.

There are 5 research workers in the department: 2 associate professors, 2 candidates of sciences, 1 junior research assistant, 1 senior laboratory assistant, translator and engineer.

The department investigates 5 scientific works on the topic: "Bending, stability and vibrations of elements of inhomogeneous and anisotropic structures."

The research was proceeding normally, there were no delays.

Work A. Research of boundary value problems, mathematical modelling and engineering computation in theories of plastic and shells. (Kh.I. Musaev)

Work B. Free vibrations of a pipe with rigidly and elastic fixed edges taking into account the resistance of a linear medium. (G.R. Mirzaveva)

Work C. Investigation of solutions of three-dimensional boundary value problems in the inner part and conical cuts of spherical shells. (F.S. Guseinov)

Work D. Prevention of cracking under the influence in a perforated homogeneous plate. (E. Shakhbendiev)

Work E. Determination of vibrations of an orthotropic cylindrical plate in contact with an elastic medium, fixed by salt-forming rods. (A. Movsumova)

On scientific organizational activity

In the department every 2 weeks (on Fridays) at 12:00, observing the quarantine conditions for the ZOOM application, a seminar is held.

It mainly discusses the reports of employees of the department, doctoral students, and in some cases, reports of employees of other scientific institutions. The employees of the department take an active part in all-institute seminars and scientific conferences, where they give reports.

If necessary, the seminars discuss the results of dissertations by employees of other scientific institutions.

The employees of the department continue their scientific and pedagogical activities.