

# METHODS AND MEANS OF MEASURING THE KINEMATIC CHARACTERISTICS OF ACOUSTIC WAVEGUIDES

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The article discusses methods and means for measuring the kinematic characteristics of an acoustic waveguide, such as phase and group velocities, as well as the invariant of the spatial–frequency structure of the acoustic field proposed in Chuprov’s works. Currently, work has intensified on the use and refinement of the latter in relation to such hydroacoustics tasks as detecting weak signals, estimating the distance to the source, etc. The results of model and field experiments to evaluate the kinematic characteristics of a waveguide using such means as acoustic interferometers, vertical antennas, and vector receivers are discussed. The technical means were developed in the Department of Technical Means of Ocean Research at the TOI Far Eastern Branch of the Russian Academy of Sciences.

**Keywords:** hydroacoustics, complex signals, kinematic characteristics, waveguide, phase velocity, group velocity, vector receiver, sound pressure, oscillatory velocity

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