

The invention relates to area of measurement, in particular to determination of physical-mechanical properties of materials, with porous and composite ones included, produced by powder technologies. Method for determination of modulus of elasticity of materials is in fact that in rod sample made of material under investigation one excites resonance mechanical vibrations, with measurement of frequency of one of forms of natural vibrations, with determination of modulus of elasticity. After that one measures resonance frequency at not less than two amplitudes of vibrations of sample, and linear dependence of resonance frequency on amplitude obtained is extrapolated to zero amplitude of vibrations. Value of modulus of elasticity of material is calculated by values of resonance frequency at zero amplitude of vibrations obtained. Technical result of the invention is in increase of accuracy of determination of characteristics of elasticity of materials.