

## **Study of the Structural Evolution Kinetics and $\alpha+\beta$ - Titanium Alloy Polymorphous Transformation by Acoustic Emission**

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The applicability of the acoustic methods for the control of the quality of the  $\alpha+\beta$  titanium alloys after their strengthening by heat treatment has been studied. For this goal, the temperature dependences of the acoustic emission (AE), the ultrasound speed and attenuation coefficient, and the dilatometric parameters in an interval of 20-1000°C were studied for the VT23 alloy samples taken in the initial, quenched, annealed, and aged states.