

## CONCLUSIONS

In the course of this diploma work, we reviewed scientific achievements in the development of technologies for strengthening titanium alloys and new methods for their powder preparation, and analyzed scientific articles and publications in the direction of creating pseudo-beta alloys. Samples were prepared for the studies and experiments were carried out on the surface hardening of wire samples of the alloy VT-22. Optical and X-ray methods are used to study the effect of treatment on residual stresses and the morphology of the phase state of a two-component titanium alloy VT-22. Samples with surface treatment for bending were prepared and tested, structural changes as a result of the tests were analyzed. According to the results of the research at the IFT conference of NTUU "KPI" a report was presented that received the "Literacy Certificate".