

## CONCLUSIONS

1. The work conducted experimental study of the effect of dispersion powder TiH<sub>2</sub> to seal during pressing and sintering.
2. The lowest porosity and greatest tensile strength when compressed with compacts fraction formed from titanium hydride powder with an average particle size of 20 microns.
3. Pressing a multi cyclic loading conditions enables to get compacts fractions with an average particle size of 20 microns with a porosity of 10% already pressing at pressures of 560 MPa, which positively affects the processes of consolidation during sintering.
4. Established that the degree of compaction of powders of titanium hydride mainly affect grain size. Moreover, with increasing degree of dispersion powder compaction slightly reduced, which explains the increase in the fair value of internal friction between particles of powder and external - friction between the surface and compacts matrix mold. Increasing polydispersity powder mixture leads to a dense stacking them while pressing and getting the most dense compacts with the same values of compaction pressure.
5. The influence of temperature and particle size distribution of titanium hydride powder on the structure and residual porosity sintered compacts. And in the smallest fractions observed most seal.
6. The calculated estimated cost of the planned work on the basis of costs of all resources, reasonable economic feasibility of the implementation of this work.
7. Analysis of dangerous and harmful factors also developed the means to address them and ensure safety in the event of an emergency.