

CONCLUSIONS

During the research work was produced porous ceramic material based on aluminum oxide with addition of carbon nanotubes in an amount of 1,2,3,4,5% wt., And studied its properties.

1. Preparation oskyda mix of aluminum and carbon nanotubes in the mixer type mixer results in a fairly homogeneous distribution in the bulk oxide nanotubes, providing quite high transport properties of composite.

2. With photos microstructure can see that this material is characteristic of the micro and macro porosity, through the formation of agglomerates and the content of carbon nanotubes.

3. It is established that the addition of carbon nanotubes to ceramic materials rapidly increasing their electrical conductivity, which in turn allows us to provide a composite material conductive properties.

4. In a number of CNTs Contents (1 - 2% mass) элeктропроводност Virtually no меняється and составляє neighborhood of 5×10^{-8} S / cm. Increase content nanotube mass to 5% for cutting lead to an increase $\text{элeктропроводности}$ 3×10^{-4} S / cm.

5. With increasing compaction pressure can be increased specific conductivity through better contact conductive particles together.

6. The cost of routine Detected conduct research on the topic "Obtaining and properties of highly porous ceramic materials based on nano oxides", which amounted to 57,671.77 UAH.

7. Established that research carried out in laboratories that are fully compliant with electrical and fire safety.