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**NANOSIZE POWDERS OF REFRACTORY COMPOUNDS FOR OBTAINING OF
FINE-GRAINED CERAMIC MATERIALS**

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Most of ceramic materials are made from powders and therefore their properties depend to a large extent on the quality of the starting powders. The powder determines processing, sintering behavior and the subsequent formation of the microstructure, which strongly influences many properties of the dense materials. One of the ways for production of ceramic materials with a fine-grained structure is the application of nanopowders. Different methods are used for production of nanopowders. One of them is the method of plasmachemical synthesis. Different nanopowders of refractory materials can be obtained by this method. Preparation of nanosized powders of nitrides and oxides and their composites by the method of plasmachemical synthesis, their characteristics and the possible advantages of nanopowders were investigated.