

## Synthesis of nanoscale aluminum and zirconium oxides from aqueous and aqueous-alcoholic solutions with polyethylene glycol

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### Abstract

In this paper, the feasibility of the use of nano of spray drying (*Nano Spray Dryer B-90*) for obtaining the powders of Al<sub>2</sub>O<sub>3</sub> and ZrO<sub>2</sub> has been shown. It was found that the use of alcoholic solutions and stabilizer (polyethylene glycol) for the synthesis of zirconium oxide can increase the content of the tetragonal phase. The use of water-alcohol solutions can increase the amount of granular product.