

## **Control of nanoparticles agglomeration state**

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Nanoparticles are currently among the most active field of research due to the novel properties they present. Nevertheless, there are still problems and questions that remain unresolved. One of these problems is the high tendency the particles present to agglomerate on the solid state. Some techniques have been proposed to avoid this agglomeration, but most of them are based on the use of different surfactants, that can modify the nanoparticles properties in an uncontrolled way.

In this work we present a dispersion method, free of surfactants and capping agents, which allow us to obtain isolated nanoparticles or agglomerates of controlled size. The method does not alter the nanoparticles size or properties. The possibility to control the agglomeration of the nanoparticles opens the possibility to study the proximity effects that can exist on these materials.