Nanoparticles and Occupational Risks Prevention

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Abstract

Manufactured or enigneered nanoparticles show some properties, due to its so small size, quite different from the ones that the same material at a higher scale has. These new properties are a key factor in generating new materials or materials with others properties, new medical cures, new products, fabrics, etc. However, these properties have created a worry about their effect on the human organism and environment. At the workplace Occupational Risks Prevention management has to give an answer to this situation and implement the means to prevent the effects over the workers' health. In order to do that, it seems that the engineering controls, personal protection measures, used up to now, with new work procedures considering the presence of nanoparticles could be enough, although, nowadays, the information in this area is not definitive, sometimes contradictory or not existent: effects? parameter to measure? measurement equipment? exposure reference value? laws or standards? –we have REACH and CLP, but…- . Besides, the European Commission has included in its definition of nanoparticles any nanosized particle, not only the engineered ones. This definition suggests that any nanosized particle has to be considered in a workplace and that is a great change for the Occupational or Industrial Hygiene and perhaps could explain the effects of some occupational exposures…

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