APPLICATIONS AND CHARACTERISTICS OF NANOMATERIALS IN INDUSTRIAL ENVIRONMENT

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ABSTRACT

Nanomaterials are the keystones of nanoscience and nanotechnology. Nanoscience and Nanotechnology is a wide area of research and development activity that has been growing explosively worldwide from the last few years. It has the potential for developing the ways in which materials and products are generated and the range and nature of functionalities that can be accessed. It is already having a significant commercial impact, which will definitely increase in the future.

Nanoscale materials can be defined as a set of substances where at least one dimension is less than around hundred nanometers. A nanometer is one millionth of a millimeter approximately one lakh times smaller than the diameter of a human hair. Nanomaterials are of interest because at this scale unique optical, magnetic, electrical, and other properties emerge. These emergent properties have the potential for great impacts in industrial machinery and other fields.

KEYWORDS: Applications, Industry, Machinery, Nanomaterials and Nanotechnology