

NANOTECHNOLOGY STANDARDS ALONG THE PRODUCT LIFE CYCLE

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The rapid pace of discovery in nanotechnology has generated great optimism and excitement in the scientific and business communities. The challenge in capturing the greatest value from these investments is undeniably linked to how innovations can be quickly commercialized. Standardization will play an increasingly important role in creating a smooth transition from the laboratory to the marketplace as products based on nanotechnology are developed and move into broad use. Traditionally, standards have evolved out of a need to achieve interoperability among existing products, create order in markets, simplify production, and ensure safety. It is critical that the nanotechnology community, which has recognized the large market potential of nanotechnology-based innovations, view standards as a vital tool to promote progress along the nanotechnology value chain -- from nanoscale materials that form the building blocks for components and devices to the integration of these devices into functional systems. In exploring the role "anticipatory" standards can play in the creation of nanotechnology platforms, this presentation describes the need for and benefits derived from developing standards to accelerate monetization of nanotechnology intellectual assets.