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Deeder Aurongzeb, Engineering Technology Sr. Principal Engineer, CTO Office, Dell Inc.

Deeder Aurongzeb is a materials innovation strategist and global reliability leader for Dell Inc. , CTO Office. Deeder has spent 8+ years with GE Lighting prior to Dell Inc., GE Global research as a staff scientist and group leader for GE Intelligent Devices group. His areas of work involved polymeric OLED, oxide sensors, solar cells and LED technology. Prior to GE, he worked at Texas Tech Nanotech center and UT Austin low temperature laboratory in the field of nanotechnology for 6 years where he published over 25+ papers in peer reviewed journals. He has commercialized numerous R&D projects from lab to customers which has led to over 100 patent application filed with USPTO and was named inventor of the year in 2014 at Dell.

Abstract:

Title: Nanotechnology-“To be or not to be”, process and cost challenges of some recent innovations

Nanotechnology has been at the forefront of most of the new materials research. However, making large scale production in cost effective way remains a challenge. We identified 3 key areas where reasonable small investment can provide new innovation and solve key challenges of recent surge in consumer devices. Some of these focus areas are sensors, composite structure and energy generation. We will show some examples of how some simple problems those can be addressed around these areas. After discussing possible large production issues, need for innovation around new manufacturing process on nanotechnology, policy suggestions are presented for its successful commercialization and advancement.