

The Role of Nanomaterials Towards Architecture Style of 21st century

Mohamed Ibrahim

Department of Architectural Engineering, Faculty of Engineering, Alexandria university, Egypt



Abstract

Nanoarchitecture as the new contemporary architectural style of the 21st century that will revolutionize the architecture world in every way either the way architects think or how they inspire their ideas, the used materials in building, finishing materials, or the way we demonstrate to the world and building users through artificial intelligent technologies. However, architecture has a small role to play in our daily life but it has a great influence in the world we live in, and its contribution to the daily behavior of man is notably in the way we design buildings. Visionary scenarios, particularly those that drive the development of new products by manufacturers, typically have an outlook of 15 to 20 years. Given the longevity of building constructions and the liability period of the architects, this outlook is comparatively short in 15 years most architects will still be liable for buildings planned today. As such, the use of nanosurfaces and nanomaterials in construction requires openness towards innovation and willingness to employ new and forward-looking intelligent technologies, not only from the architect but also from the client.

As result of globalization, new notion called the global problems has appeared such as the financial crisis, global warming, climate change and biodiversity affecting the whole world in general and the third world developing countries in particular resulting from the developed countries actions. One of these solutions is using the nanotechnology and the environmental materials in architecture to reduce energy consumption in the public buildings to reduce its heat emissions.

Hence, reaching the main purpose of using nanomaterials and artificial intelligent technology in built environment finding the best ways to reduce the carbon dioxide emissions harming the environment. Furthermore, it leads to sustainable environment on the public level. Also, on the private or individual level, nanoarchitecture contributes effectively in creating spaces and zero carbon environments. More over depending renewable energy producing a clean reliable energy without harming the environment.

Biography

He has done his Master degree: supervision of 25 thesis last master is in nanoarchitecture in 2008. His Establishment of educational entities in the years of 1998, 1994, 1993 is incorporation of computers and software in order to enhance students' skills in drawing and design, AU - Egypt, BAU - Lebanon, UAE, Emirates 2005 -20012 nanoarchitecture lab faculty of engineering, Alexandria University. His Interests is: sustainability, sustainable architecture, nanoscience, nanotechnology, nanoarchitecture, green nanoarchitecture, virtualism, virtual architecture and digital architecture. He is currently a professor of Architecture, Department of Architectural Engineering, Faculty of Engineering, Alexandria University, Alexandria, Egypt.



23rd International Conference on Advanced Nanoscience and Nanotechnology | Edinburgh, Scotland | July 31 – August 01, 2020

Citation: Mohamed Ibrahim, *The Role of Nanomaterials Towards Architecture Style of 21st century*, Nanoscience 2020, 23rd International Conference on Advanced Nanoscience and Nanotechnology, Edinburgh, Scotland, July 31 – August 01, 2020