

## **Raw Materials treated with Nanotechnology and its Use in Contemporary Sculpture**

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### **Abstract:**

It's hard to imagine just how small nanotechnology is. One nanometer is a billionth of a meter, Nano science and nanotechnology involve the ability to see and to control individual atoms and molecules. Everything on Earth is made up of atoms—the food we eat, the clothes we wear, the buildings and houses we live in, and our own bodies, but something as small as an atom is impossible to see with the naked eye. In fact, it's impossible to see with the microscopes typically used in a high school science classes. The microscopes needed to see things at the nanoscale were invented in the early 1980s., and once scientists had the right tools, such as the scanning tunneling microscope (STM) and the atomic force microscope (AFM), the age of nanotechnology was born.

Although modern nano science and nanotechnology are quite new, nano scale materials were used for centuries, but

The artists back then just didn't know that the process they used to create these beautiful works of art actually led to changes in the composition of the materials they were working with. Today's scientists and engineers are finding a wide variety of ways to deliberately make materials at the nano scale to take advantage of their enhanced properties such as higher strength, lighter weight, increased control of light spectrum, and greater chemical reactivity than their larger-scale counterparts.

Lately , Some sculptures are built on a grandiose scale, impressing the observer with their sheer size. These are not those sculptures. These feats of technical skill and nanotechnology pack incredibly detailed features into forms no bigger than the eye of a needle and in some cases, even smaller.

### **Keywords:**

Nanotechnology, raw materials treated with nanotechnology, contemporary sculpture.

### **An Introduction:**

Availability of contemporary studios in production. As for the works of sculpture, and sculpture as in the works of sculpture, and sculpture as in the works of sculpture, and sculpture as in the works of sculpture, and it is affected by the exhibits around it, and it is affected by the exhibits

around it, and it is rooted in its shop and root The transformations that society is going through, which is the product of the technology driven by the human intellectual thought of nano cars, and this technology is the integration between science, engineering and research in developing products and adapting atoms and molecules and dealing with them through a highly accurate electron microscope. Technology to the world of sculpture. (First: 5, p. 523)

**Research Problem:**

- Can nanotechnology contribute to the production of advanced materials used in the completion of contemporary sculpture?

**Force Search:**

The search assumes the following:

- Retrograde nanotechnology can be used to enrich the art of sculpture with various materials and exciting designs.

**Research Goal:**

- Uncovering the role of nanotechnology.

**Research Importance:**

- Taurat technical libraries with a scientific material that enables the opening of a new beginning related to dealing with nanotechnology.
- Activating the role of Taraji nanotechnology in contemporary sculpture.

**Research Methodology:**

The research follows the descriptive analytical method.

**We conclude from the study:**

- Nanotechnology affected the materials used in the implementation and formation of sculptural works and increased their efficiency.
- Nanotechnology contributed to extending the life of the field sculptures and reducing their impact on the factors of the architectural environment in which they are located.
- There is an integrative and direct relationship between the development of scientific research and contemporary arts. Nanotechnology has proven the ability of science to produce advanced materials that serve the vision of the contemporary artist.
- Through nanotechnology, advanced materials and raw materials were created that the sculptor could not reach with traditional techniques.
- The materials developed by nanotechnology can be employed in the production of contemporary sculptural works with unique and modern plastic properties.

**Recommendations:**

**It is recommended to search for:**

- Holding seminars and conferences that talk about the difficulties that a contemporary sculptor may face while dealing with nanotechnology.
- Develop curricula to help students of the art of sculpture in Libya learn about nanotechnology and the mechanisms of dealing with it.
- The necessity of having research centers concerned with introducing nanotechnology to train students to apply its uses in sculpture.

- Giving opportunities to Libyan sculptors to follow up on artistic projects and cultural events around the world to learn more about contemporary sculpting techniques in an effort to keep pace with development and shorten time

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