

Study of the protection and conservation of glass artifacts using nanomaterials with the practical application of the restoration and maintenance of glass artefact.

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Abstract:

In recent years, nanoparticles have played a major role in the protection and conservation of antiquities. These nanoparticles are dispersed in different polymers to improve their properties and to obtain nanoparticles. These materials have achieved a significant and unprecedented breakthrough in improving the physical and mechanical properties of polymers used in Reinforcement and protection of glass surfaces, due to nanomaterials of very small size, very large surface area compared to their sizes and the significant increase in their chemical activity. As a result of the manufacture of these new Multifunctional Nano composites, which are applied in a single step, which has more than one function in the protection of the surfaces, due to the enjoyment of these compounds with many characteristics, the most important: the ability to expel water Super hydrophobic surface and cleaning The nanotechnology applications have increased the efficiency of traditional treatment materials and provided more tolerant surfaces for weather and friction, and surfaces that problems of accumulation of dust and dirt through the theory of Self-Self cleaning, as well as resistance to micro living organisms, resist the impact of UV.

Key Words:

Glass artifacts, Nanomaterials, Examination and analysis, Self-cleaning, Protection.