## Strategies for Integrating Crystallography and Biophilic Design Principles and Their Impact on Interior Architecture Following The COVID 19 Pandemic Lect. Dr/ Esraa Abd El-Fattah Hamed Ahmed Hamed

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## **Abstract**

In light of the repercussions of the emerging Covid 19 pandemic, which would have changed the aspects of human life, and thus the contemporary design goals, to aim centrally to achieve the priority of achieving health, environmental sustainability, functional and physiological comfort for the users of interior architecture, to adopt an interrelationship between man, the environment and science, and therefore this paper aims to crystallize the plastic structure of science Crystals and its response to bio-design strategies in an attempt to achieve the communicative function between man and the nature around him and within the framework of designing the space of interior architecture and its reflection on the internal energy of man from the perspective of engineering crystal sciences and identifying modern technological and smart technical applications to deal with emerging conditions that combine with the principles of environmental sustainability. Discussions about the endless possibilities offered to us by nature and the smoothness of the utilitarian and aesthetic relationship between nature and humans as a result of the ease of understanding its elements in order to repair inspiration from the biophilic world that has been corrupted by humans and adapt to health and global problems that occur to it and find solutions to design interior architecture and combine it with the possibilities of crystallography inspired by nature This paper presents an identification of the strategies of crystal science and its plastic, perceptual and aesthetic impact on the functional design of the biophilic interior space, and the possibilities of combining science and art together to develop the idea of sustainability, which enhances the experience of interior architecture users in light of the emerging events of the Covid 19 pandemic and provides a great deal of interdependence with nature and then Serving contemporary human needs in an effective and innovative manner commensurate with the principles of preserving them by using environmentally friendly materials and technologies to provide the ideal material content for interior design products inspired by the elements of nature. The biophilic design, by merging it with the products of crystallography in interior architecture, directs the importance of being around nature and respecting it, and even inserting it into the space of interior architecture to ensure the quality of the interior environment inspired by the elements of nature and its functional and beneficial effect on its users to achieve the desired goal of creating the space.

## **Keywords:**

Crystallography, biophilia (Biodesign), contemporary interior architecture, environmental design, fractal design, sustainability, renewable energy, covid 19.