

## مفهوم المحاكاه الحيوية ومردودها على التصميم الداخلى والأثاث في ضوء التقنيات الرقمية

### The concept of biomimetic and its impact on interior design and furniture in the presence of digital techniques

أ.م.د/ مها محمود ابراهيم

الاستاذ المساعد بكلية الفنون التطبيقية\_جامعة حلوان

أ.م.د/ دعاء عبد الرحمن محمد

الاستاذ المساعد بكلية الفنون التطبيقية\_جامعة حلوان

#### Abstract:

Biological and ecological forms attracted many designers from successive generations as the source of a new thought that was only possible after the electronic revolution. These forms were considered progressive views of the future architecture.

Around the beginning of the third millennium, there has been a surge of interest in such bioinspiration and biomimicry — the imitation of biological traits or systems in applications ranging from architectural design and materials to robotics and engineered tissues.

Biologists from all sorts of disciplines have an extraordinary store of knowledge that could guide a revolutionary breakthrough in bio-design. Such knowledge could also help to steer experimental approaches.

Unfortunately, in most papers on biomimetic, the relevant biodiversity gets short shrift; researchers consider only one species or refer to a biological element such as a 'cell' or 'enzyme' in only a generalized way.

There is no doubt that the huge development of digital technologies and its programs has facilitated the design process and made it more flexible and creative as well as become an important way to help the designer in reaching his idea, to develop interior designs that are new forms and unexpected inspired by nature and free of traditional design and construction limitations.

Therefore, the research is interested in studying the concept of biomimetic as one of the new concepts in architectural and interior design in terms of orientation, philosophy, features, application and its reflection in the field of interior design and furniture.

**Keywords:** Biomimetic – Digital Technology - Digital Architecture