

## TECHNOLOGICAL SYSTEM AND METHODOLOGIES FOR TRANSPARENCY AND OPACITY, INDIRECT OF GLASSES SCULPTURE AND HOW TO BENEFIT FROM IN TEACHING THREE DIMENSION EXPRESSIONS

**Mahmoud Mostafa El sayd Mohamed Metwally**

Dr., Faculty of Specific Education, Alexandria University

[dr.Mahmoudmostafaelsayd@gmail.com](mailto:dr.Mahmoudmostafaelsayd@gmail.com)

### Abstract

No doubt that the integration between science and technology has influenced to a great extent, the acceleration of progress simply because issue became no longer dependent upon the skill of artisan or his effective tanning upon any a specific technique but the main accreditation turned to a confirmed scientific theory, that allows the individual to harness the nature's forces for his welfare ... and it is the major benefit as a result of integration between science and technology .

Integration between science and technology has been increased to a robust bond, the muleteer that it has led to the emergence of a newer kind of researches ... the applied researches, which has made during the late decades huge, and influential .

the discovery of any new methodology by the artist is no more result of a technological progress and this could start by utilizing new materials for another field differing than that it has been originally intended .the artist with his deep insight and futuristic trends, can invest these materials, and perhaps the found tools, in plastic art domain.

One of most exciting materials for the artist, who is concerned with modeling, is glasses .it is a mysterious medium .. assist displays the metaphysical aspect of the sculptural art work ... !!.

Glass includes what is seen and what is un seen at the same time, as far as it alternates between transparency, opacity and the change of its colors . this is in addition to its uniqueness of plastic features, which is being latent in its color data and transparency . also one can observe the unique qualities of glass . the richness and diversity of its modeling methods, is diverse physical properties, which being it closer to metals, for melting, casting in metallic and thermal molds .. and another properties that bring it closer to viscous liquid ... another quality that enables its direct modeling at hot states, also it can be directly modeled on cold glass, through assembly, cutting, lazier in graphing, acids, and abrasive materials, using parallel technologies of hard stones. hence we see that this material is a rich medium in experimentation and progress for the art of sculpture, also for developing a new methods and techniques, which possess intellectual and artistic values ... these late methods allow the artist possibility of creating colossal works that could be appropriate to that sort of associative sculpture architecture, in addition to outdoor displays through comprehensive study for technological and beautiful aspects of glass sculpture, it would be clear for us new expressive features (qualities ) using different visual attributes . from the technological point of view, glasses produced with various techniques, particularly direct modeling techniques, are materials of unique characteristics for sculpture and this is for what it possesses as physical and mechanical properties .

Research problem: the research problem is associated with extent of abilities for a adapting and utilizing the cold working technologies (direct modeling), and its importance in handling this material in the field of sculptural and artistic creations.

Research objective: benefit from modeling and expressive abilities, that characterize the glass material as a source of enriching three dimensional modeling at the faculty.

**Keywords:** viscous liquid, metaphysical aspect of the sculptural art work the cold working technologies (direct modeling)