**Proposal for the Abu Dhabi Environmental Education Center Monument.**

**(The dancer of the Wind and Sun)**

 Abu Dhabi Environmental Education Center is more than a building; it will become an icon of great relevance for the city, where their habitants reflect their concern for environmental issues and for the cultural values ​​that habit a single space.

**Conceptual Memory of the Project:**

The conceptual proposal is an Alliance of art and science, where the main basis is the conservation of the planet. This principle is based on the design of unique elements, but in the creation of items made with a plastic language or a constructive system with repetitive such as bars and nodes elements. The creation of man through the systematization, makes use of the resources in a more efficient and rational manner. Works of artistic design and utilitarian design must be able to transform in time, be able to grow, decrease or simply change its use; the transformation is an inherent part of life and while continuing to lose force. Works of art not only should be a record that demonstrates an attitude of an era, should transcend time as elements of plastic and utilitarian language. Another element to take into account, is the use of materials that can be reused or recycled. One of the materials most used in my proposal is aluminum and steel, to be an element that can be reused many times, without losing its basic characteristics. In the world, more than 70% of the aluminium used for matrices fabrications comes from recycled material. I define my work as a modern late constructivism, which is part of my plastic language where it joins Kinetic Physichromatic and Vivrational Rotary, also complete my works with natural elements, such as the sun, wind and water.

The Physicromatics are a light trap, a space where come into interaction a series of frames of color to transform each other, to generate new color ranges and invade the space circumscribed between vertical plates that cover all the work. In them, the displacement of the viewer or the light source, creates a series of chromatic variations, such as those that occur in the real space of the landscape, are repeated tirelessly with each revolution of the sun, without being exactly the same, because the intensity and the nature of the light that bathes them, will never be equal. From there the name of Physicromatic, by the fact of bringing into play the color light, physical color.

Physical characteristics: Wind pushes the polychromatic ailerons of the ring, where you will see some of the kinetic effects of the work. Will be seen how on the right side of the ring, the colors began to emerge with the movement and in turn they disappear on the left side of the ring, at the same time, when the speed is increased of kinetic physicromatic effect, you can see how the differents colors merge to become white. Physicromatic is the assumption of the colour by the movement. Another of the effects that are generated by the movement in the work is the kinetic rotatory vibe. This occurs with two cylinders, one fixed and the other integrated to a mobile ring. The visual effect is produced by the fragmentation of light in the retina. When the movement of the mobile cylinder begins on the static one, produces the rotatory vibrational effect.

Polychrome ring will feature the installation of eight 30 kva generators or 30,000 watts of power, generating power to 24 volts for about 240,000 watts, to a group of batteries located on the ground floor, which will be connected with a group of investors that it will produce electricity for the operation of the building.

**Building Formation:**

**Ground floor and basement:** will feature a centre of environmental divulgation, auditoriums, conference rooms, exhibition rooms, library, panoramic Tower. Likewise, there will be rooms where you will see the installation of electric vehicle equipment, produced by the physichromatic wind rotor; you can visit the banks of batteries, electric power equipment and investors, in a didactic way

**Tower Plant:** can be accessed in two ways, through a panoramic elevator or up the system of stairs. As you ascend, you will see part of the city and reaching its highest point, you can penetrate the monumental sculpture and see all the mechanisms that make it up and make the electricity in the building as well.

**Viewer Plant:** You can see the city in its 360°, the floor will be glazed in order to see all the components of the sculpture generator and will be crowned with a geodesic dome where a coffee store will be installed.

**Building Components:**

Articulated Tetrahedral Structure.

Physichromatic Sculture.

Eight 30 kva generators.

**Structural Estimations:**

**Articulated Tetrahedral Structure (Space Frame):** it is a typology of the spatial structure, a structural system composed of linear elements united, in such a way that the forces are transferred in a three-dimensional way. Macroscopically, a spatial structure

**Spatial Grids:** are those in which all its elements are prefabricated and do not require for the assembly of joining mediums, other than purely mechanical ones.

**Spatial Grids Bars:** they work by pulling or compressing, but not by flexion.

The main advantages of this space armor are growth and degrowth of the work according to the need and the change of morphology of its current volumetry by another.

**Electric** **load table :**

Elevator elevator……………………………64 kva

Interior lighting……………………………….14 kva

Outdoor lighting……………………………..20 kva

Power pumps ………………………………. 12 kva

Others………………………………………….20 Kva

**Electric cost of the building…………….. 130 kva**

**Eletric generation of the sculpture ……. 180 kva**