Solar & Wind projects-Joaquín Fargas



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Joaquín Fargas is an artist and engineer, since 1988 works for the popularization of Science and Technology. In 1990 founded the "Centro Científico Tecnológico Interactivo (CCTI)". This organization runs the Exploratorio Science Center, the environmental program "Mirando al Futuro (Facing the Future)" and the international project, Arts, Science & Technology. On June 2008 founded The Bioart Lab at Maimonides University in Buenos Aires, Argentina. On 2009 was awarded by Red-Pop UNESCO as specialist on popularization of science and technology. Since January 2010 is the Executive Director of Red Pop, the network for the popularization of Science and Technology for Latin America and the Caribbean.

- A combination between Engineer and Artist.
- From Research & Development of Lasers to the design and making of sculptures through Science & Technology.
- Able to manage multidisciplinary projects from conception to completion.

Sunflower, Sentinel for Climate Change

Medium:

Sculpture and interactive installation

Dimensions:

6 m x 6 m x 6 m

Year Completed:

2007/2011

Primary Discipline:

Sculpture

Art in Public Places

Location:

Ushuaia, Argentina

Cuernavaca, Mexico

Public Art Program:

Second Biennial of the End of the World

Jardin de la Ciencia



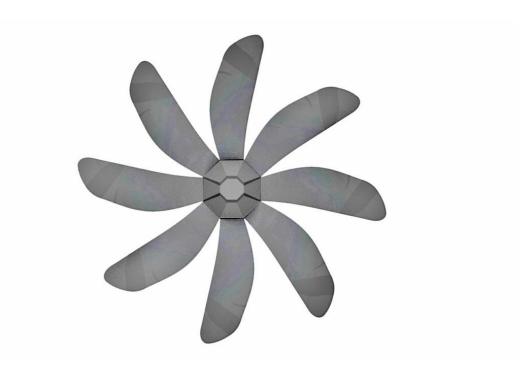
Description:

SunFlower is an intelligent flower that open at dawn and follow the sun during daylight and close at night. The flower is an environmental weather station that monitors air pollution, UV radiation, temperature, and more. SUNFLOWER is a Sentinel for Climate Change. It sends images to a website working for the awareness on sustainability.

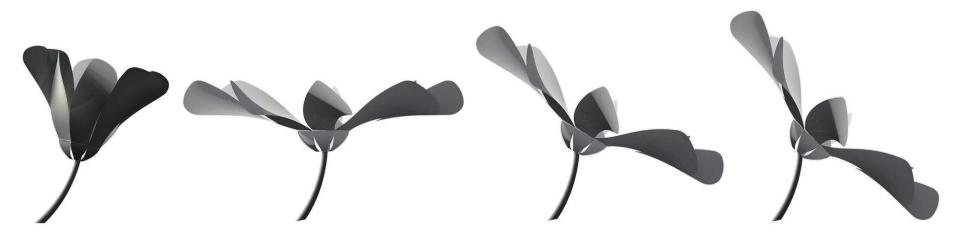


















Arborem Autotroph

Medium:

Artificial tree that emulates natural processes making a sort of photosynthesis through solar panels and water.

Dimensions:

2.80" x 2" x 2"

Primary Discipline:

Kinetic Sculpture

Art in Public Places

Location:

Sculptures Garden on the University of Tres de Febrero in Buenos Aires Argentina.

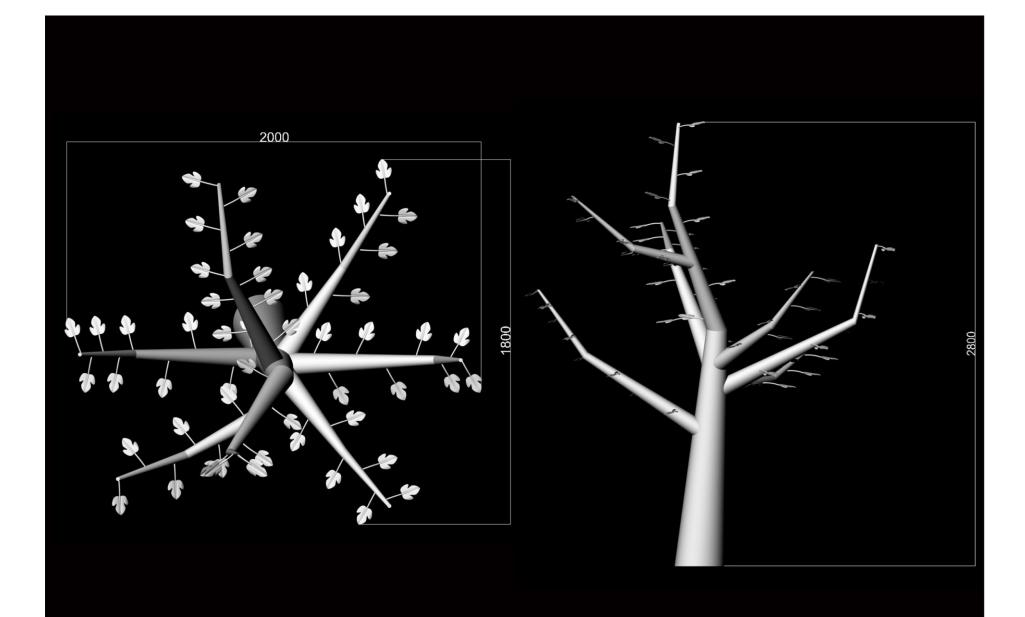
Public Art Program

Description:

Arborem Autotroph is a metallic tree (stainless steel) that generates a sort of "artificial photosynthesis". In the ground surrounding the tree, there are solar panels

that generate electricity to pump water from the bottom to the leaves on top. It makes tiny drops to fall suggesting the water cycle. By night the leaves are illuminated by fiber optics and leds using the stored energy generated during the day. The wind make the leaves to move while the sun is reflected emphasizing the movement.





Solar Möbius

Solar Möbius is an Art and Scientific installation/exhibit.

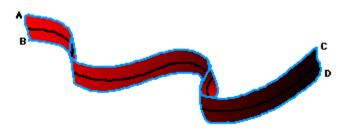
It is a solar sculpture made of stainless steel, acrylic and solar panels.

It conveys science principles related mainly with energy and environment as it uses solar panels to power the system and it is made from environmental friendly materials like stainless steel.

It is autonomous and low maintenance.

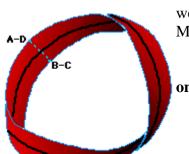
About the Möbius strip:

1. If we have this long rectangle (ABCD) and, we start joining A to C and B to D it will produce a simple belt-shaped loop with two sides and two edges -- impossible to travel from one side to the other without crossing an edge.



2. But if we give the rectangle a half twist, joining A to Dand B to C **Möbius Strip** or Möbius Band, named after August Ferdinand and astronomer.

Because of the half twist, the Möbius Strip has only one side and



we will obtain this curious surface called the Möbius, a nineteenth century German mathematician

one edge.

Solar Möbius uses this property to run a solar powered ball that travels along the edge making an endless trip.



The way of the ball:

It is interesting to realize that the ball passes two times by the same place on the strip on each lap but in different directions as the edge of the moebius is just one.

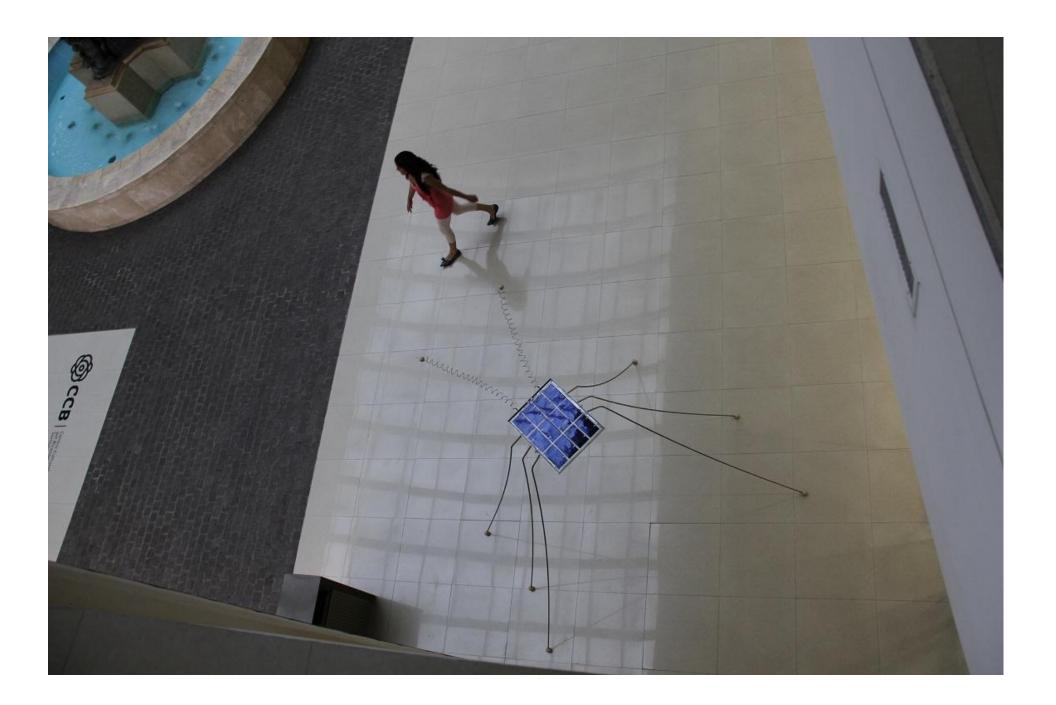
The ball is made of transparent plastic. Inside there are solar panels and motors to drive the ball along the edge of the Möbius strip.



Solar Garden/Solar Zoo

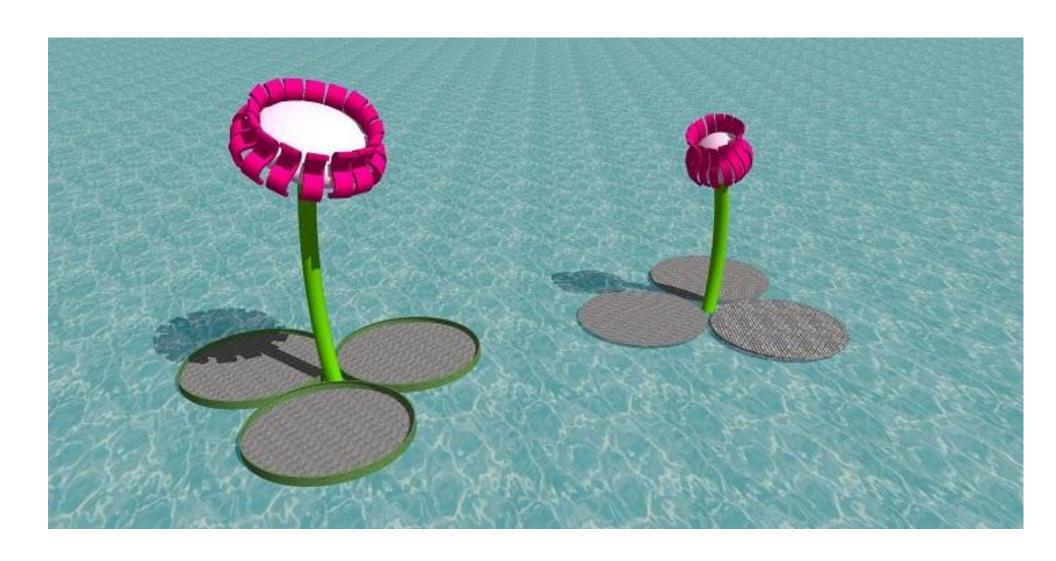
Mosquitos, caterpillars, ants, flowers, fish, etc., are part of the Solar Zoo and Solar Garden.

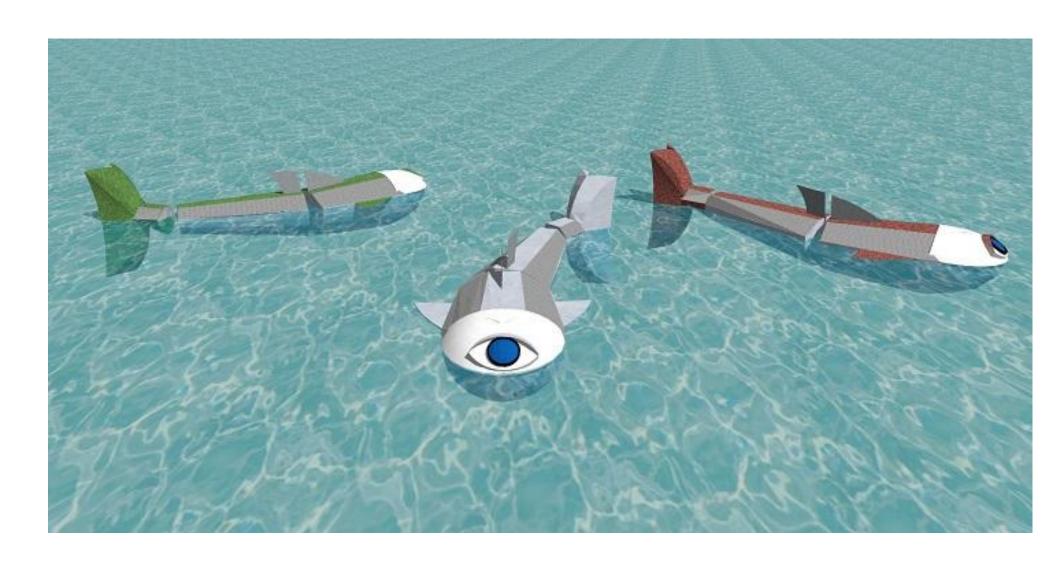












The Utopia Project Don Quijote against Climate Change

Medium:

Installation / Wind sculpture

Dimensions:

3.50 m x 8 m x 2 m

Year Completed:

2011

Primary Discipline:

Installation

Location:

Buenos Aires, Antartica

Public Art Program:

Sur Polar Cultural program for Antarctica

Description:

Three windmills installed in Antarctica during two weeks, generated cold in order to stop the thaw of the glaciers. This chimerical task against climate change represents the man's ability to fight for what seems to be impossible. The windmills are made of stainless steel, aluminum, polycarbonate and worked as wind generators that fed Peltier cells that made ice on the surface of the glacier.





Don Quijote against the Climate Change, Antartica.

Wind Kinetic sculptures

Description:

Windlight and Windcapture are kinetic sculptures made of aluminum and stainless steel move by the wind. They generate electricity to illuminate themselves.



Kuref

Medium:

Wind Kinetic Sculpture

Dimensions:

1.60 m x .60 m x 5 m

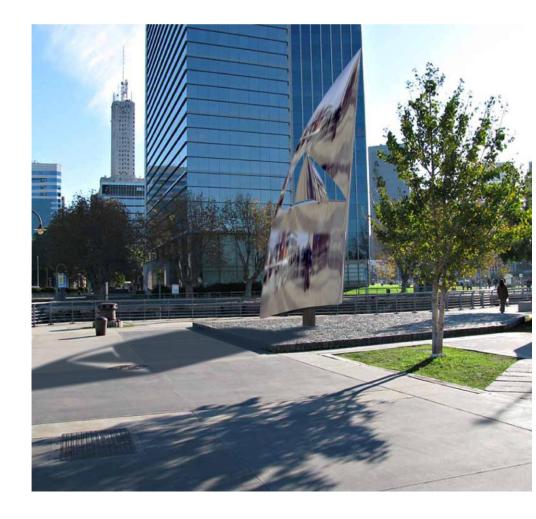
Year Completed:

2012-13

Primary Discipline:

Sculpture

Art in Public Place



Description:

Kuref means wind in mapuche. the language of one of the indigenous people of patagonia. The wind is associated to life, without it de cycle of water will not be completed and the rivers would not exist more. The objective of this sculpture is to rescue the concept of the wind as a driving force and energy boost used through time. This sculpture is made of iron and stainless steel and it also has led illumination, and the electricity for it is produced by a electricity generator system.

