

Finalist of the Cool Silicon Art Award 2011

Andreas Hetfeld (NL) / Installation, Drawing



Andreas Hetfeld (NL) / energy autachic Installation, drawing „Solartree“

technical dates:

high: max. 12 m / calyx: Ø 6 m / material: stainless steel, aluminium

rotation axis - 360° / horizontal axis - 0°- 47°

solar cells: 97 pieces

Curator`s Statement

Andreas Hetfeld was born in Reutlingen, Germany in 1965. Since 1989 he has lived and worked in The Netherlands.

The artwork “Sonnenbaum” was planned as an object for public spaces. In the medium term it will be realized for the newly built “Technovium Nijmegen” (NL), a training center for technical professions.

The concept of “Sonnenbaum” includes that it is completely energy self-sufficient. The required kinetic energy is totally generated by its own sources. The artists’ principal aim is to establish a relationship between human being, nature and modern technology. Furthermore, he also strives for a shift in awareness concerning the use of electricity and energy resources.

In its final version “Sonnenbaum” is going to be a kinetical sculpture of a total height of 12 meters. Both nature and energy therein merge into a symbol of solar power. Moreover, it is combining natural shapes and recent trends in the field of modern technology. Up to now, “Sonnenbaum” exists as scale model and was calculated and developed in association with expert technicians and scientists.

The finalized “Sonnenbaum” will be able to follow the sun by using an existing sensor system installed in the huge calyx. Moreover, the system responds to cloudiness and further adverse effects. As it operates automatically, the photovoltaic modules always gear towards the brightest area of the sky to absorb optimum of solar radiation. Hence, the calyx of “Sonnenbaum” steadily and precisely adjusts to the position of the sun. Bringing the grid more in line with the ideal orientation increases energy gain by 45 % and transforms the object into a self-sufficient and “living” artwork. At a force 5 wind the solar system within the calyx aligns to a save position of a 0° gradient.

Thus, “Sonnenbaum” is a stand-alone object which is moved by solar power like a sunflower following the sun. The project illustrates processes of energy and growth in nature and exposes the viewer to the phenomenon of solar power. Using a digital screen the processes of energy can be visualized permanently.

The project of Andreas Hetfeld is a felicitous example for the importance of finding solutions for the urgent global challenges. Thus, the artwork can be considered as a symbol for cooperating and correlating fields such as arts, sciences and technology.



Cool Silicon Art Award

The Cool Silicon Art Award, which is aligned in cooperation with the international festival for contemporary art - OSTRALE, wants to encourage the inventive dialog between the fields of Art and Technology. The Art Award, being tendered 2011 for the first time, is calling for national and international artists of all media to deal with the topics and the vision of the Cool Silicon leading-Edge Cluster in an artistic way. The focus is set on the conflict between the worldwide rapidly increasing energy consumption of the Information and Telecommunication Technology (IKT) and the associated global-climatic consequences for a steadily growing world population. The Cool Silicon Art Award is asking for artistic future-bound answers for this global and social relevant topic. www.coolsilicon-art.com

Cool Silicon Art Award Jury

Prof. Elizabeth Hoak-Doering (USA, Cyprus), visual artist, professor University of Nicosia, author
Andrea Hilger (D), performing and visual artist, curator, director OSTRALE-international exhibition of contemporary arts

Dr. Martin Müller (D), visual artist, designer, curator, art historian, director OSTRALE-international exhibition of contemporary arts

Helmut Warnecke (D), management Infineon Technologies Dresden GmbH, member of board
Leading-Edge Cluster „Cool Silicon“

Prof. Dr.-Ing Thomas Mikolajick (D), Vorstandsvorsitzender für Nanoelectronic Materials and Scientific, Direktor von NaMLab GmbH an der TU Dresden

Cool Silicon Leading-Edge Cluster

The Cool Silicon Leading-Edge Cluster of the Free State Saxony is searching after solutions to considerably reduce the energy consumption at the Information and Telecommunication Technology (IKT) – to the point of energy self-sufficient systems. The Cool Silicon Leading-Edge Cluster, which represents more than 60 companies, academies and research institutes of the Free State Saxony, aims to limit the worldwide energy consumption by increasing the energy efficiency within the IKT and to allow in this way further technical and social progress. www.cool-silicon.org