

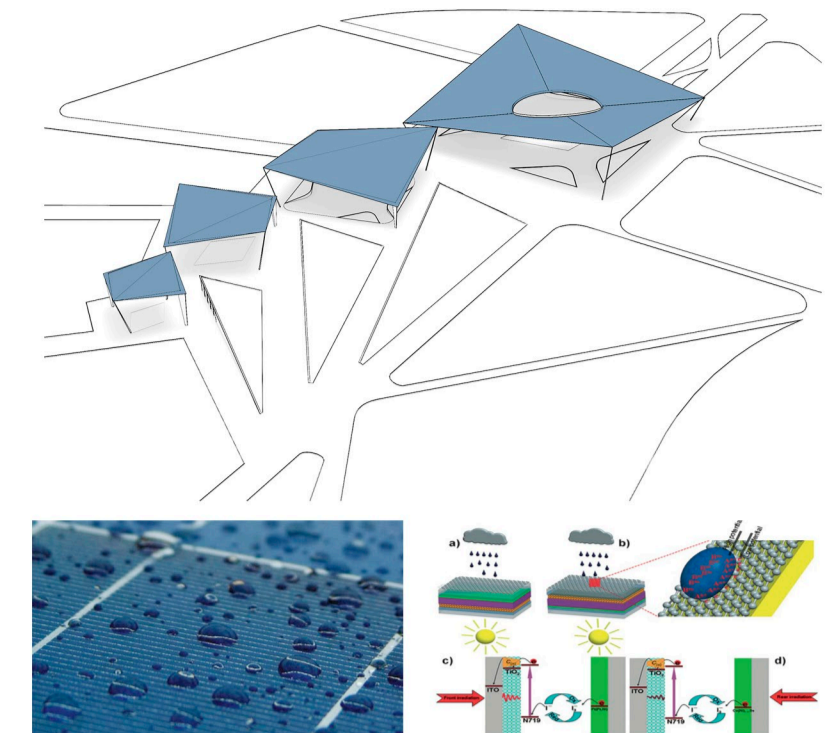
Solar & Rain Energy



Hybrid solar panels will generate energy both in the sun and during rain. The new technology involves the separation of sodium and potassium salts contained in rainwater into individual ions. To separate salts into individual ions, scientists propose using an advanced material - graphene - in the construction of solar cells.

Graphene is currently the only two-dimensional crystal, which means that even a very small layer of a few atoms is stable and allows you to use all of its physical properties.

Graphene conducts electricity very well, despite the very small thickness of the coating. Due to the fact that the graphene layer is very small, it will not interfere with the operation of the main semiconductor photocell, the converter of solar energy into electrical energy.

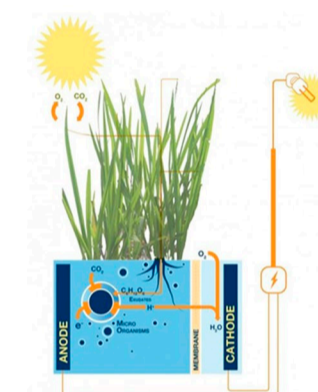
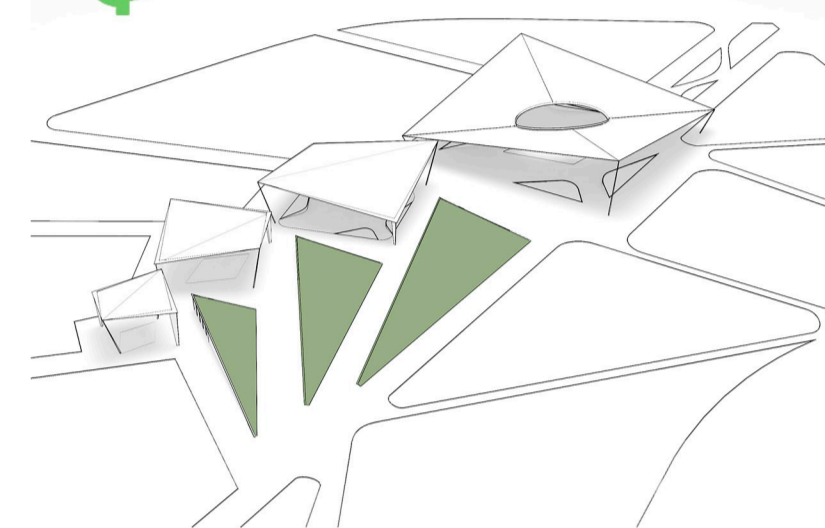


Plant Microbial Fuel Cells

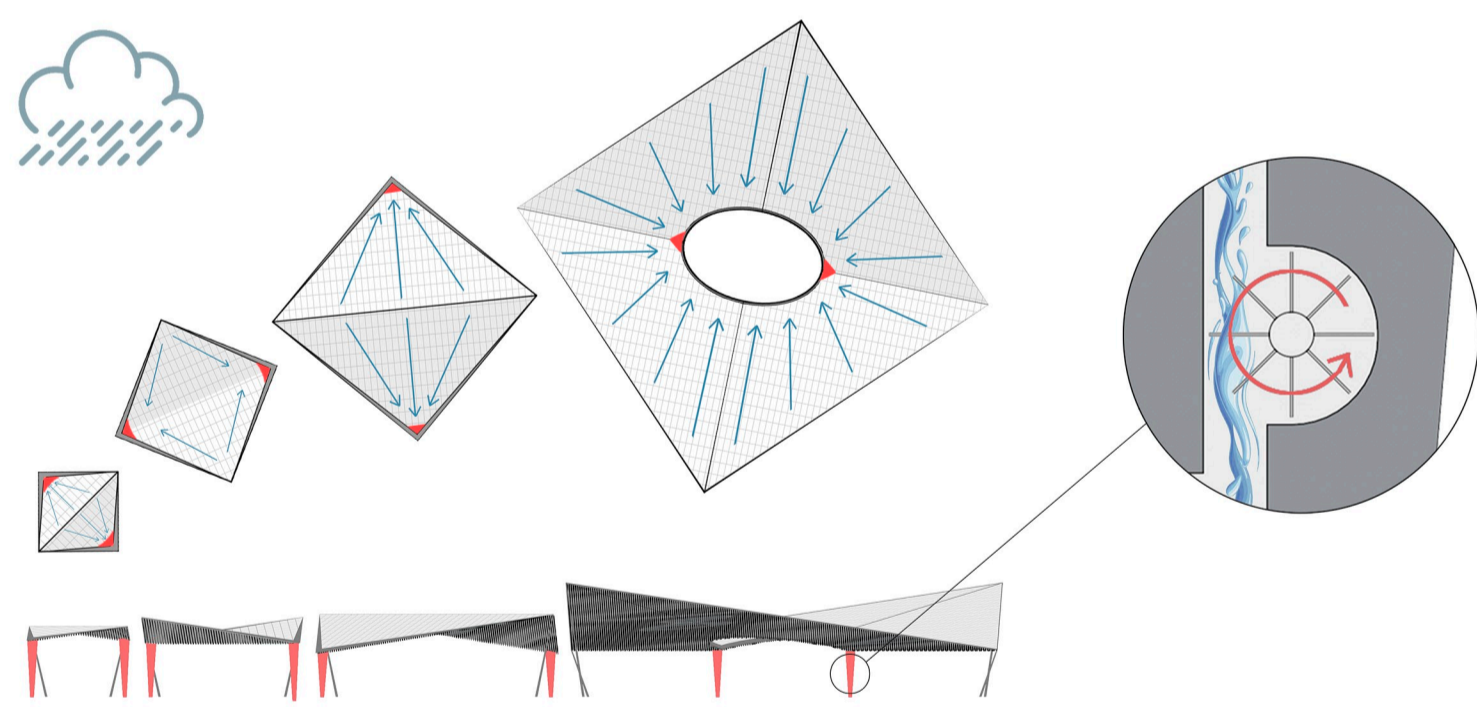


The technology is based on a kind of battery, which is a square plastic container with a side of 50 cm. The container is divided into two parts by an ion-selective membrane through which hydrogen ions move to the cathode.

An aerobic cathode chamber is located in one part of the container, and an anaerobic anode chamber is located in the other part. Free electrons rush to the anode, which are transferred to the cathode through an external circuit. As a result of the combination of hydrogen with oxygen in the cathode chamber, water is formed and an electric current is generated.



Energy of Watercourses & Water Collection



The use of atmospheric gases significantly saves water and energy generation due to the drainage through the pavilion's support pipes.



Kinetic wind energy



The kinetic facade is a trend and one of the latest trends in architecture. In other words, it is the movement of a group of objects under the influence of natural forces.

the surface is formed from many metal elements (aluminum plates) dependent on the wind, and visually forming a single surface. Air currents are able to change the angle of inclination of these elements, forming a constantly changing relief. Visually, this movement resembles a water surface. The movable facade creates a unique spectacular image of the structure

