# New way to generate electricity from diatom solar energy

## Overview

By using biology instead of conventional semiconductor manufacturing approaches, researchers at OSU and Portland State University have created a new way to make “dye-sensitized” solar cells, in which photons bounce around like they were in a pinball machine, striking these dyes and. By using biology instead of conventional semiconductor manufacturing approaches, researchers at OSU and Portland State University have created a new way to make “dye-sensitized” solar cells, in which photons bounce around like they were in a pinball machine, striking these dyes and. CORVALLIS, Ore. – Engineers at Oregon State University have discovered a way to use an ancient life form to create one of the newest technologies for solar energy, in systems that may be surprisingly simple to build compared to existing silicon-based solar cells. These tiny. Photovoltaic (PV) Solar Cells: Convert sunlight directly into electricity using semiconductor materials such as silicon, cadmium telluride, and perovskites. Diatoms use chemical bonds to efficiently absorb and convert energy from the Sun. But could diatoms, with their unique properties such as efficient photosynthesis and their nanoporous silicon shells, become a. Oregon State University and Portland State University have been working with the rigid-shelled creatures in a new type of solar cell that functions at the nanotechnology level.

## New way to generate electricity from diatom solar energy

**In its search for new technologies for solar energy that can produce**

In its search for new technologies for solar energy that can produce lower-cost electricity, Smith-Diatom is developing a new way to make dye-sensitive solar cells, in which photons strike light ...

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**On the diatomite-based**

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Diatoms use chemical bonds to efficiently absorb and convert energy from the Sun. But could diatoms, with their unique properties such as efficient photosynthesis and their nanoporous ...

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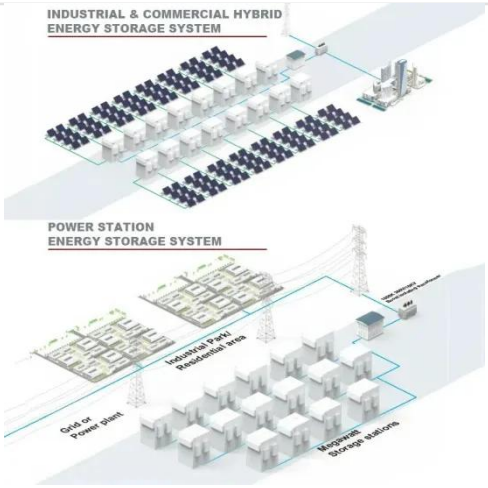


**Natural high-porous diatomaceous-earth based self-floating aerogel ...**

Based on many applications examples, in this paper we are proposing that this low-cost, hierarchically structured natural fossilized diatomite silica having

excellent light absorbing properties ...

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