STEM Education for Sustainable Development

SCIENCE ON STAGE TURKU 2024

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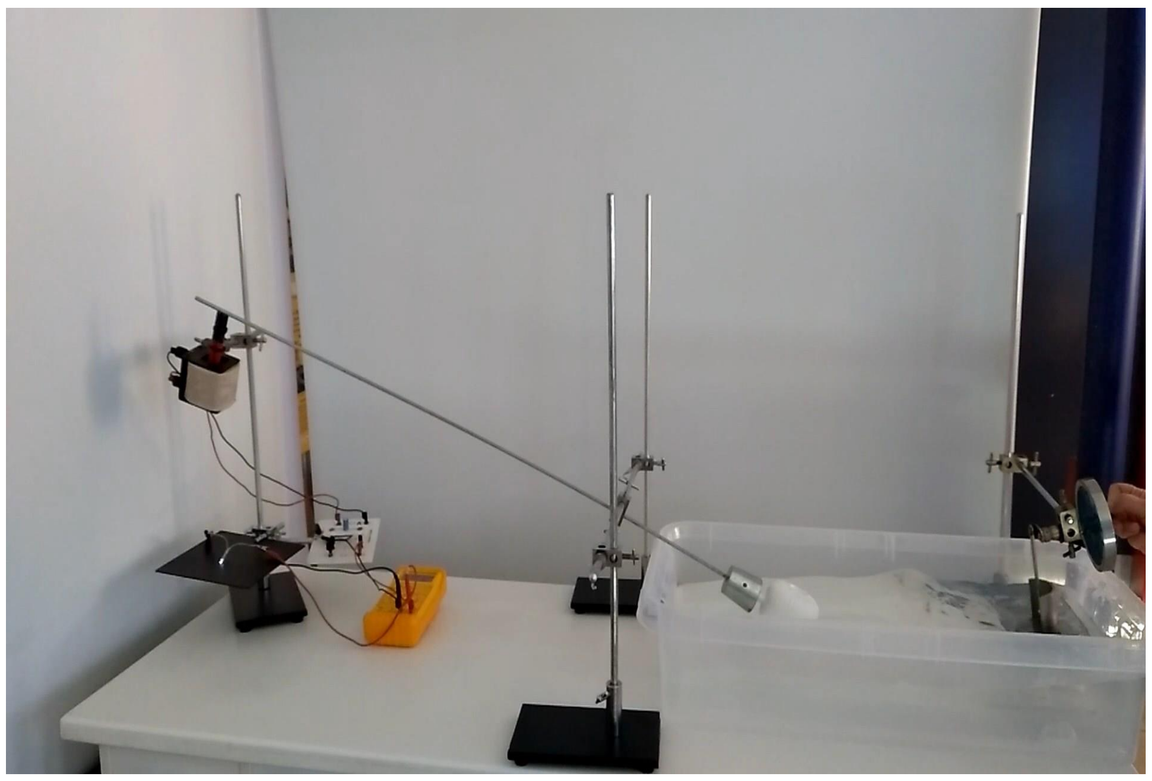
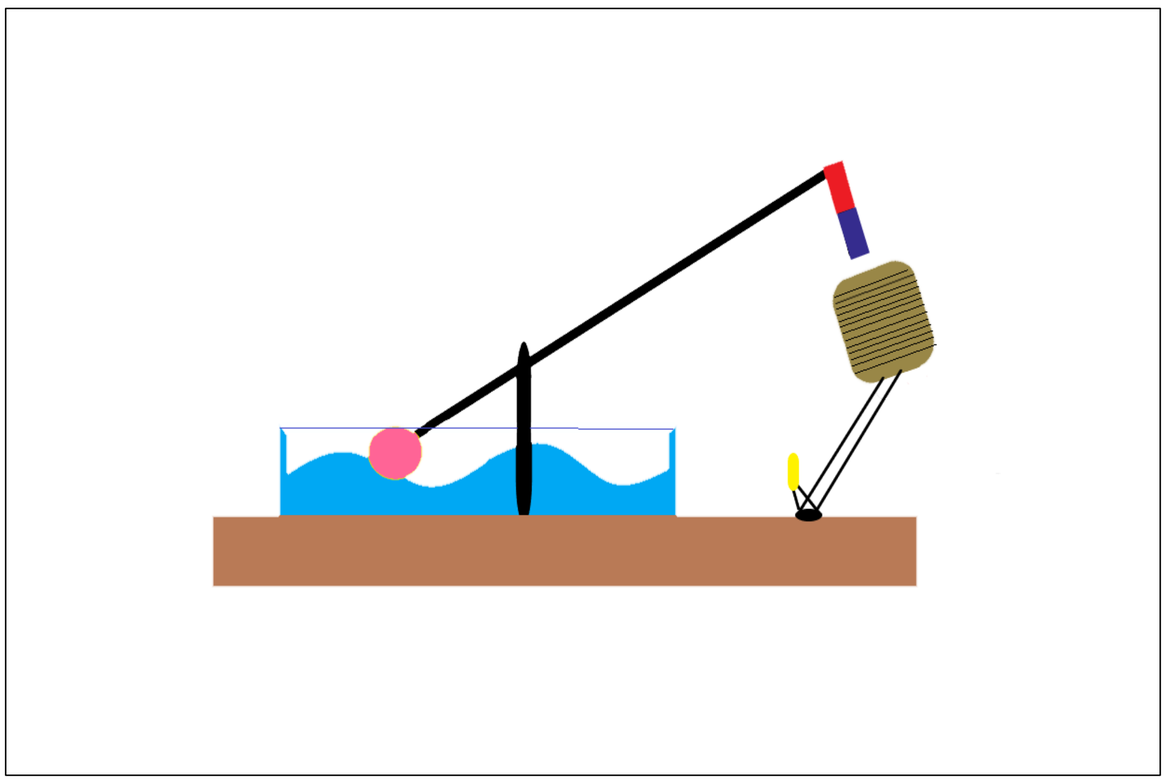
Electricity from sea waves

This project aims to exploit the mild and renewable source of energy produced by the waves of the sea. The construction of the experimental arrangement of the project is carried out with materials available in a school laboratory. Through this, ripple is created in the water.
The waves set in motion a plastic float and therefore the magnet to which it is connected via a metal rod. The movement of the magnet creates an inductive voltage in the coil.





The energy of the waves is converted into kinetic energy of the magnet and then into electrical energy in the coil, which lights up a LED or charges a capacitor.

There are processes of nature, such as sea waves, which can provide us with mild and exploitable forms of energy, potentially solving the ecological and energy problems facing the Earth.