SolarBio Energy begin oceanic research into lithium discovery

According to researchers at SolarBio Energy, using water from the oceans could provide nearly unlimited amounts of the critical battery material lithium.

Santiago, Metropolitana de Santiago Jun 21, 2023 (Issuewire.com) - Current findings from SolarBio Energy researchers show a possible limitless lithium supply by extracting it straight out of the oceans water. The world's oceans contain an estimated 180 billion tons of lithium but it is very diluted with only 0.2 parts per million.

Lithium is well known for rechargeable batteries because it stores more energy per gram weight than other battery materials. Manufacturers use thousands of tons every year, a number expected to grow increasingly over the next decade.

The Tech

Using lithium-ion battery electrodes to pull lithium directly from seawater and brines, without the need for first evaporating the water, is the latest research technique used in tapping into the oceans lithium.

The electrodes consist of sandwich like layered materials designed to trap and hold lithium ions as a battery charges. By changing the way the voltage is controlled, lithium and sodium ions move into the electrode, stop, and then start to move back out when the current reverses. By repeating this cycle, lithium concentrates in the electrode by almost double the standard amount. Researchers are attempting to increase selectivity using other types of lithium-ion battery electrodes.

For more information on Lithium or any of the subjects mentioned in this article please visit www.solarbioenergy.com

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