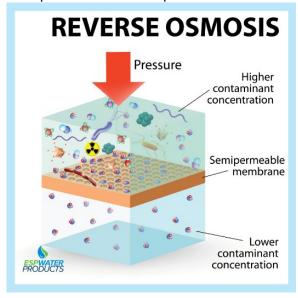


Desalination without Electricity

Recently, researchers at the Tata Institute of Fundamental Research (TIFR), Mumbai, have been able to desalinate seawater to produce drinking water without using electricity.

 Unlike the conventional reverse osmosis that is energy-intensive, the researchers used gold nanoparticles which required no external energy to produce potable water from seawater.



- Using gold nanoparticles that absorb sunlight over the entire visible region and even the near-infrared light, researchers were able to use sunlight to heat the water up to 85 degrees Celsius and generate steam to produce drinking water from seawater.
- Alternatively, gold nanoparticles can also be used to convert carbon dioxide into methane.
- However, This is only a preliminary study. The next step should be to replace gold with some inexpensive metal to make it sustainable,

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