

Electromethanogenesis is: the direct bioconversion of current to methane

[Literature](#), [Russian Literature](#)



The paper " Electromethanogenesis: The Direct Bioconversion of Current to Methane" is an outstanding example of an article on environmental studies. New methods that can be sustained are required to generate renewable energy carriers that can be amassed and stored and used for heating, chemical manufacture, or even transportation. Recently, according to a number of specialists, methane could be the answer to the problem, or perhaps the problem itself. Specialists have been examining the development of methane in microbial electrolysis cells (MECs) in an attempt to prevent it. Surprisingly, they discovered that a microbe, which they assumed to be a *Methanobacterium palustre*, can produce methane-utilizing electrons from current plus utilizing hydrogen gas. These very important findings could result in an efficient means to produce methane, the primary element of natural gas, then transform it into electricity and might have other important environmental use. The transmission of electrical current, or specifically, electrons, into methanogens indicates that it could be probable to produce methane from natural power sources such as wind and solar power; then, the methane could be amassed and stored as fuel for future use. At present, biofuels can be produced from anything that is recyclable and environmental, yet it is a complicated process. What the specialists suggest is that if there is a source of current, then there is a source of electrons and methane can be produced electrochemically. Several specialists believe that the discovery of the methanogenic archaea, which is an element that possesses a distinctive biochemistry and which can carry out electron transfer, is momentous; however, the discovery is fascinating scientifically rather than practically. The present challenge is to show the

potentialities of the discovery with a secluded methanogen which would be indeed a valuable challenge.