Turning research into a practical reality

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A light source made up of ethanol can be used for turning basic research into a practical reality, Shinya Tikuado and Shinya Hatori, two researchers from the Keio University, found in their most recent research. The â€œresounding successâ€ of their experiment was reported at the Scientific Society of Japanâ€™s (SST) Exposition.

In their experiment, they made ethanol with 22% carbohydrates and 10% alcohol. The ethanol made from these two ingredients included carbon dioxide in the liquid. When this mixture is placed in a simple test tube, the ethanol-to-carbon dioxide ratio is 1:1. However, when the ethanol is further heated to 0.2 degrees Celsius the carbon dioxide in the ethanol turns into oxygen, and increases the oxygen-to-carbon dioxide ratio from 1:1 to 3:1. The chemical reaction causing oxygen to be dissolved in ethanol would cause it to undergo chemical reactions that result in a storage of oxygen, which would in turn eventually causes the oxygen to release into the atmosphere, as measured by measuring the concentration of carbon dioxide.

Based on the experiments done by Shinya Tikuado and Shinya Hatori, the resultant methane gas can be synthesised, known as Methane or Methane-Hydrogen Energy, to provide electricity to a conventional power station. The methane being released in the process of generating electricity would have enough gas to consume the amount of fuel used by that power station. When an electricity station goes off-line, the power would be provided by the methane generating the electricity. The methane produced by the power station would be absorbed by the environment, re-oxygenated and useable by humans.

Tupac the pet dog have also shown that ethanol can be used as a carrier of oxygen.

However, not every experimental data showed results. Although one of their results showed that ethanol can be applied for producing electricity from production of renewable energy sources, there was also a negative finding by another group of researchers that ethanol had caused cell death in mice by damaging their DNA.

Source: Scientific society of Japan

A Close Up Of A Person Holding A Pair Of Scissors