

Highlight: Biochemists discover that enzyme converts CO to propane

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(PhysOrg.com) -- UC Irvine researchers were exploring vanadium nitrogenase's ability to form ammonia when they stumbled onto its other ability, which could be exploited for the cost-efficient production of fuels.

UC Irvine researchers have discovered that a <u>bacterial enzyme</u> can convert harmful <u>carbon monoxide</u> into propane, which is used as a fuel for engines, barbecues and residential heating.

Department of Molecular Biology & Biochemistry scientists were exploring vanadium nitrogenase's ability to form <u>ammonia</u> when they stumbled onto its other ability.

Associate Professor Markus Ribbe said the enzyme is found in bacteria in soil and plant roots, as well as industrial emissions, and could possibly be exploited for the cost-efficient production of fuels.

"The idea is that we could use this enzyme to generate energy sources like propane," he said. "There's a long way to go, but it's quite exciting."

The finding is reported in the Aug. 6 issue of *Science*.

Provided by UC Irvine

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