



## Single-reactor Process For Production Of Liquid-phase Organic Compounds By Catalytic Processing Of A

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### The Invention

Disclosed is a method for preparing liquid fuel and chemical intermediates from biomass-derived oxygenated hydrocarbons. The method includes the steps of reacting in a single reactor an aqueous solution of a biomass-derived, water-soluble oxygenated hydrocarbon reactant, in the presence of a catalyst comprising a metal selected from the group consisting of Cr, Mn, Fe, Co, Ni, Cu, Mo, Tc, Ru, Rh, Pd, Ag, W, Re, Os, Ir, Pt, and Au, at a temperature, and a pressure, and for a time sufficient to yield a self-separating, three-phase product stream comprising a vapor phase, an organic phase containing linear and/or cyclic mono-oxygenated hydrocarbons, and an aqueous phase.

#### Tech Fields

- [Clean Technology : Biobased & renewable chemicals & fuels](#)

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