



An article presented by Dr. Francois Jerome and Prof. Samir *et. al.*, of the University of Poitiers, France and University of Alberta, Canada.

Unraveling the mechanism of the oxidation of glycerol to dicarboxylic acids over a sonochemically synthesized copper oxide catalyst

Low frequency ultrasound was employed to synthesize a highly crystalline and highly pure copper oxide, within only few minutes. In combination with  $H_2O_2$ , the as-synthesized CuO was to be found capable of selectively oxidizing glycerol, a co-product of the vegetable oil industry, to valuable dicarboxylic acids (oxalic and tartronic acids) in an overall 78% yield. DFT calculations were performed to rationalize the reaction mechanism.

As featured in:



See Samir H. Mushrif, Francois Jérôme *et al.*, *Green Chem.*, 2018, 20, 2730.



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