

Figure S12. Catalase mechanism of hydrogen peroxide dismutation to water and oxygen.

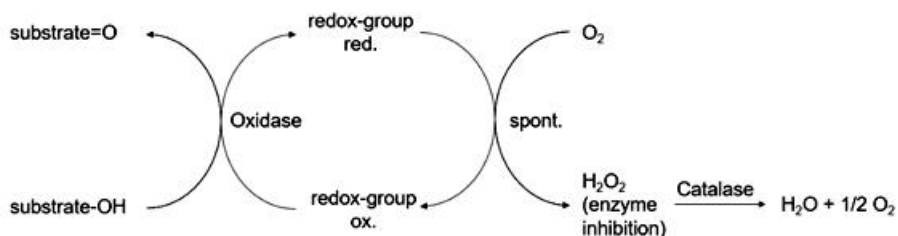


Figure S13. Removal of H₂O₂ from the reaction mixture employing catalase.

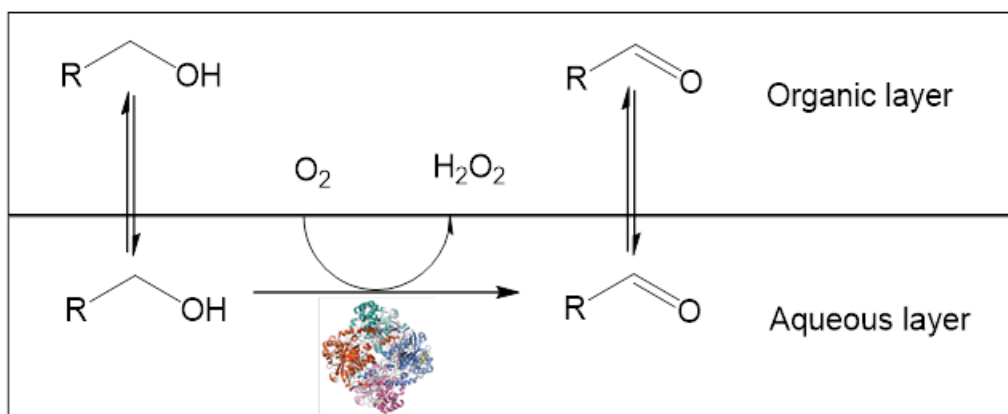


Figure S14. Simplified mechanism of ethanol oxidation by catalase-immobilized cryogel matrix in the presence of oxygen and air.

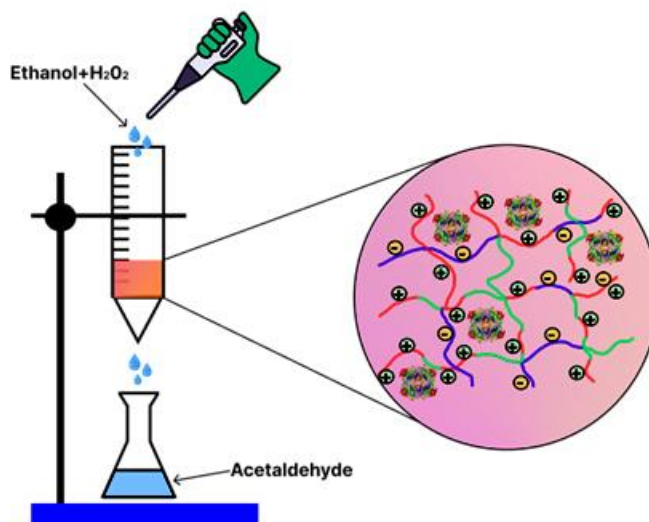


Figure S15. Schematic view of the cryogel-based flow-through catalytic reactor setup, with immobilized catalase for the catalytic oxidation of ethanol and hydrogen peroxide.

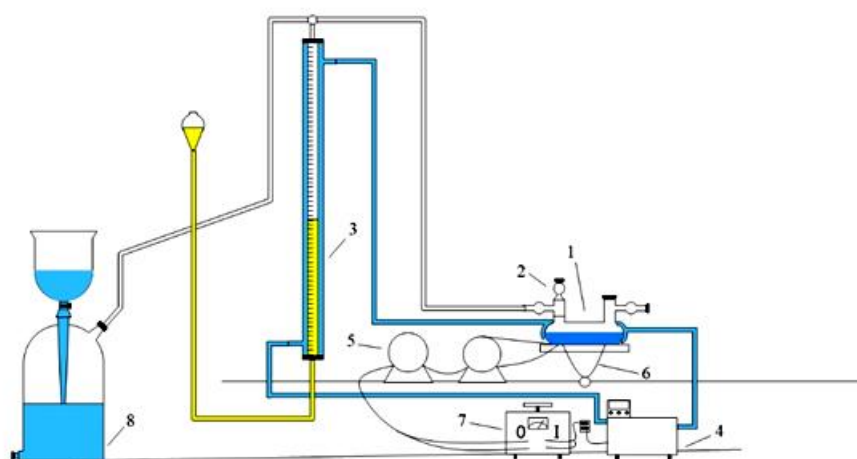


Figure S16. Schematic view of batch type catalytic reactor setup for the catalytic oxidation of ethanol by hydrogen peroxide, molecular oxygen and air. 1 – catalytic “duck”, 2 – valve for catalyst insertion, 3 – thermostated burette, 4 – thermostat, 5 – electric motor, 6 – shaker, 7 – laboratory autotransformer, 8 – Berzelius laboratory gasholder.