

Development of Bimetallic Cu/Mg/MCM Catalyst for Glycerol Hydrogenolysis to Propanediol Without External Hydrogen

Anita Ramli ^{1,2*} and Nur Akila Syakida Idayu Khairul Anuar ^{1,2}

¹HICoE Centre of Biofuel and Biochemical Research, Institute of Sustainable Energy & Resources (ISER), Universiti Teknologi PETRONAS, Seri Iskandar 32610, Perak, Malaysia.

Email: anita_ramli @utp.edu.my, nurakila.khairul@utp.edu.my

²Fundamental and Applied Sciences Department, Universiti Teknologi PETRONAS, Seri Iskandar 32610 Perak, Malaysia. Email: anita_ramli @utp.edu.my, nurakila.khairul@utp.edu.my

*Corresponding author: anita_ramli @utp.edu.my, +605 3687639

Supplementary materials

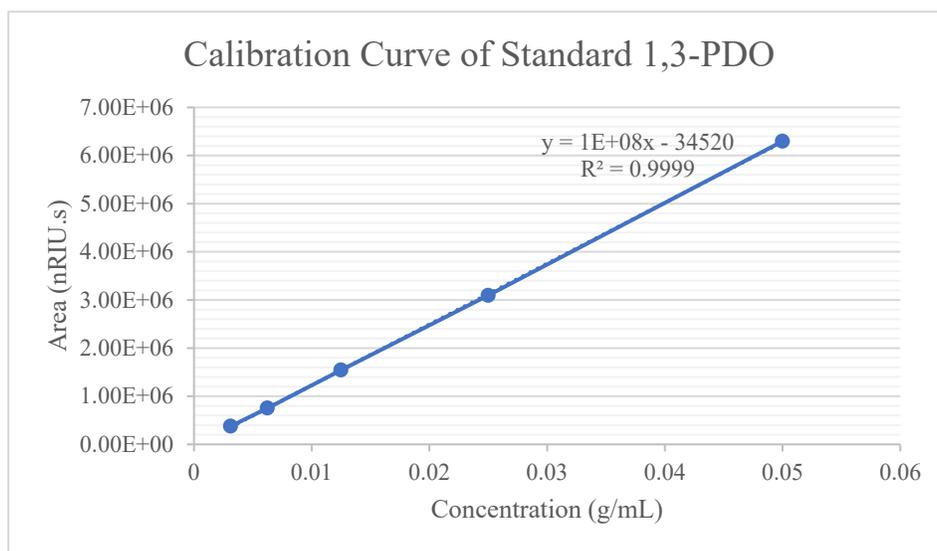


Figure A1. Calibration curve of standard 1,3-propanediols at five different concentrations.

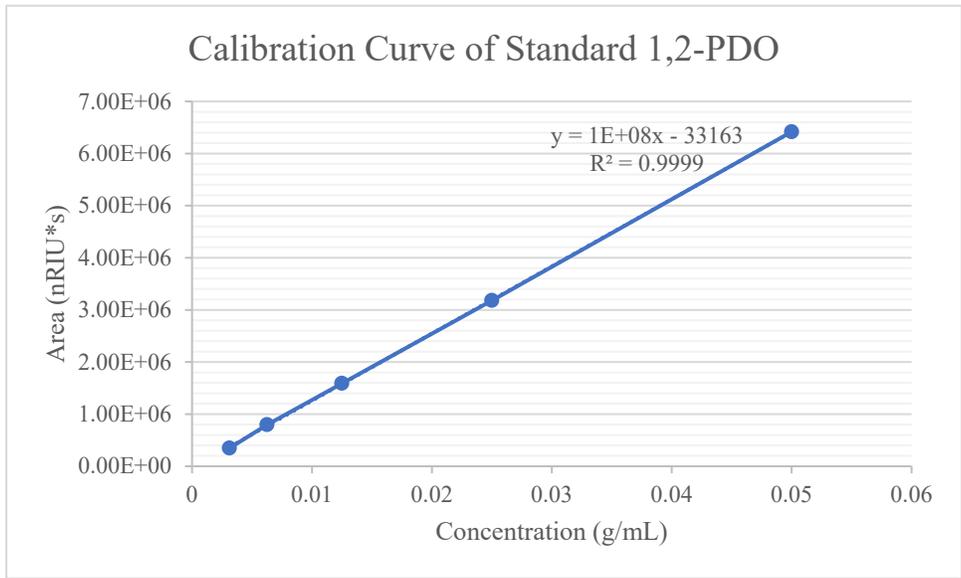


Figure A2. Calibration curve of standard 1,2-propanediol at five different concentrations

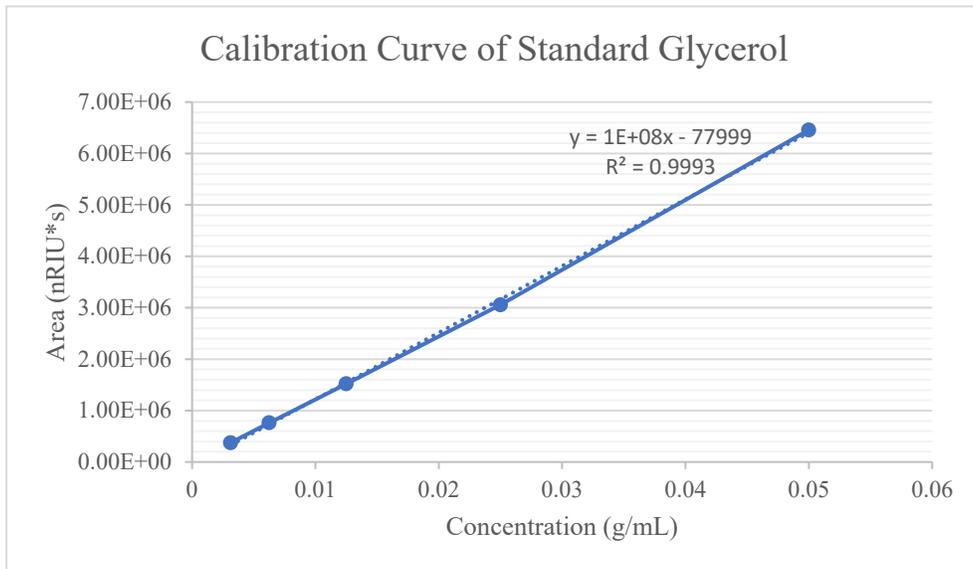


Figure A3. Calibration curve of standard glycerol at five different concentrations

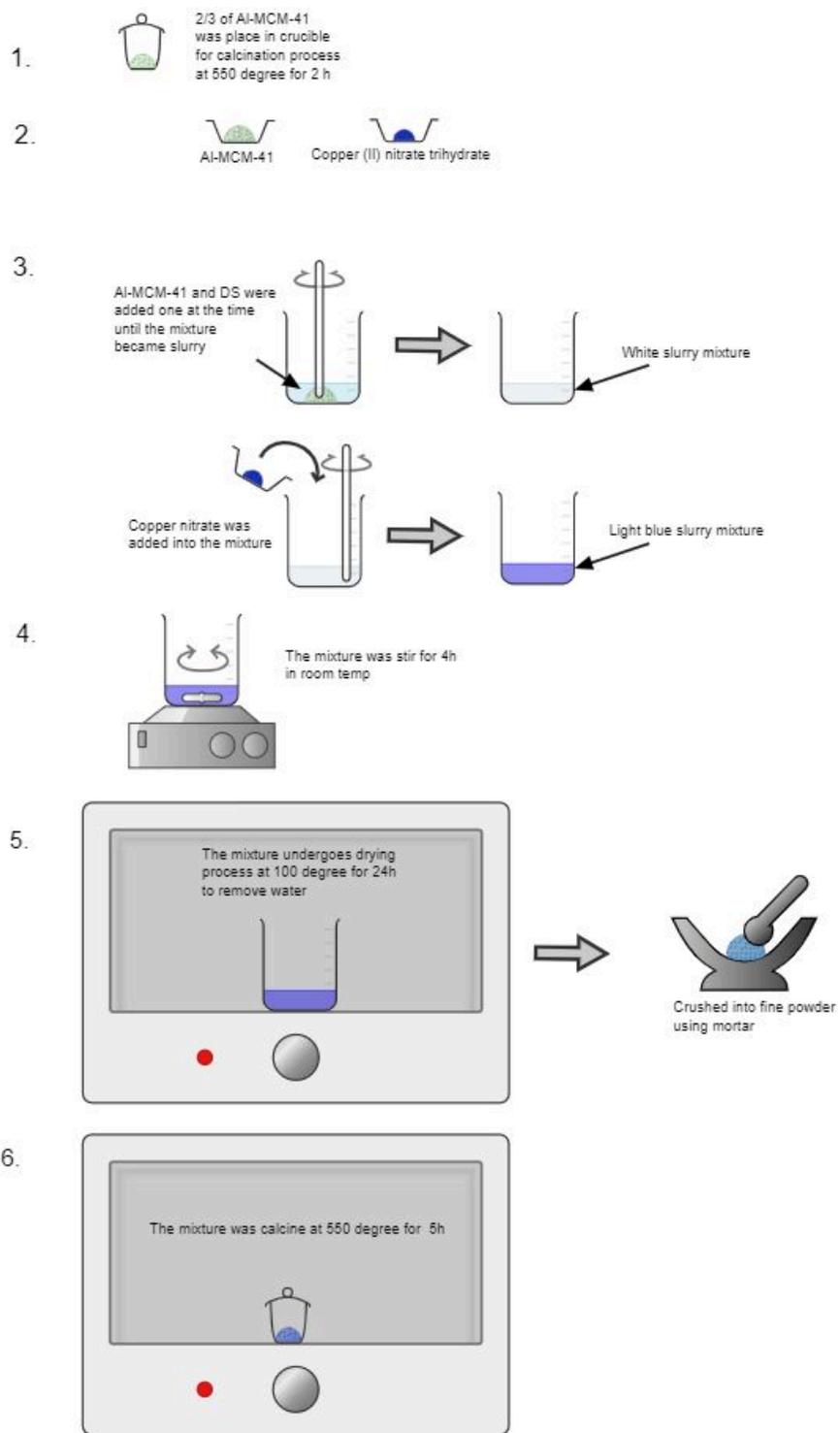


Figure A4. Schematic illustration of catalyst synthesized process.