Deoxyalkylation of Guaiacol with Catalysis of Haggite Structured $V_4 O_6 (\mathrm{OH})_4$

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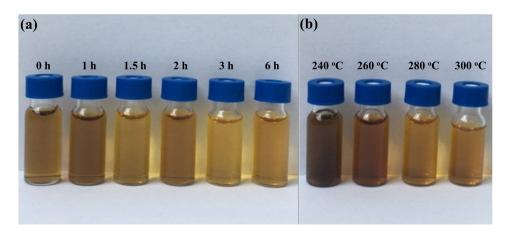


Figure S1. (a) The liquid products acquired from guaiacol conversion in methanol at 280 °C for different time. (b) The liquid products acquired from guaiacol conversion in methanol at different temperatures for 6 h. Reaction conditions: 0.5 g V₂O₅, 1.0 g guaiacol, 60 mL methanol.

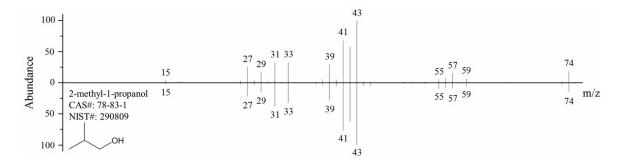


Figure S2. The mass spectrum of 2-methyl-1-propanol detected in post-reaction liquid mixture (upper) and the standard mass spectrum of 2-methyl-1-propanol, NIST#: 290809 (lower).

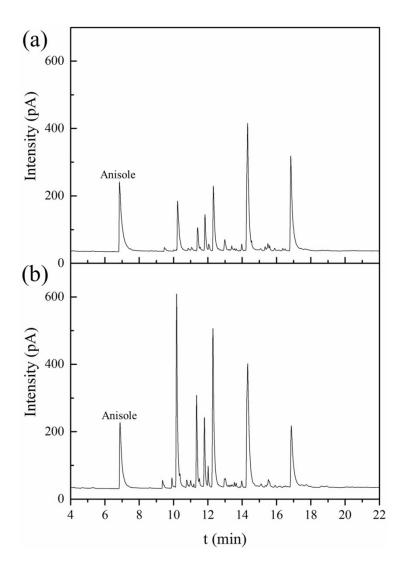


Figure S3. GC spectra of liquid mixtures acquired with catechol (a) or guaiacol (b) as substrate. Reaction conditions: 0.5 g V_2O_5 , 1.0 g substrate, 60 mL methanol, 300 °C, 6 h. Note: Anisole is the internal standard.