

## Supplementary Materials

# Nickel and Cobalt Ilmenites-Based Catalysts for Upgrading Pyrolytic Oil during Pyrolysis of Waste Tires

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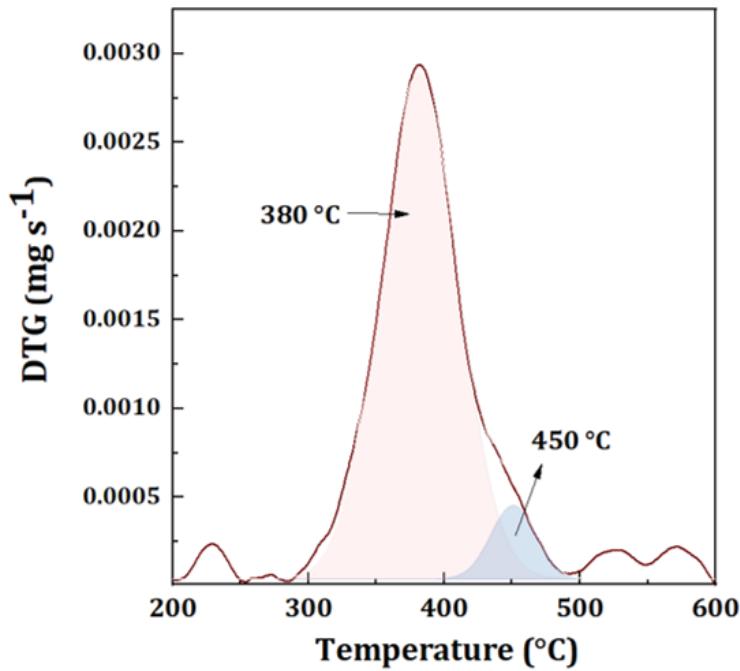
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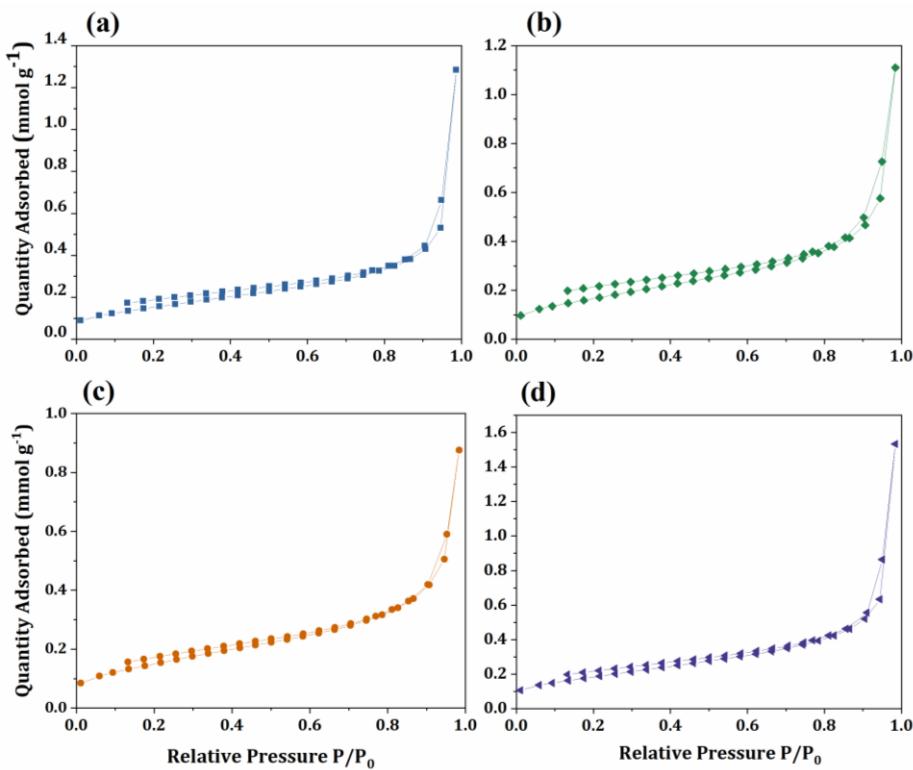
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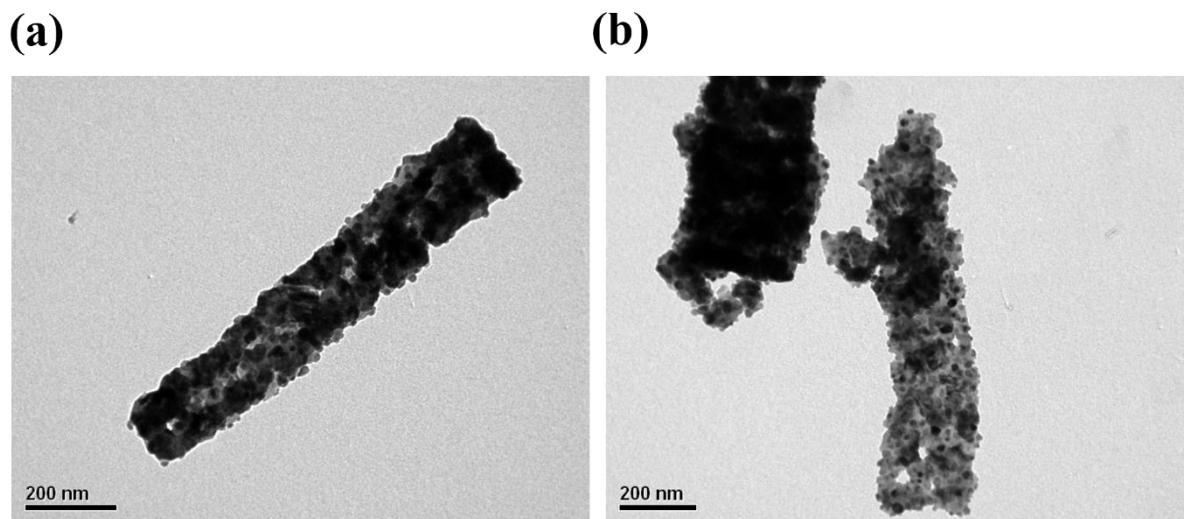
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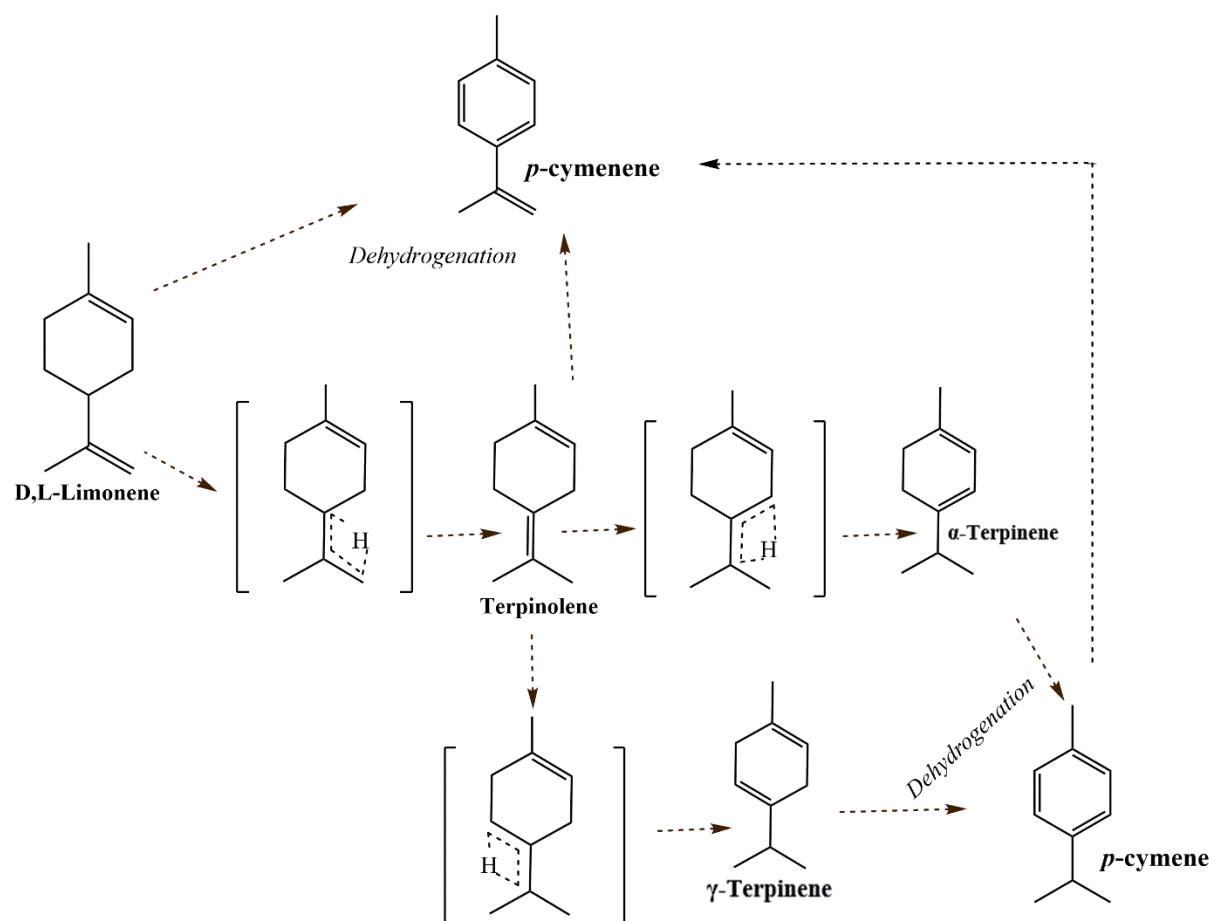
**Figure S1.** Derivative of the mass loss curve corresponding to the decomposition of waste tire samples



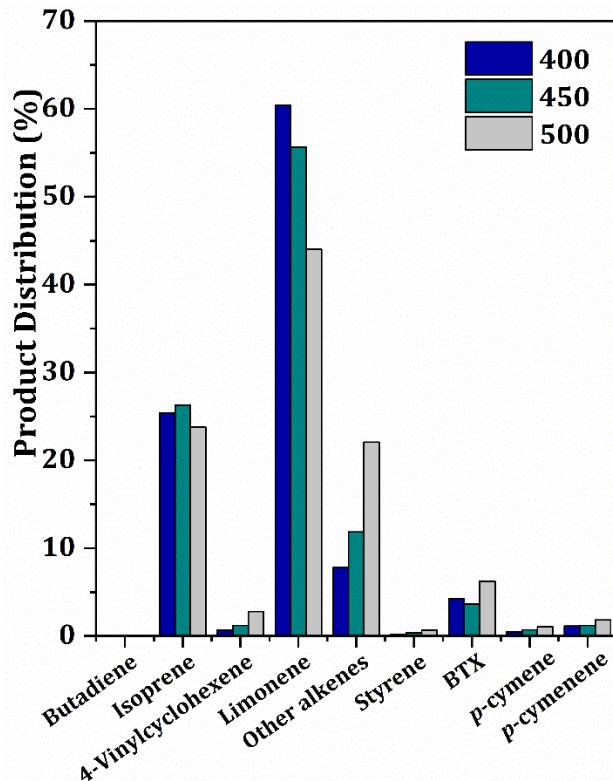
**Figure S2.** N<sub>2</sub> adsorption-desorption isotherms of NiTiO<sub>3</sub> (a) oxidized, (b) reduced and CoTiO<sub>3</sub> (c) oxidized, (d) reduced



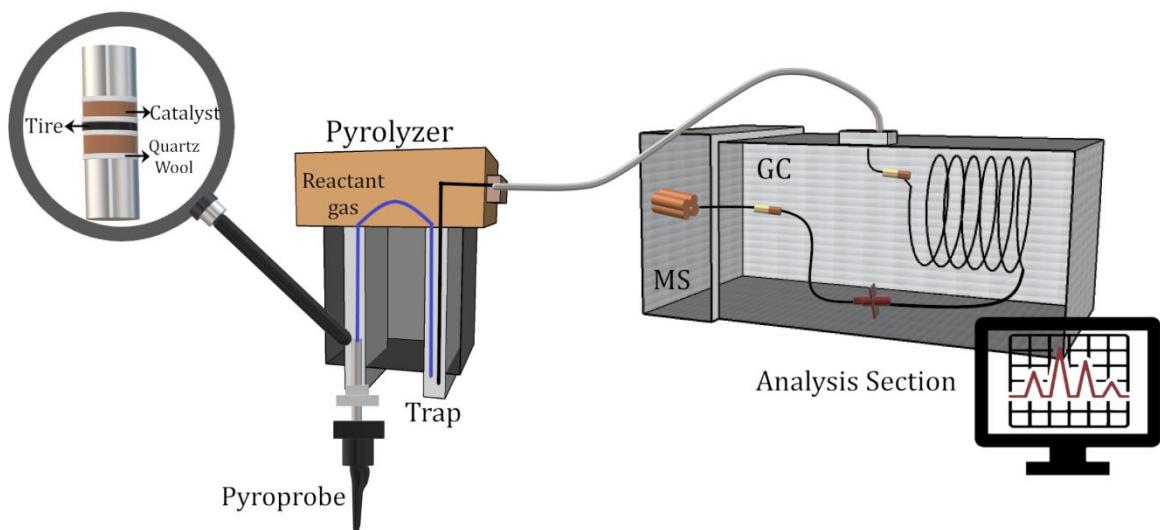
**Figure S3.** TEM micrographs showing metallic particles of reduced (a) CoTiO<sub>3</sub>, (b) NiTiO<sub>3</sub> catalysts



**Figure S4.** The proposed mechanism for p-cymene and p-cymenene formation from limonene comes from waste tire pyrolysis.



**Figure S5.** Temperature effect on product distribution during waste tire pyrolysis



**Figure S6.** Analytical micropyrolysis reactor