Supplementary Information

Conversion of methoxy and hydroxyl functionalities of phenolic monomers over zeolites

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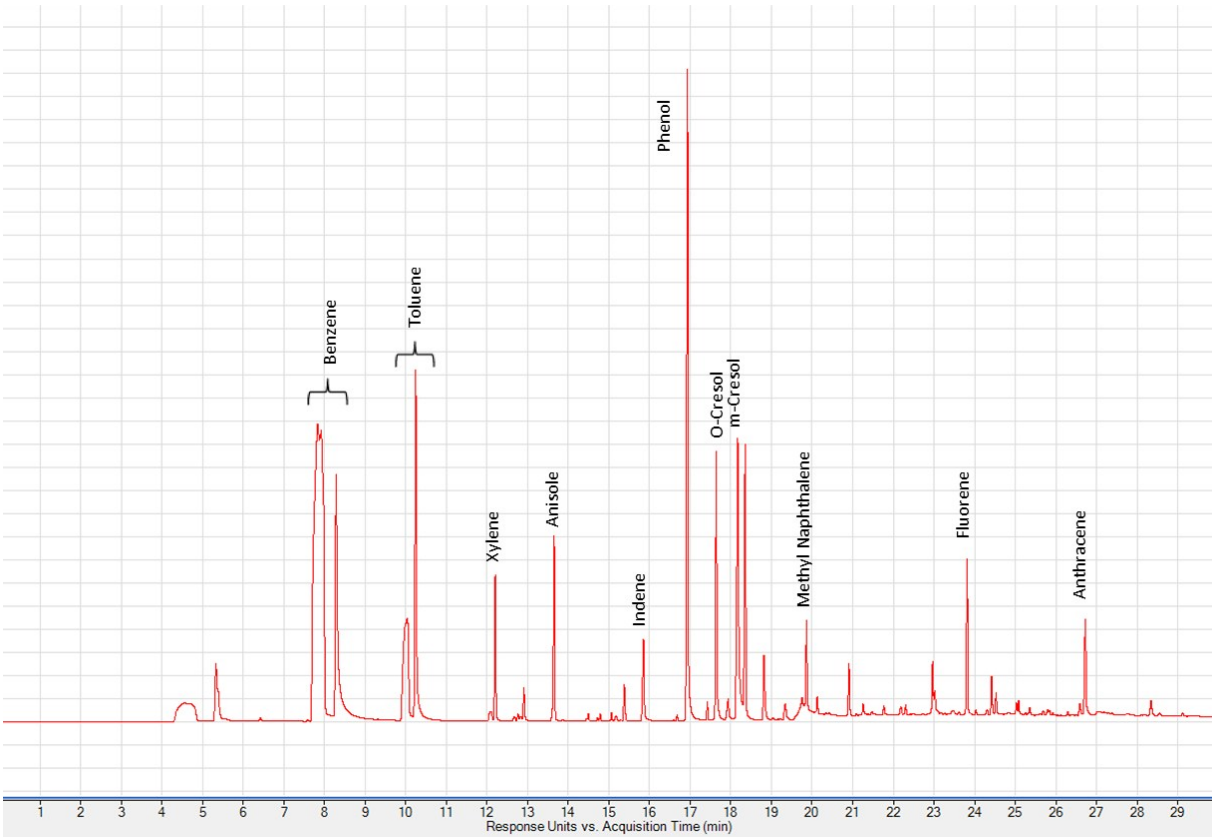


Figure S1. FID chromatogram showing intermediate peaks for anisole run over coked ZSM5 catalyst bed in pyrolysis at 600^0C (after five consecutive runs of 2mg anisole over the catalytic bed).

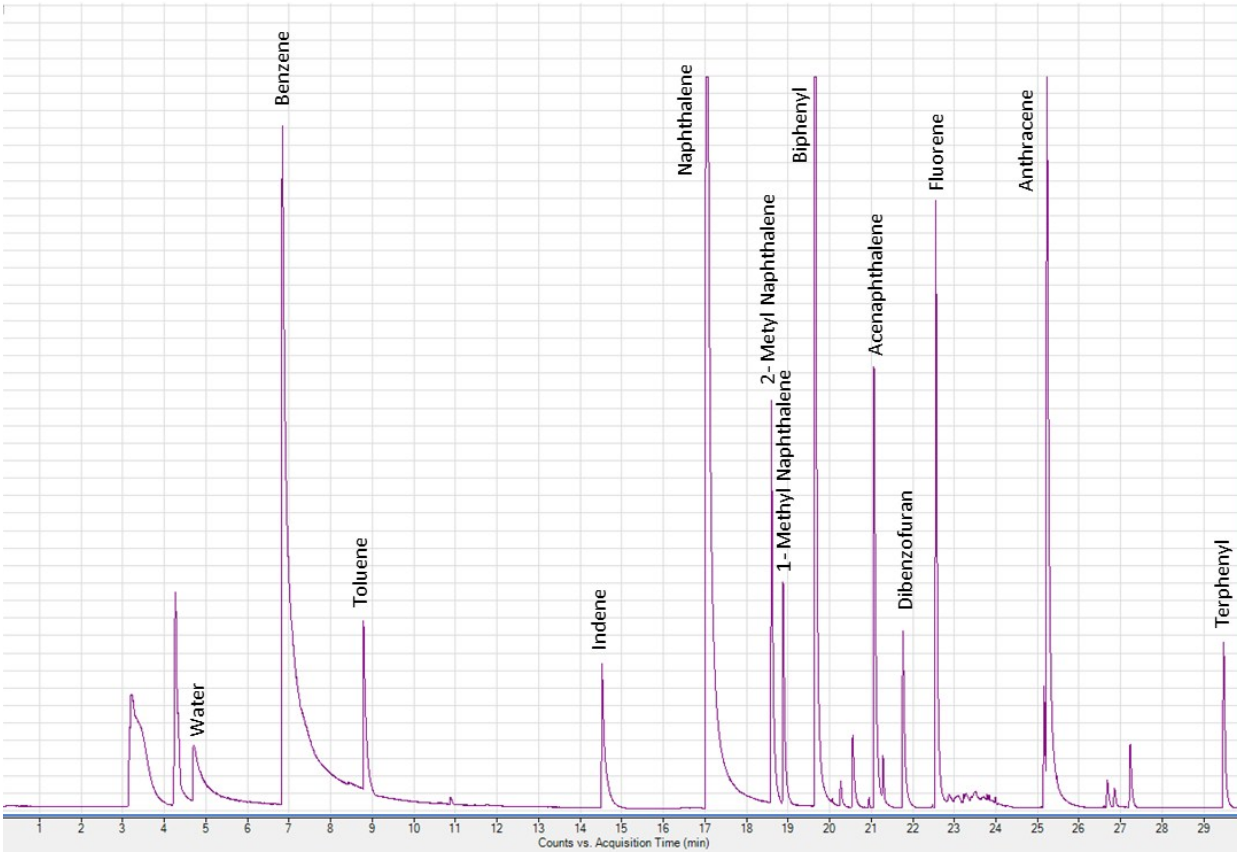
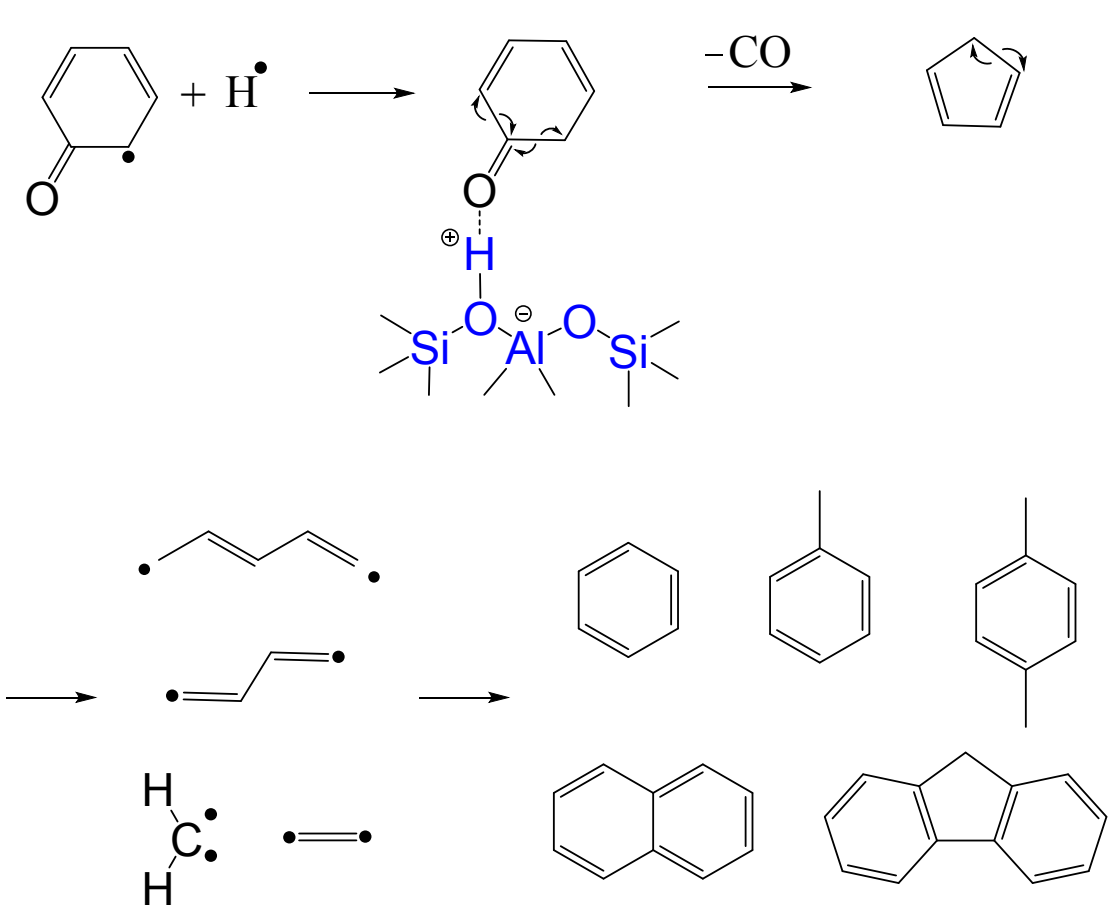


Figure S2. MSD chromatogram showing water and other aromatic products for phenol pyrolysis over zeolites at 600^0C



Phenol rearrangement to produce 2,4- cylohexadienone and decrbonylation to produce cylcopenta- 1,3-diene

Intermediate radicals produce comparatively high hydrogenated products

Figure S3. Proposed mechanism for secondary phenol conversion pathway via 2,4- cylohexadienone phenol isomer (thermal route)

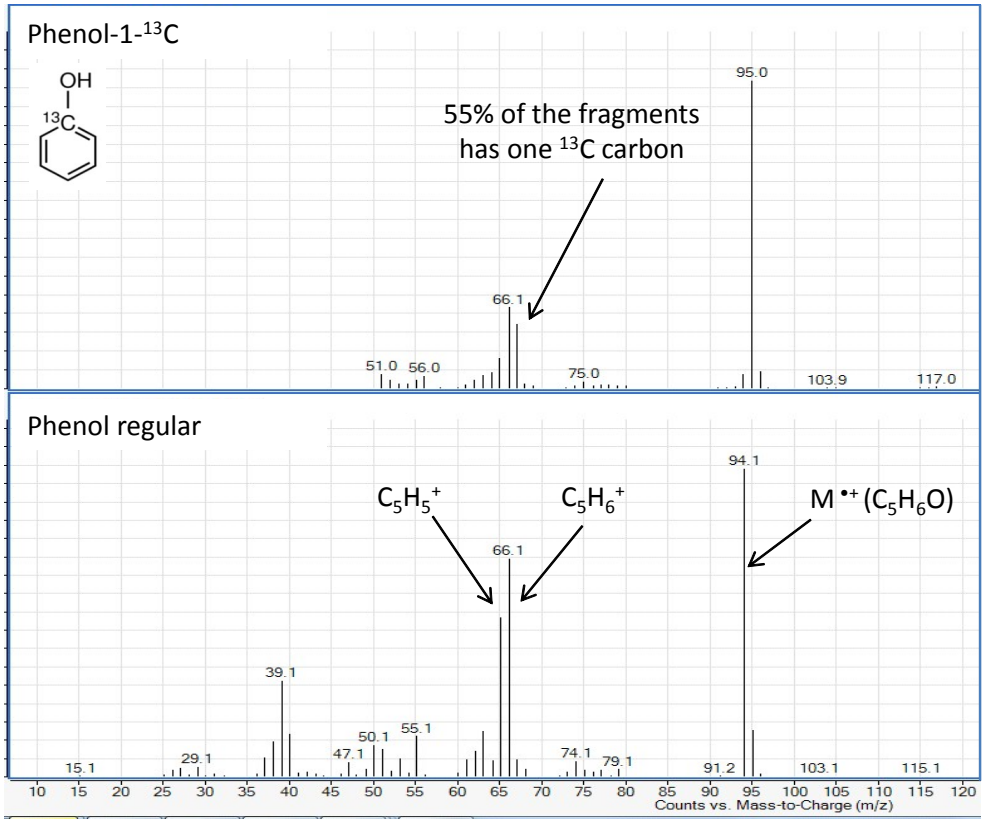


Figure S4. MSD-EI spectrum for phenol isomerization from phenol-1-^{13}C and regular phenol