

Supplementary information

Cleavage of aryl-ether bonds in lignin model compounds using a Co-Zn-beta catalyst

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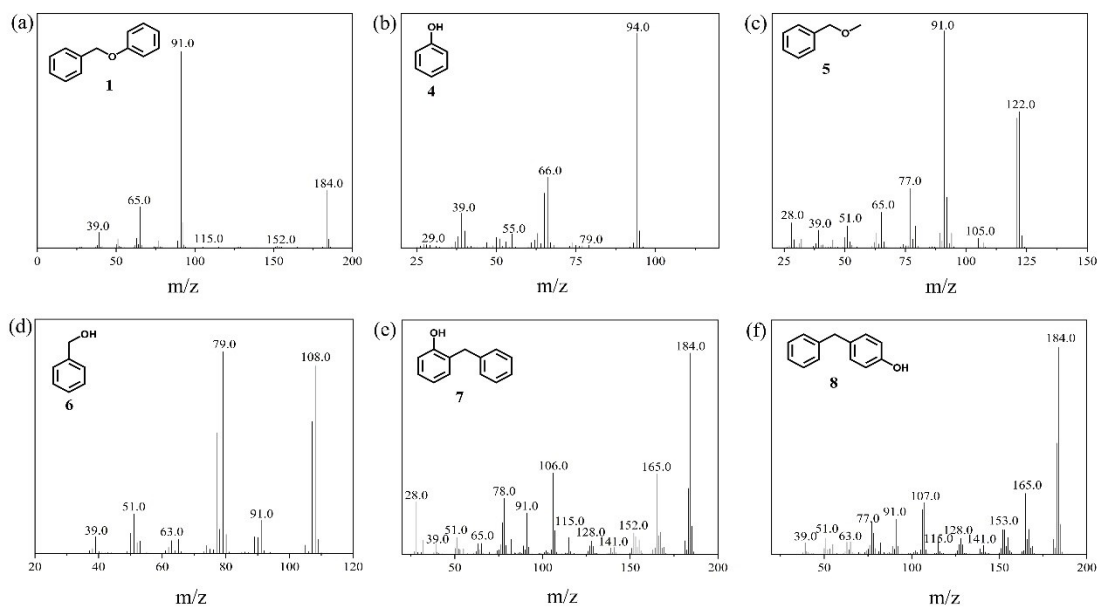


Fig. S1 MS data of BPE and its degradation products.

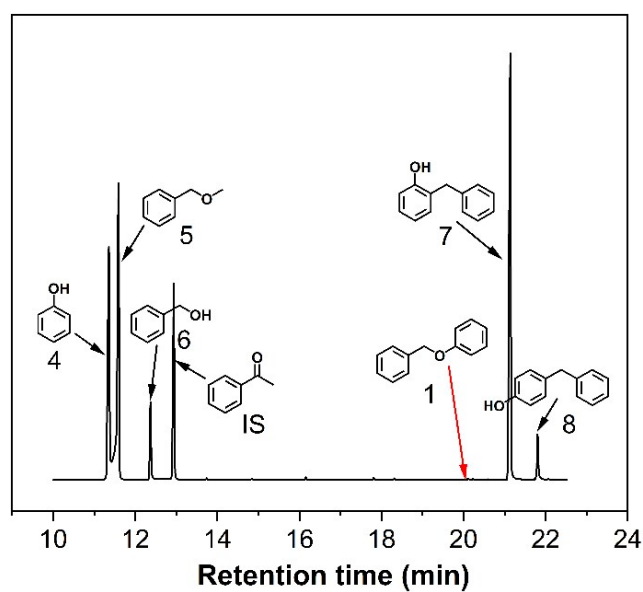


Fig. S2 GC of degradation products of BPE at 240 °C.

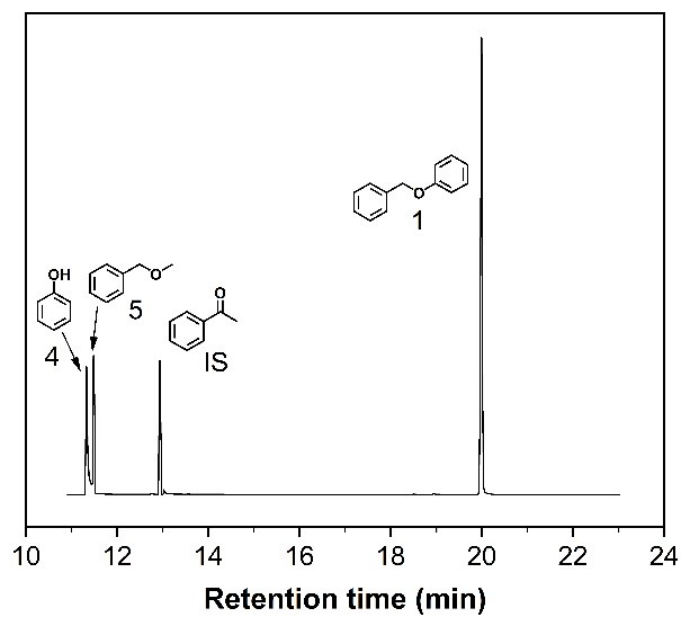


Fig. S3 GC of degradation products of BPE at 240 °C without catalyst.

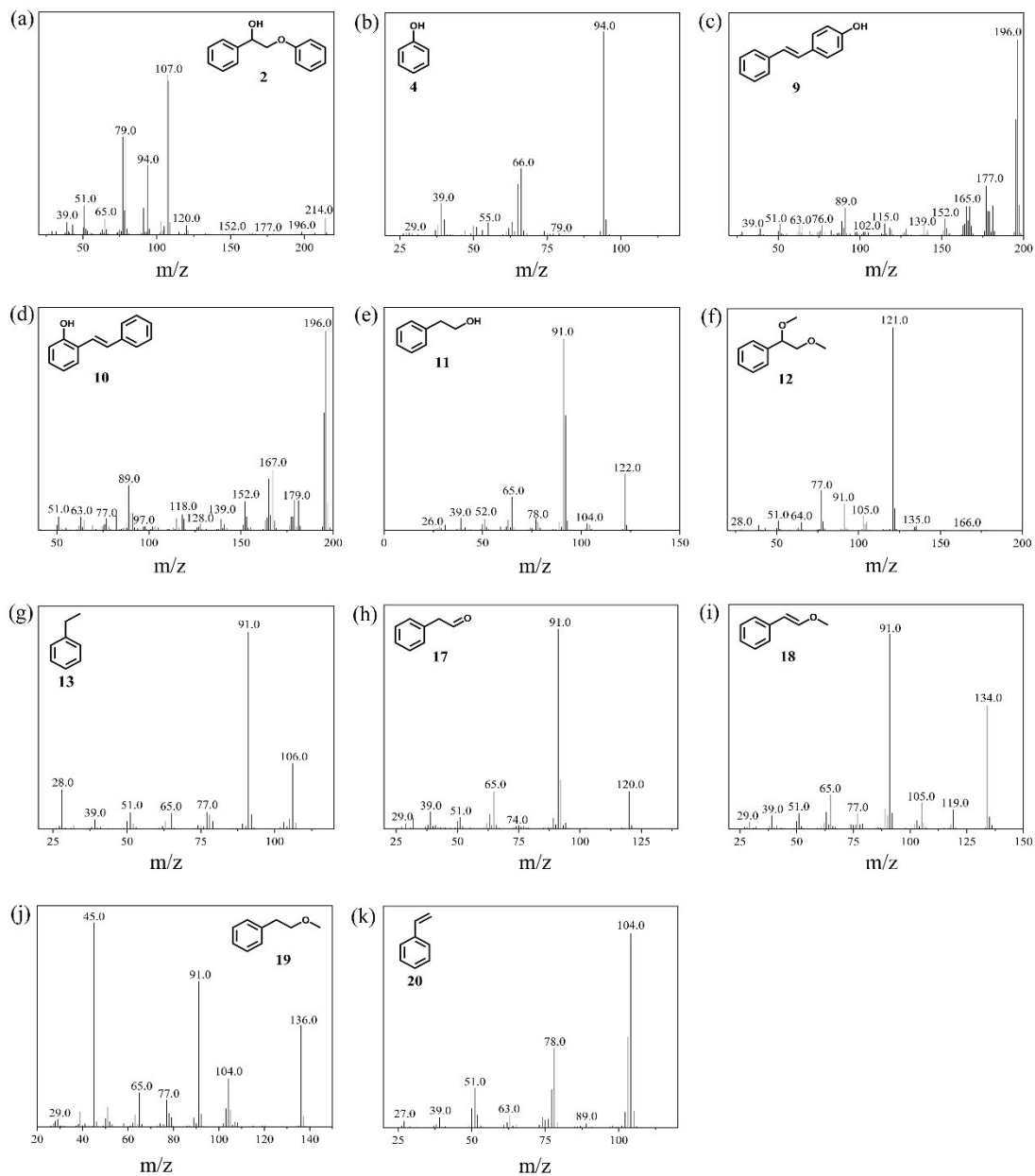


Fig. S4 MS data of PPE and its degradation products.

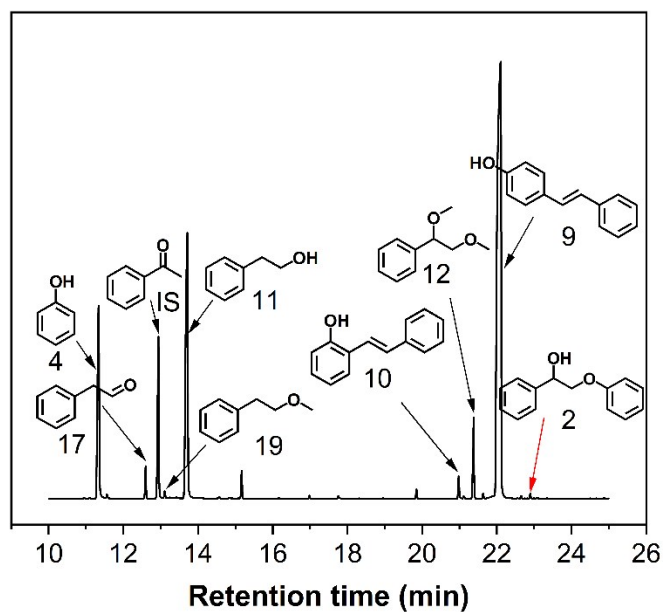


Fig. S5 GC of degradation products of PPE at 240 °C.

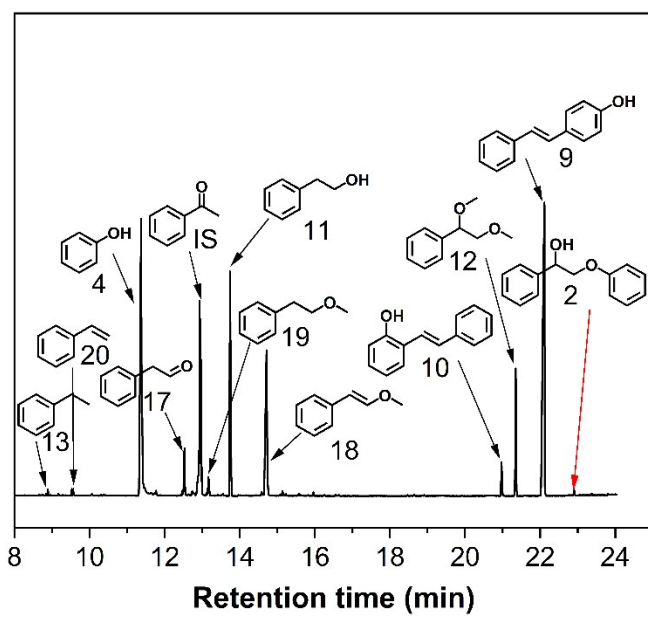


Fig. S6 GC of degradation products of PPE at 260 °C.

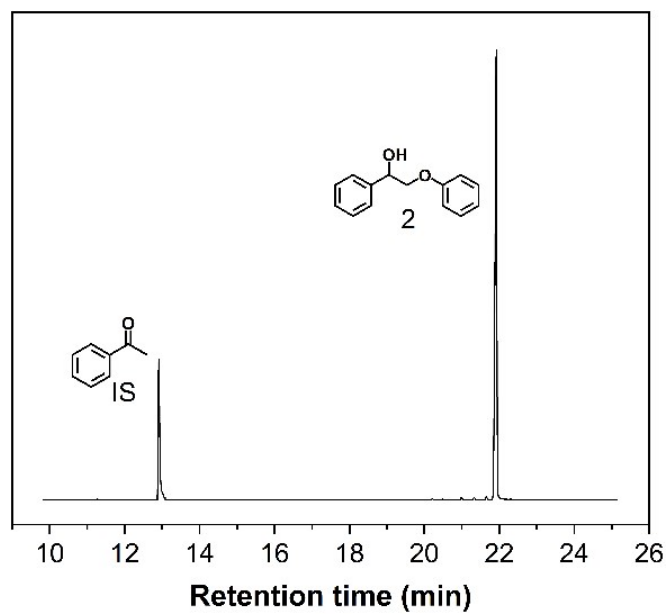


Fig. S7 GC of degradation products of PPE at 260 °C without catalyst.

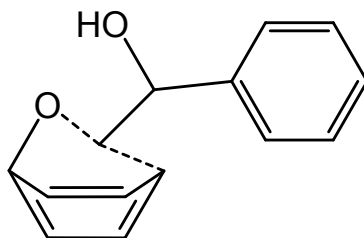


Fig. S8 A possible distorted transition state for a direct [1, 5] shift of PPE.

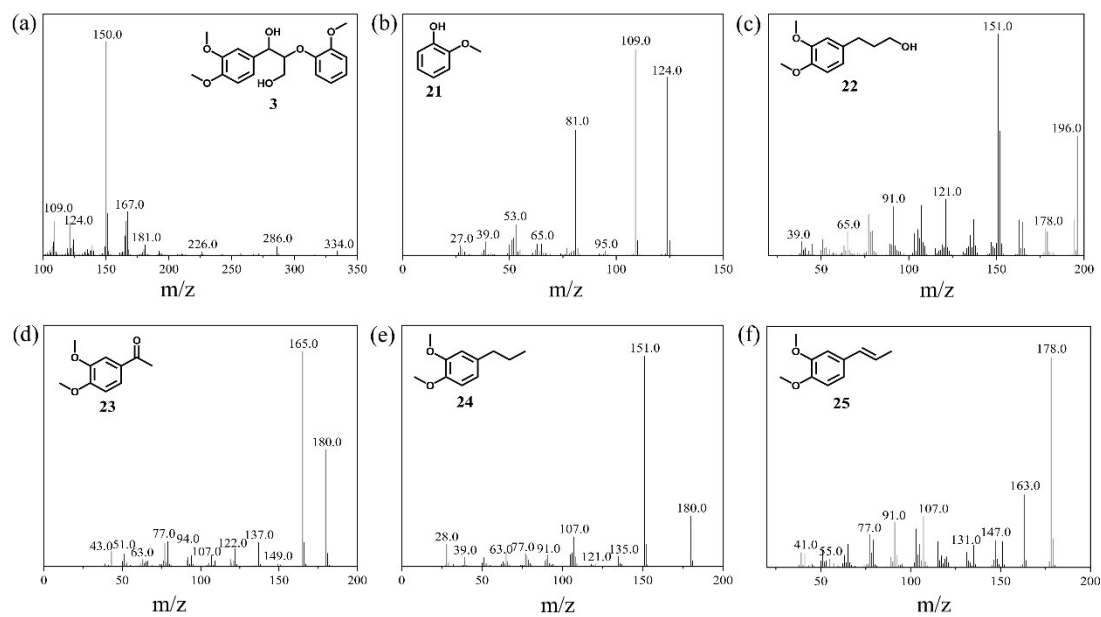


Fig. S9 MS data of PPPD and its degradation products.

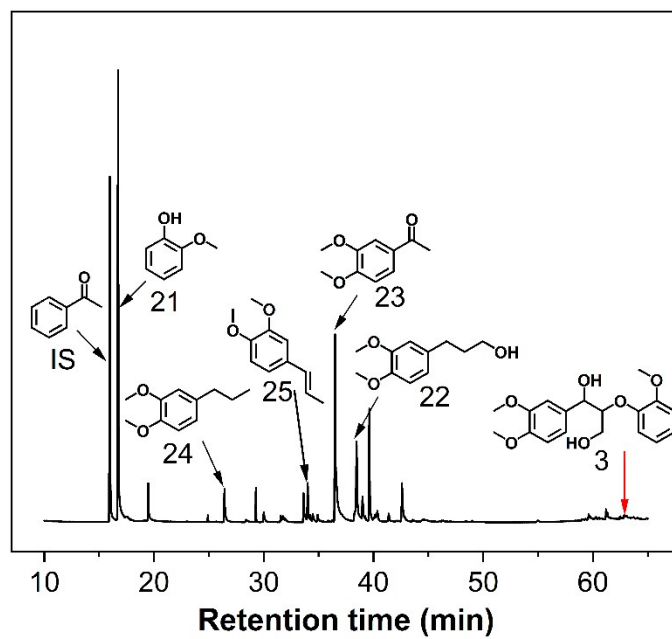


Fig. S10 GC of degradation products of PPPD at 200 °C.

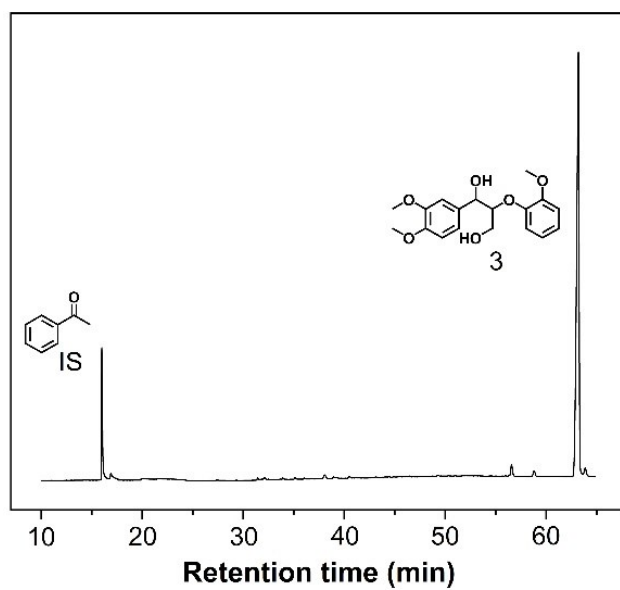


Fig. S11 GC of degradation products of PPPD at 200 °C without catalyst.