

## Supplementary Information

### **Sulfamic acid-functionalized nano-titanium dioxide as an efficient, mild and highly recyclable solid acid nanocatalyst for chemoselective oxidation of sulfides and thiols**

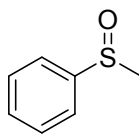
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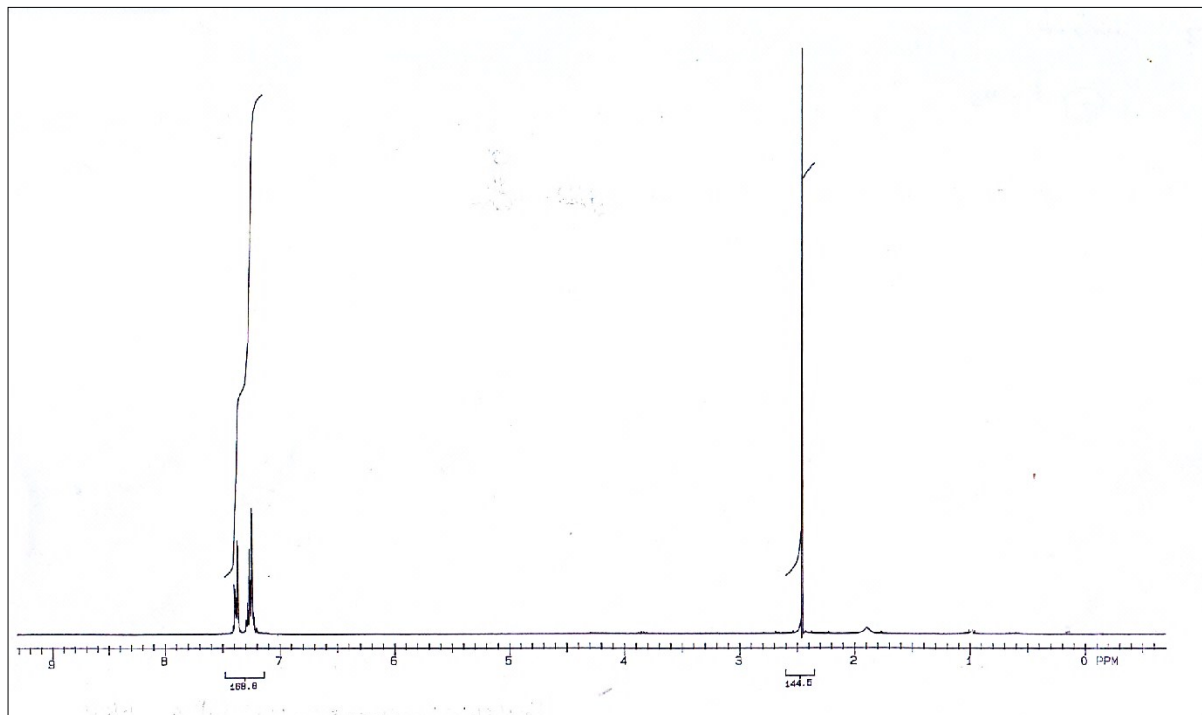
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## Methyl phenyl sulfoxide

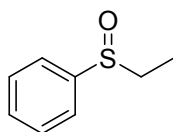


$^1\text{H}$  NMR ( $\text{CDCl}_3$ , 400Hz, ppm): 2.45 (3H, s, Me), 7.25 (3H, m, Ph), 7.43 (2H, m, Ph)

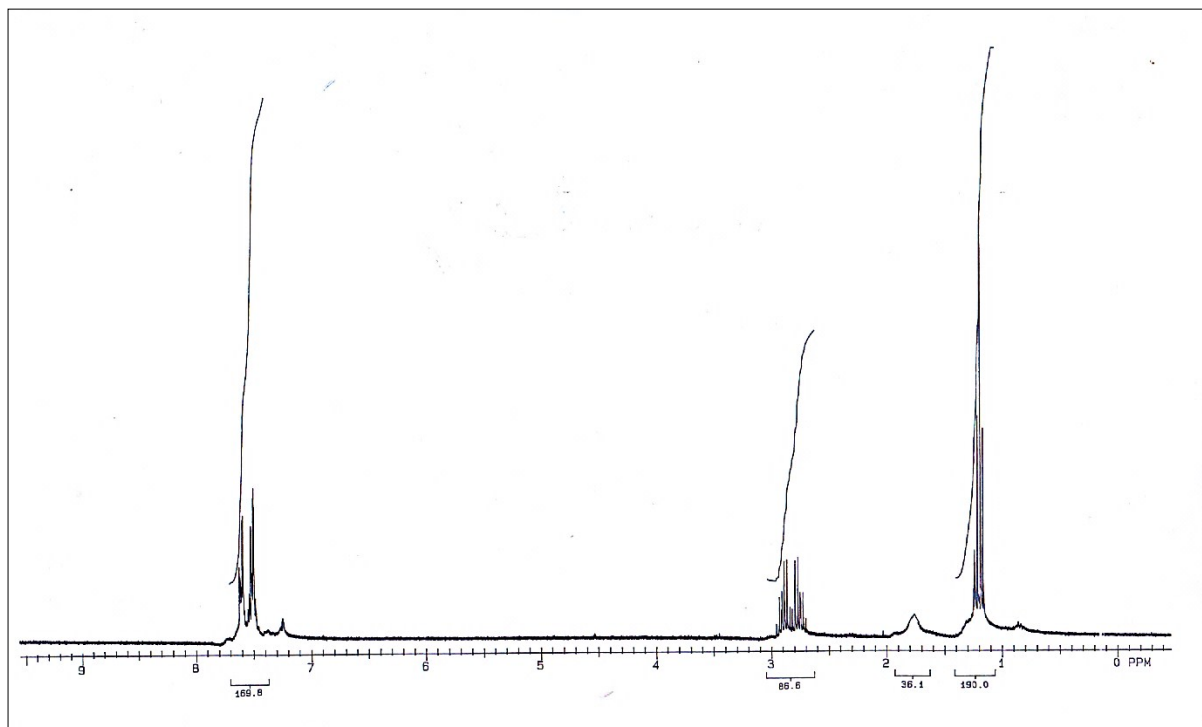


**Figure 1.**  $^1\text{H}$  NMR of methyl phenyl sulfoxide

## Ethyl phenyl sulfoxide

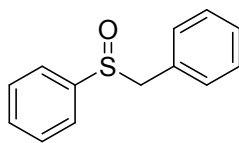


$^1\text{H NMR}$  ( $\text{CDCl}_3$ , 400Hz, ppm):  $\delta = 1.20$  (3H, m,  $\text{CH}_3$ ),  $2.70$  (2H, m,  $\text{CH}_2$ ),  $7.52$  (3H, m, Ph),  $7.61$  (2H, m, Ph)

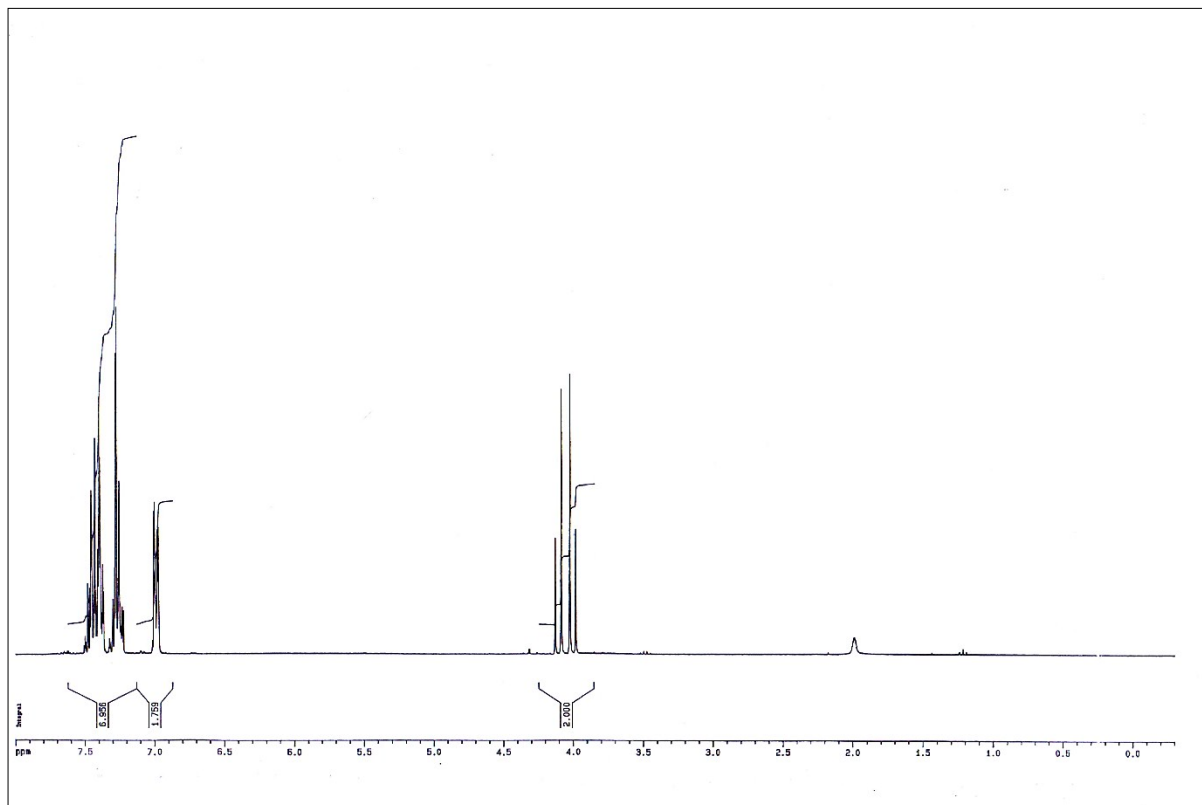


**Figure 2.**  $^1\text{H NMR}$  of ethyl phenyl sulfoxide

### Benzyl phenyl sulfoxide

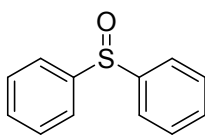


$^1\text{H NMR}$  ( $\text{CDCl}_3$ , 400Hz, ppm):  $\delta$  = 3.98 (1H, d,  $j=13\text{Hz}$ ,  $\text{CH}_2$ ), 4.12 (1H, d,  $j=13\text{Hz}$ ,  $\text{CH}_2$ ), 6.95 (2H, m, Ph), 7.25 (2H, m, Ph), 7.42 (6H, m, Ph)

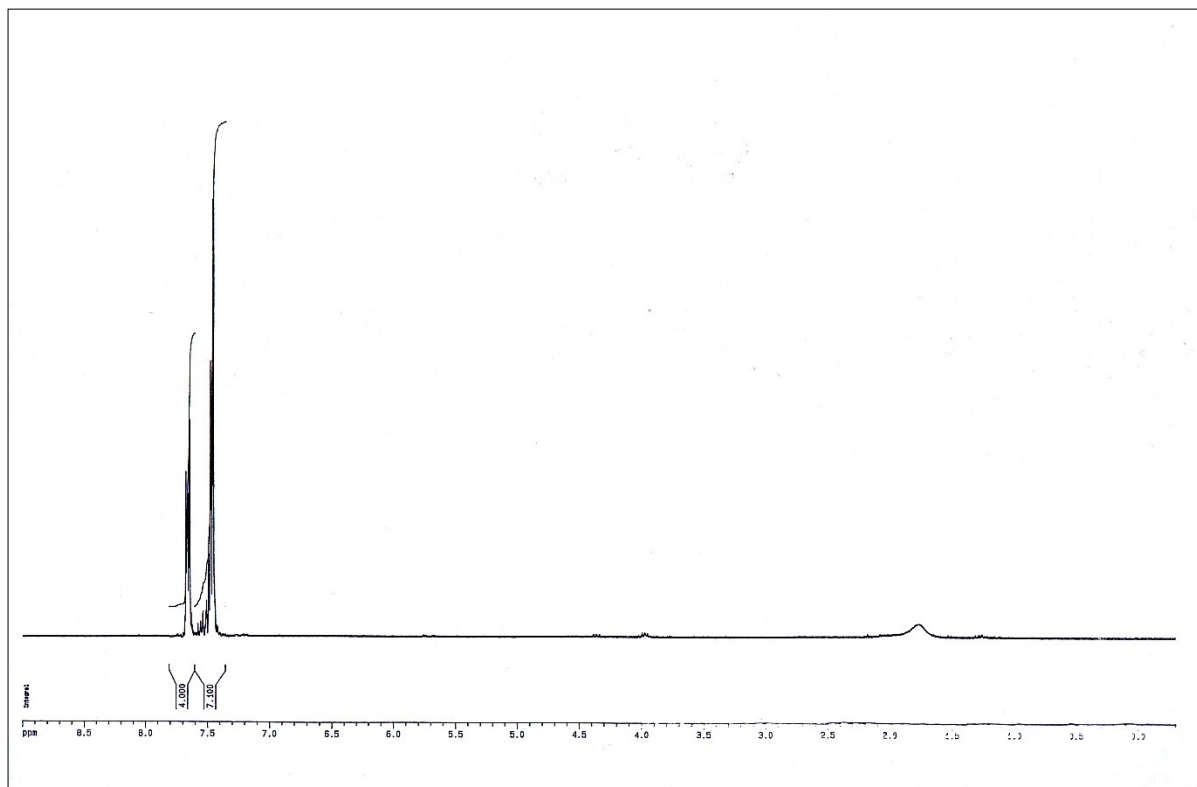


**Figure 3.**  $^1\text{H NMR}$  of benzyl phenyl sulfoxide

## Diphenyl sulfoxide



$^1\text{H}$  NMR ( $\text{CDCl}_3$ , 400Hz, ppm):  $\delta = 7.49$  (4H, m, Ph),  $7.65$  (6H, m, Ph)



**Figure 4.**  $^1\text{H}$  NMR of diphenyl sulfoxide