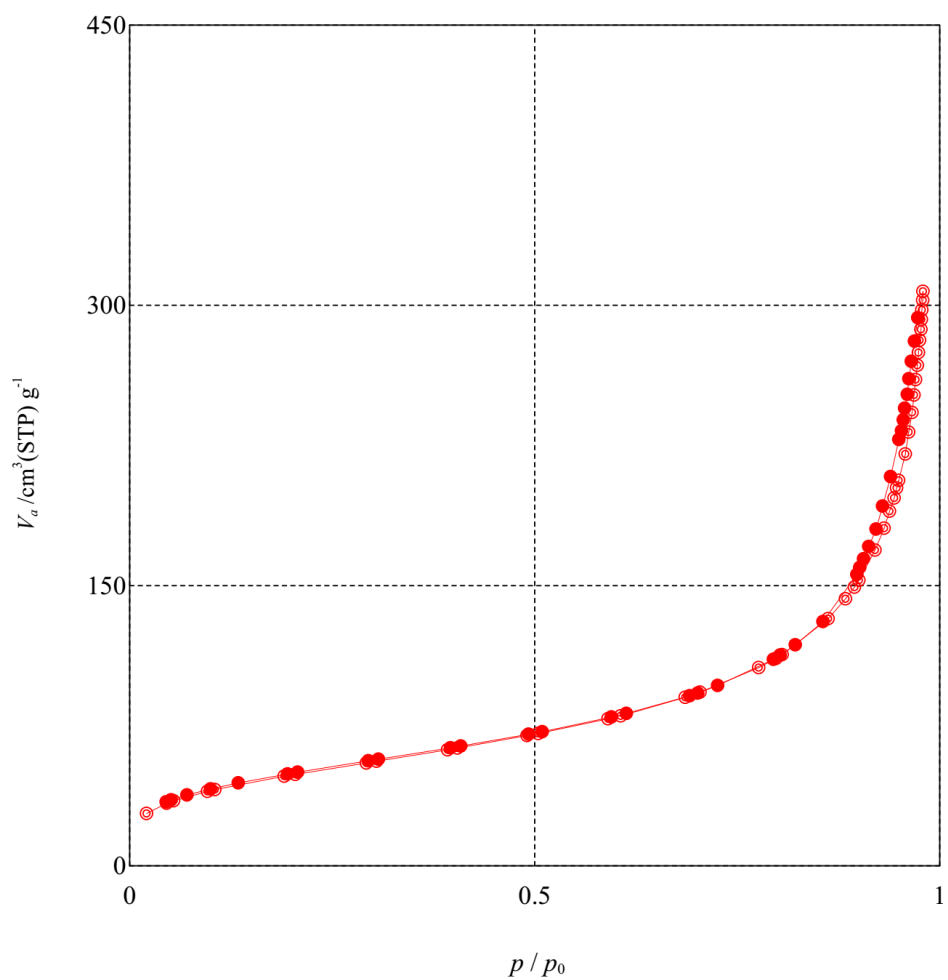


Supplementary data

Synthesis, characterization and first application of graphene oxide functionalized Cu(II) complex for the synthesis of 1,2,3-triazole derivatives

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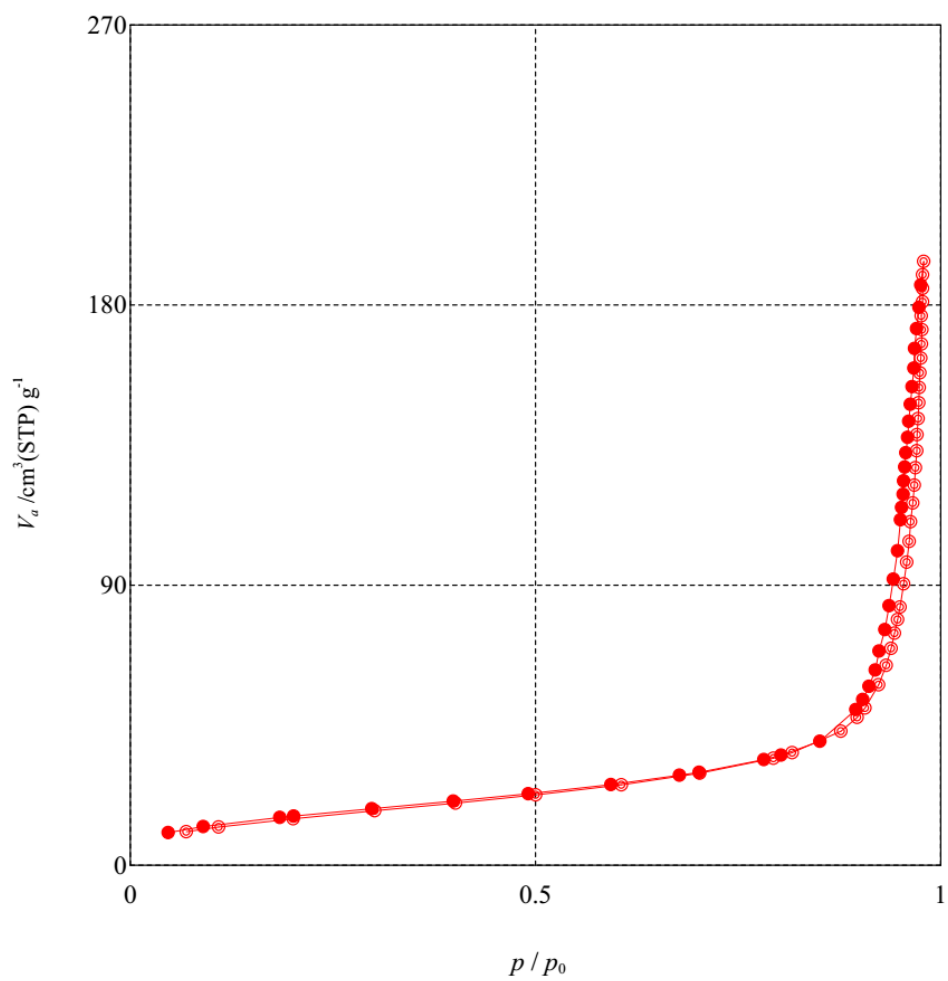


Adsorption / desorption isotherm

Adsorbate N₂

Adsorption temperature 77 [K]

Fig. S1 Nitrogen adsorption–desorption isotherms of GO



Adsorption / desorption isotherm

Adsorbate N2

Adsorption temperature 77 [K]

Fig. S2 Nitrogen adsorption–desorption isotherms of GO-M-Cu

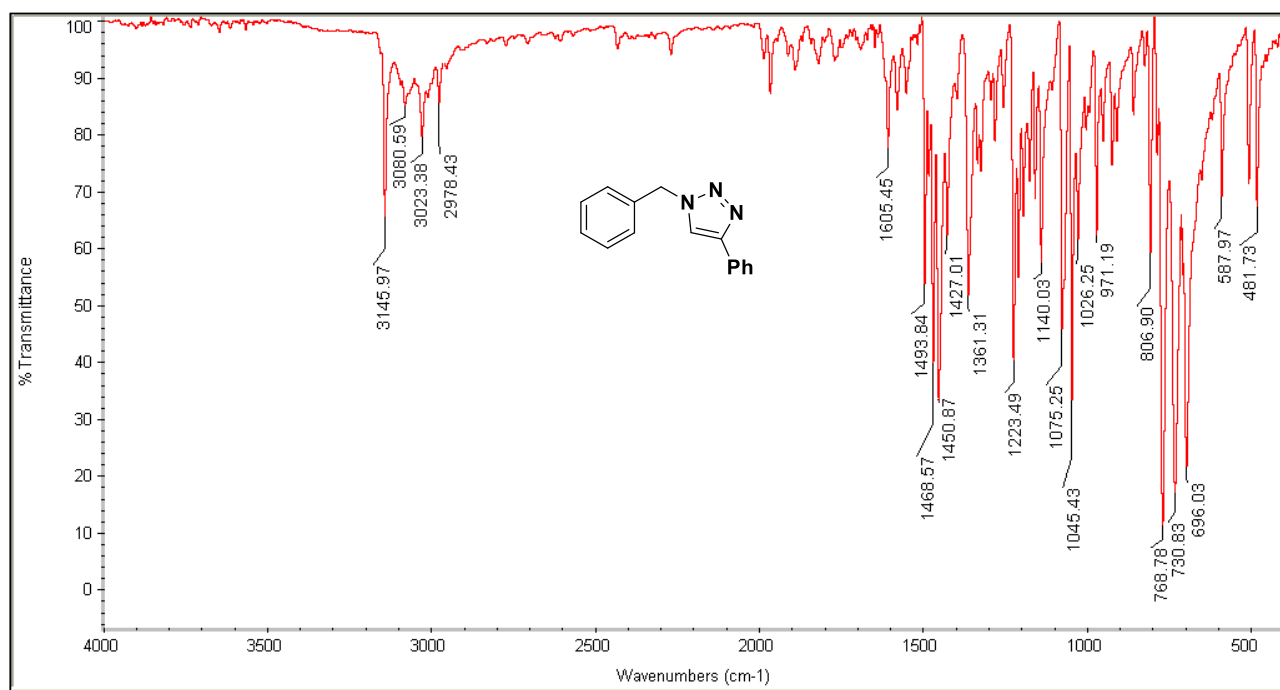


Fig. S3 FT-IR of 1-Benzyl-4-phenyl-1H-1,2,3-triazole (**5a**, **5b** and **5c**, Table 3, Entries 1-3)

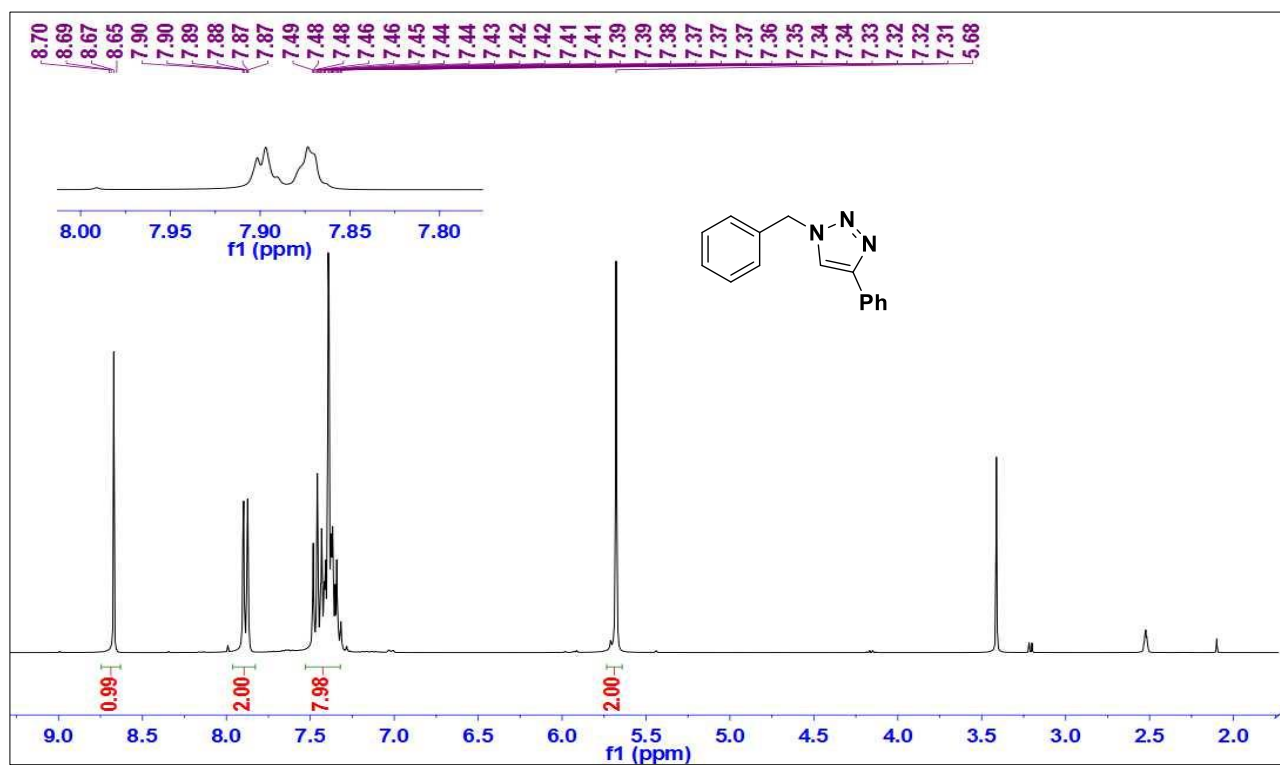


Fig. S4 ^1H -NMR of 1-Benzyl-4-phenyl-1H-1,2,3-triazole (**5a**, **5b** and **5c**, Table 3, Entries 1-3)

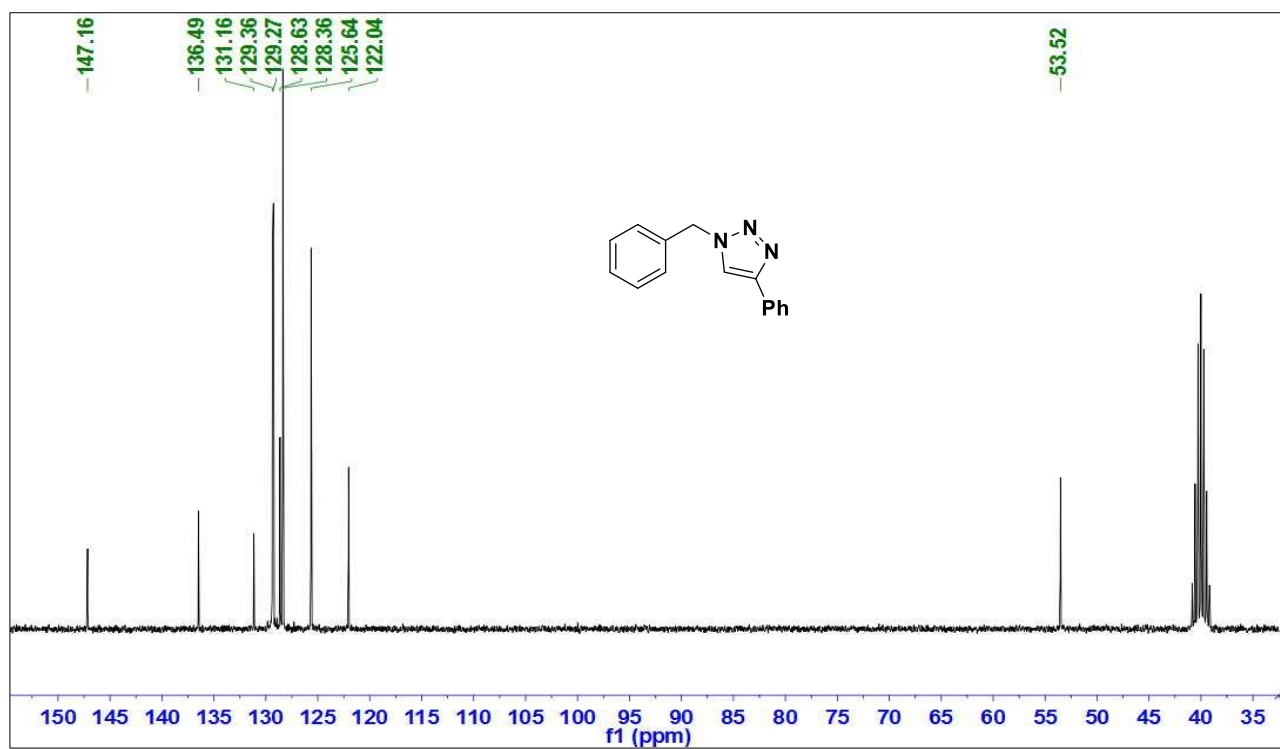


Fig. S5 ^{13}C -NMR of 1-Benzyl-4-phenyl-1H-1,2,3-triazole (**5a**, **5b** and **5c**, Table 3, Entries 1-3)

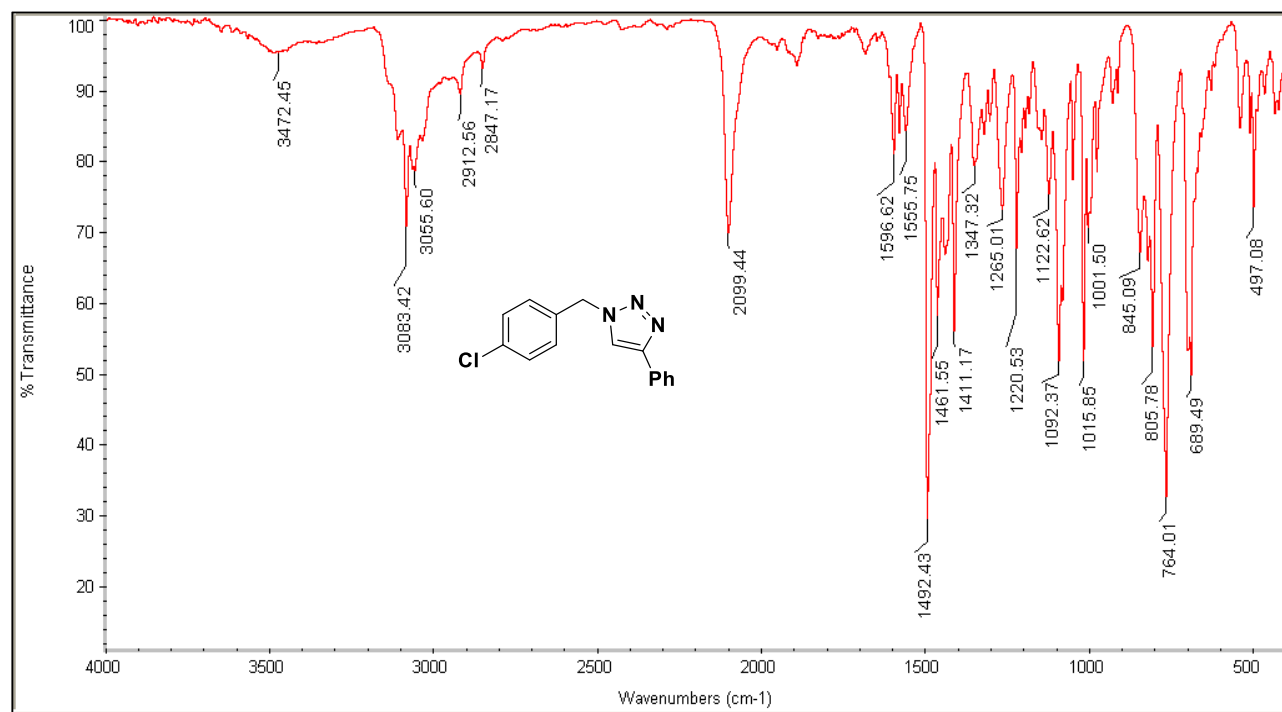


Fig. S6 FT-IR of 1-(4-chlorobenzyl)-4-phenyl-1*H*-1,2,3-triazole (**5d**, **5e**, Table 3, Entries 4,5)

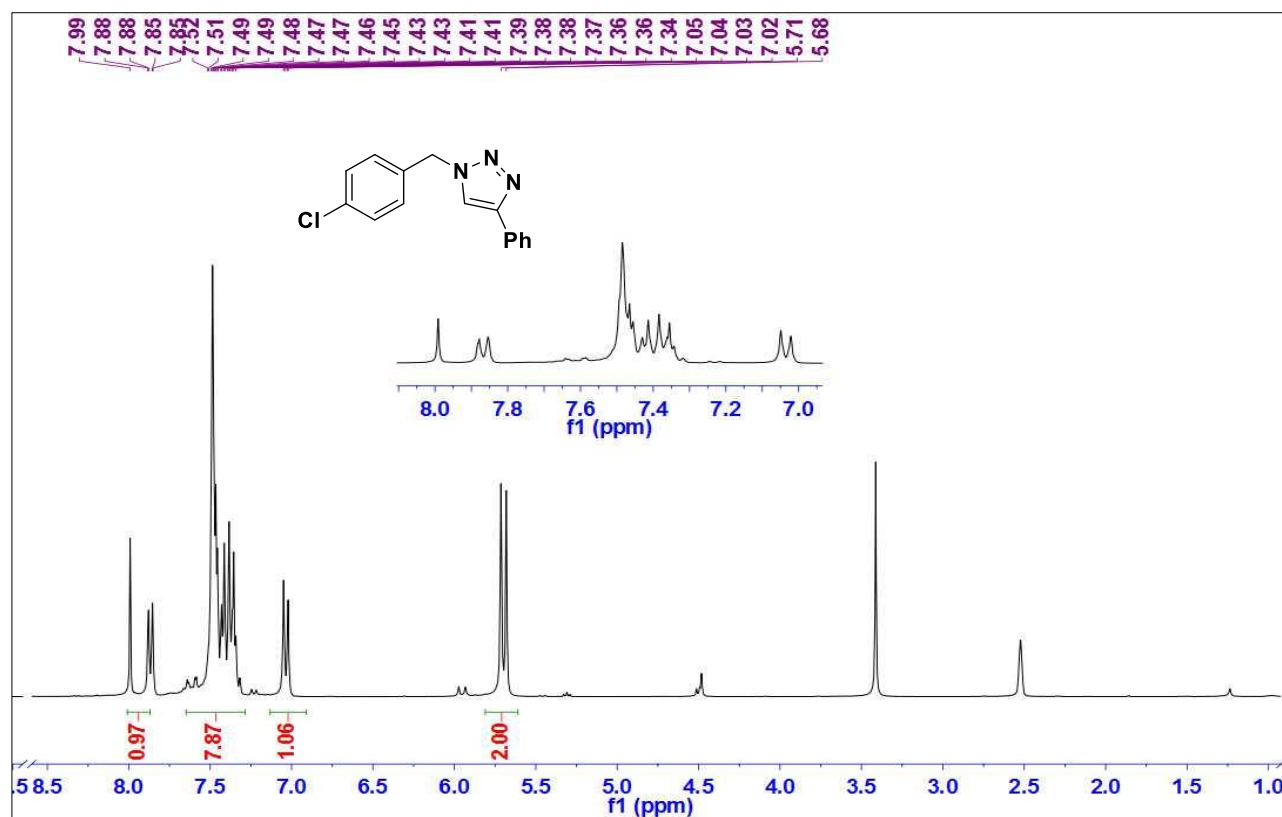


Fig. S7 ¹H-NMR of 1-(4-chlorobenzyl)-4-phenyl-1H-1,2,3-triazole (**5d**, **5e**, Table 3, Entries 4,5)

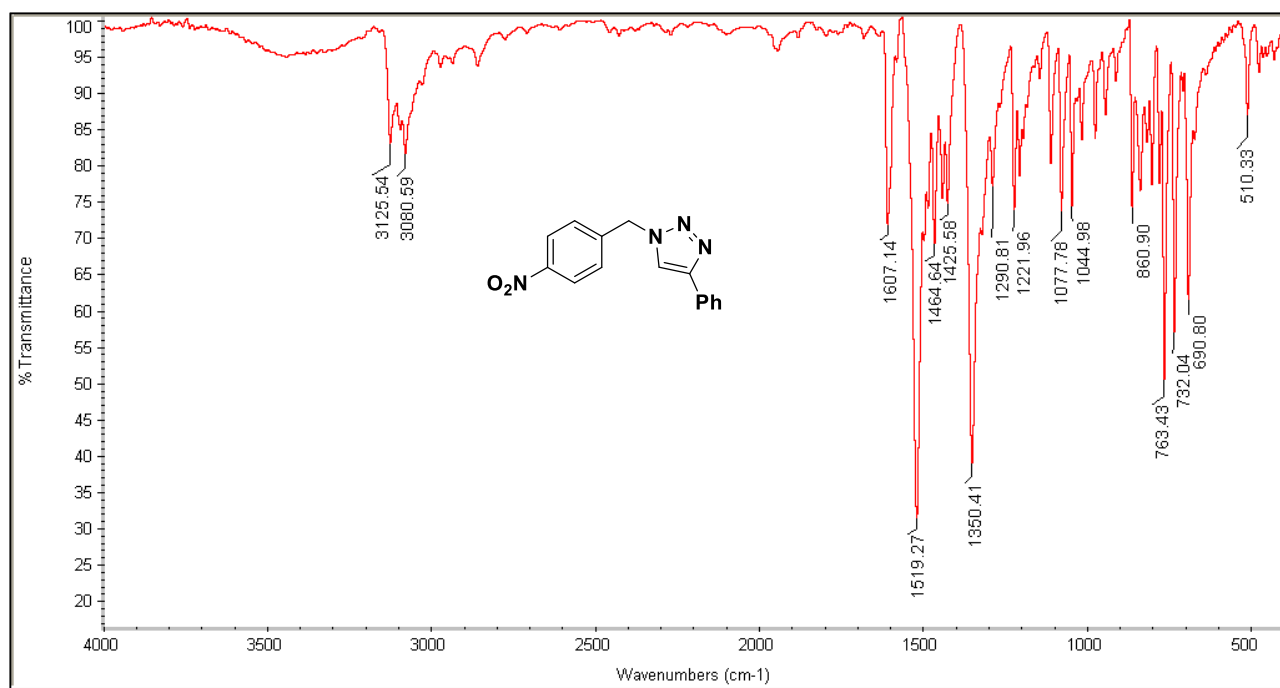


Fig. S8 FT-IR of 1-(4-nitrobenzyl)-4-phenyl-1H-1,2,3-triazole (**5f**, Table 3, Entry 6)

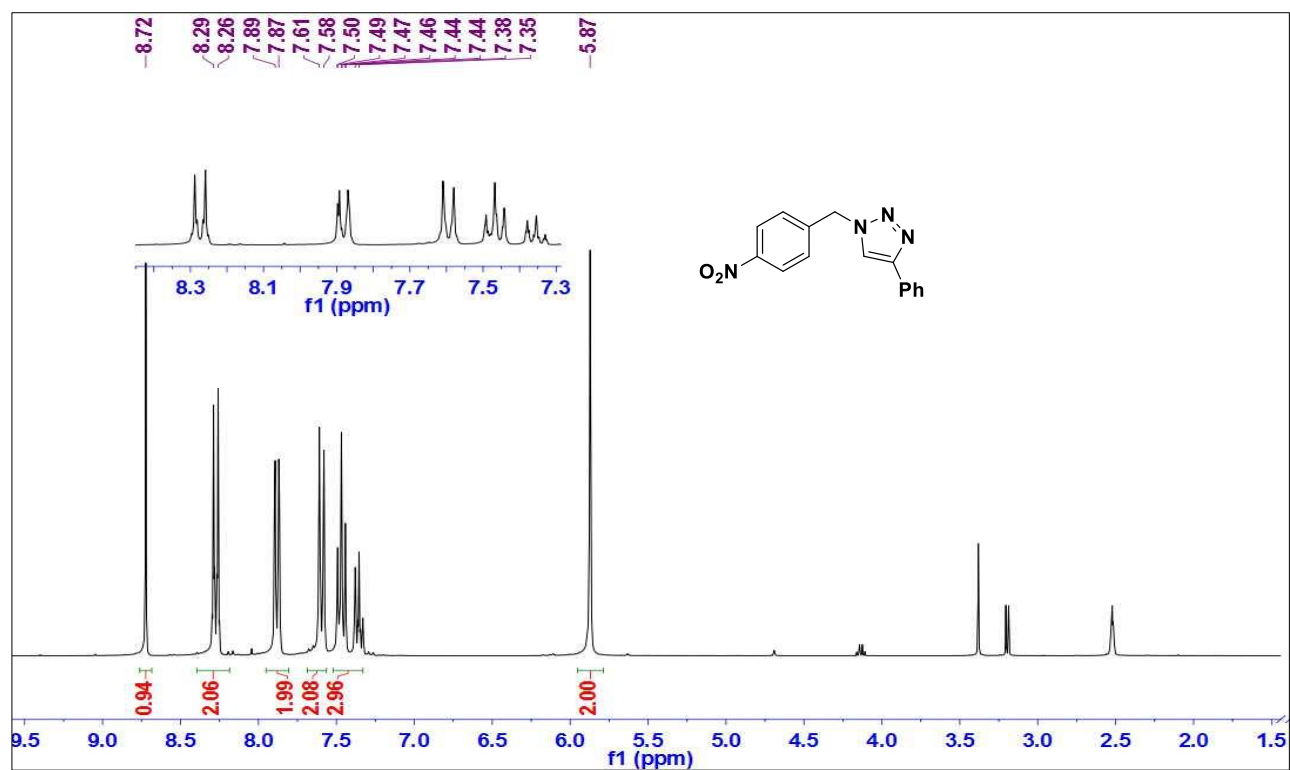


Fig. S9 ^1H -NMR of 1-(4-nitrobenzyl)-4-phenyl-1H-1,2,3-triazole (**5f**, Table 3, Entry 6)

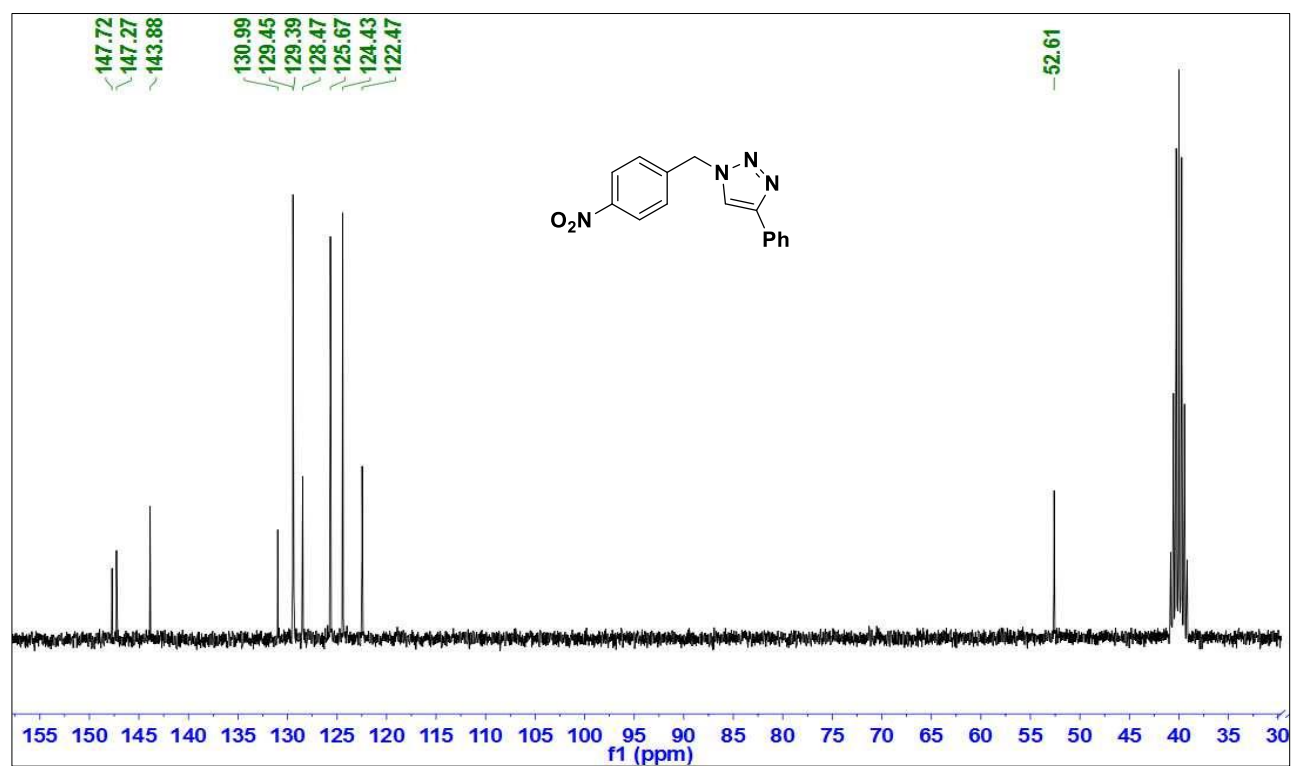


Fig. S10 ^{13}C -NMR of 1-(4-nitrobenzyl)-4-phenyl-1H-1,2,3-triazole (5f, Table 3, Entry 6)

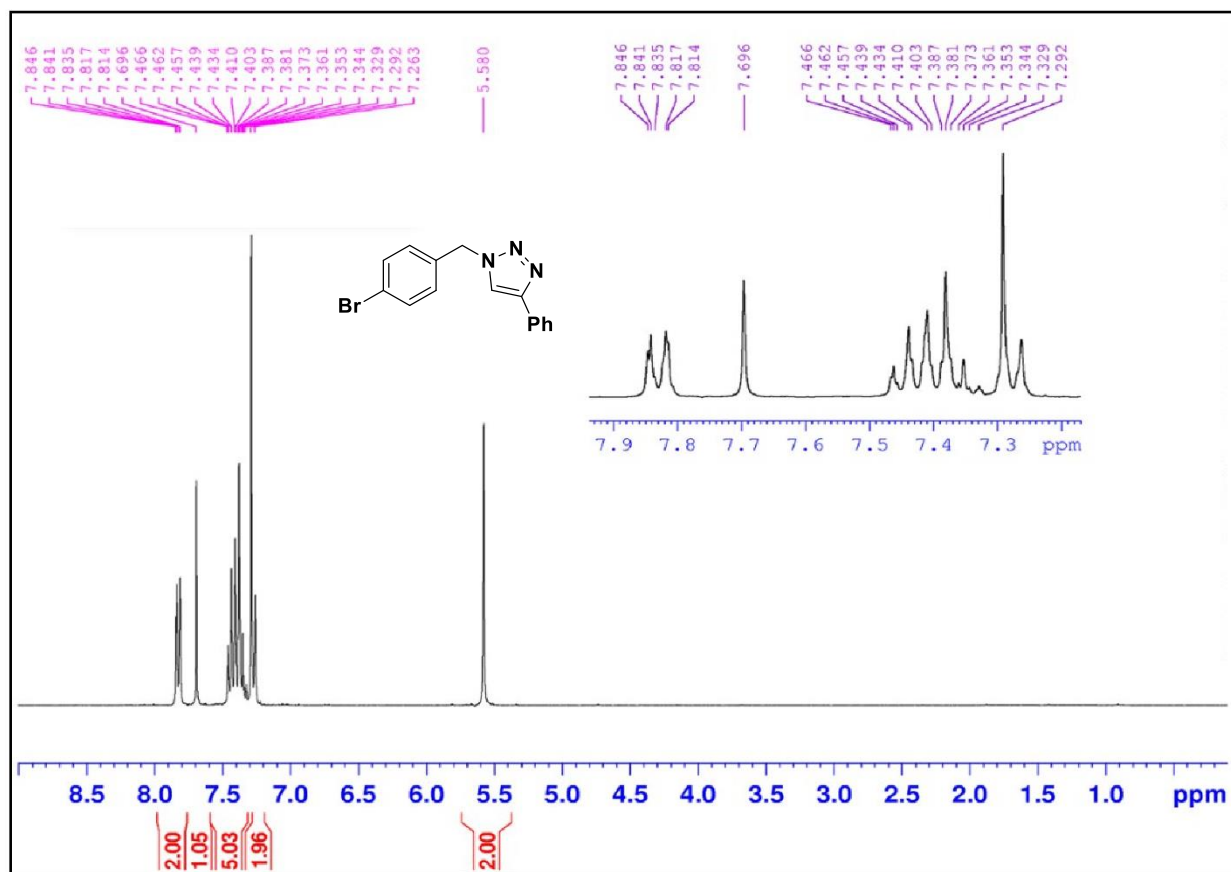


Fig. S11 ¹H-NMR of 1-(4-bromobenzyl)-4-phenyl-1H-1,2,3-triazole (5g, Table 3, Entry 7)

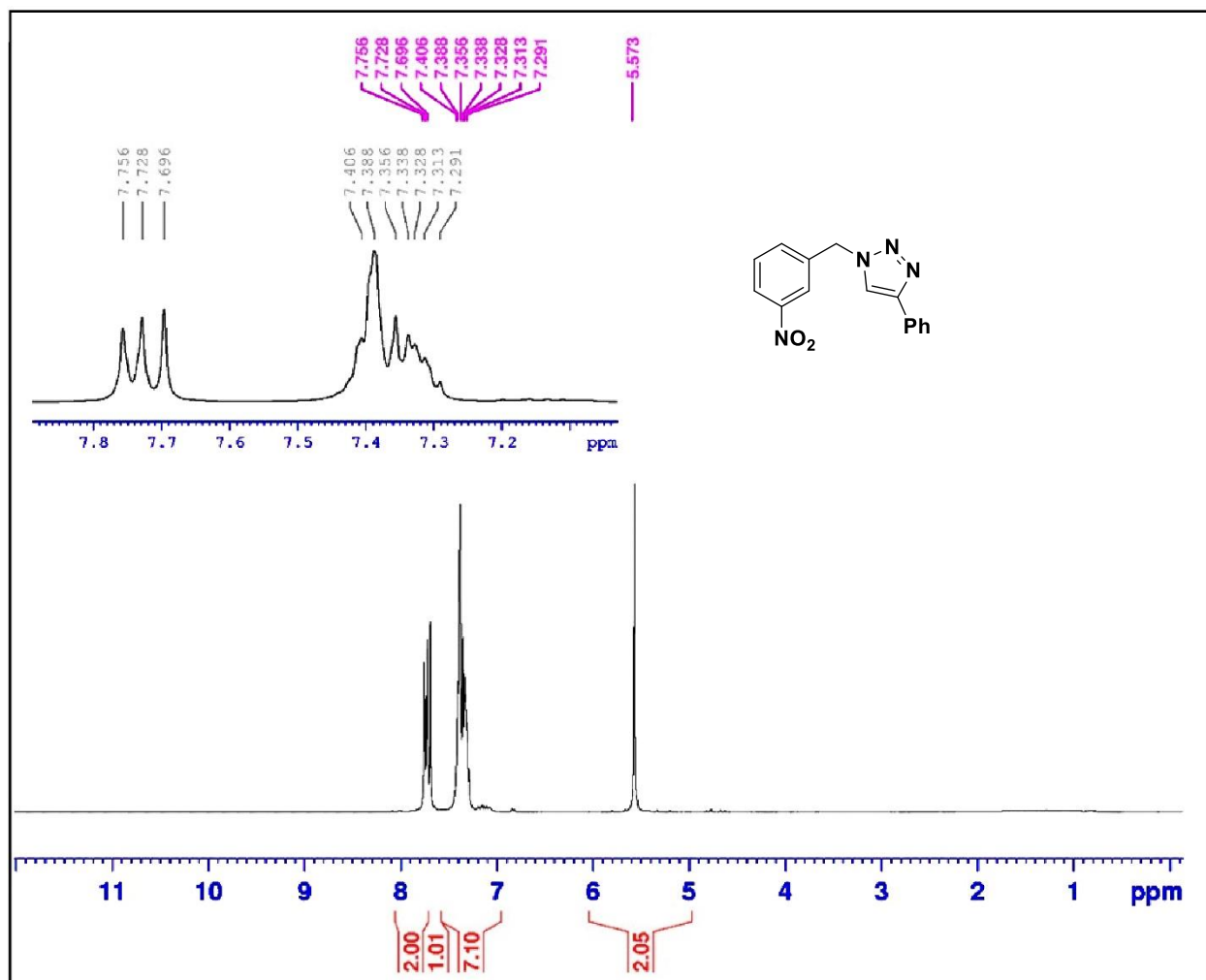


Fig. S12 ^1H -NMR of 1-(3-nitrobenzyl)-4-phenyl-1H-1,2,3-triazole (**5h**, Table 3, Entry 8)

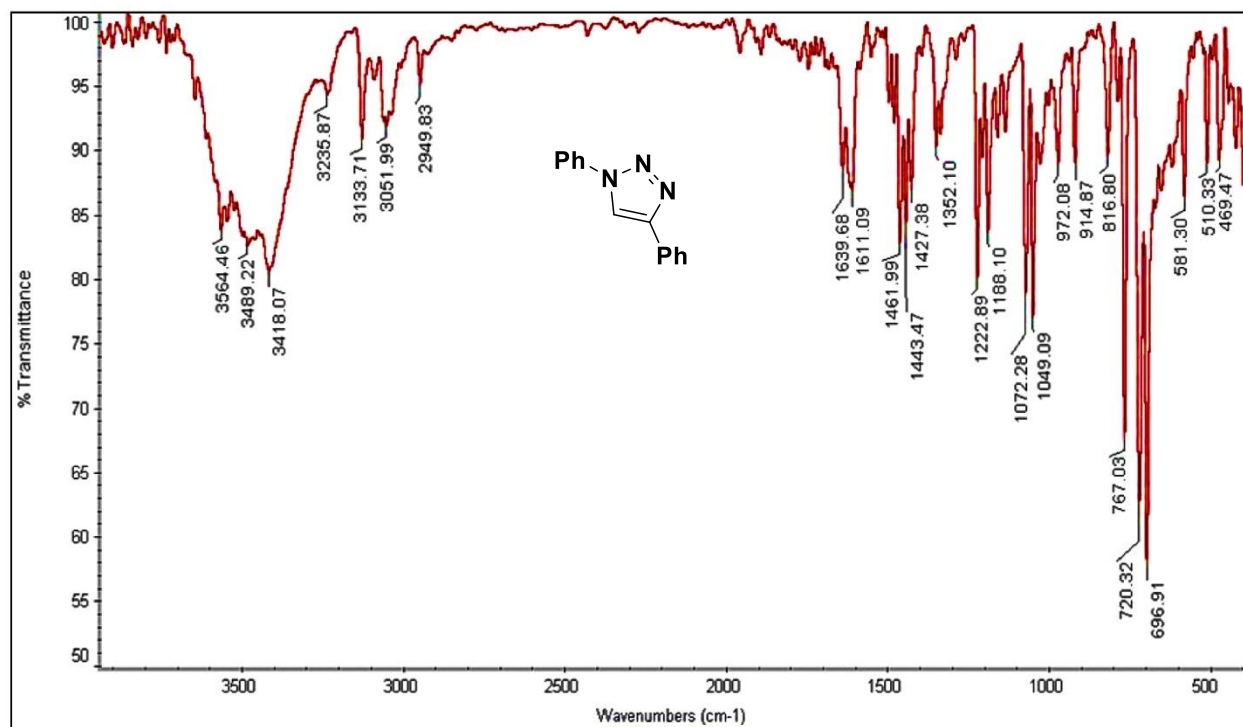


Fig. S13 FT-IR of 1,4-diphenyl-1*H*-1,2,3-triazole (**6a**, Table 3, Entry 9)

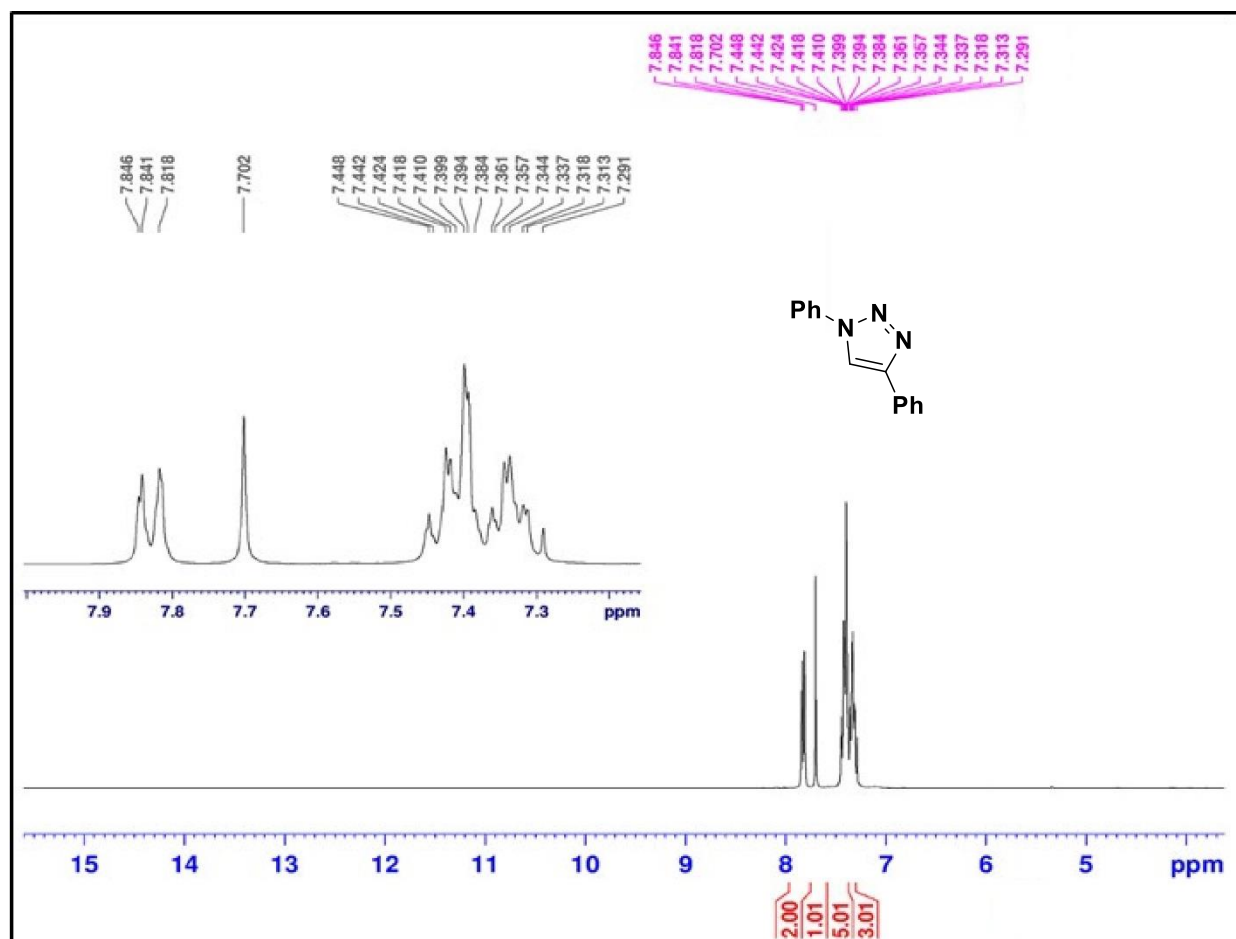


Fig. S14 ¹H-NMR of 1,4-diphenyl-1*H*-1,2,3-triazole (**6a**, Table 3, Entry 9)

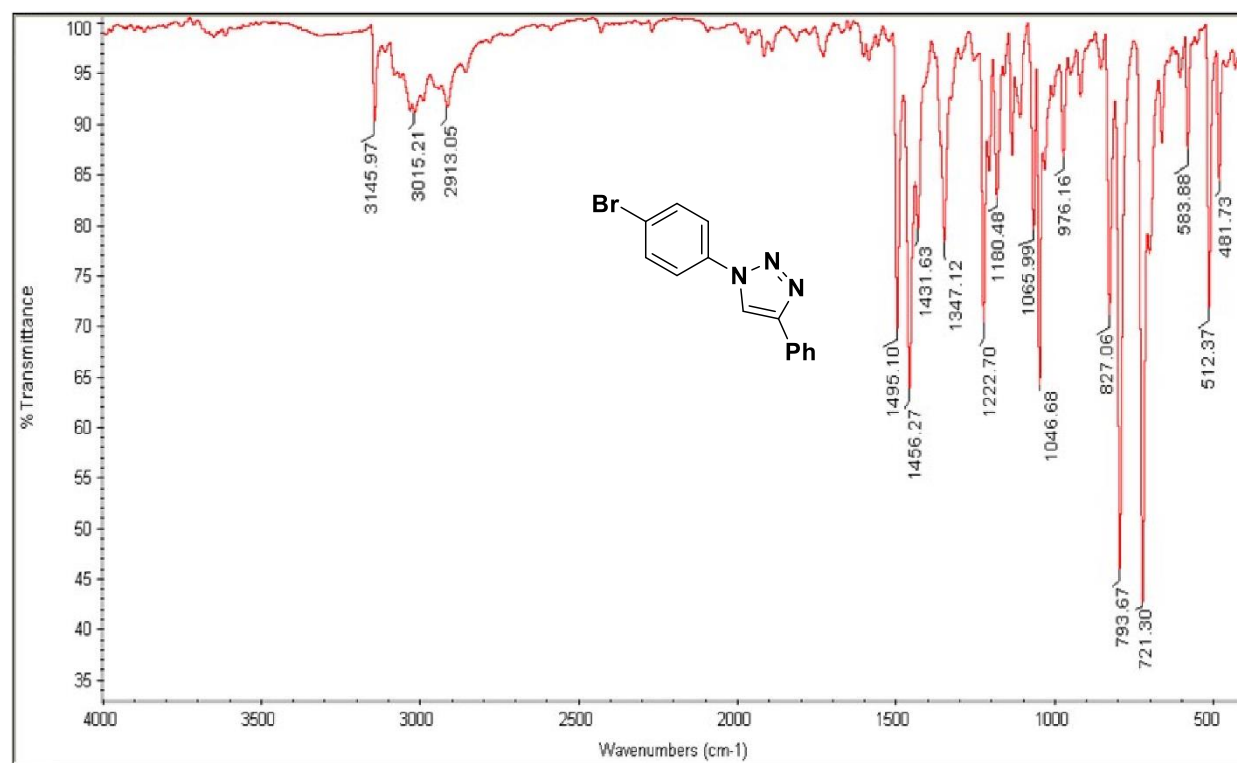


Fig. S15 FT-IR of 1-(4-bromophenyl)-4-phenyl-1H-1,2,3-triazole (**6c**, Table 3, Entry 11)

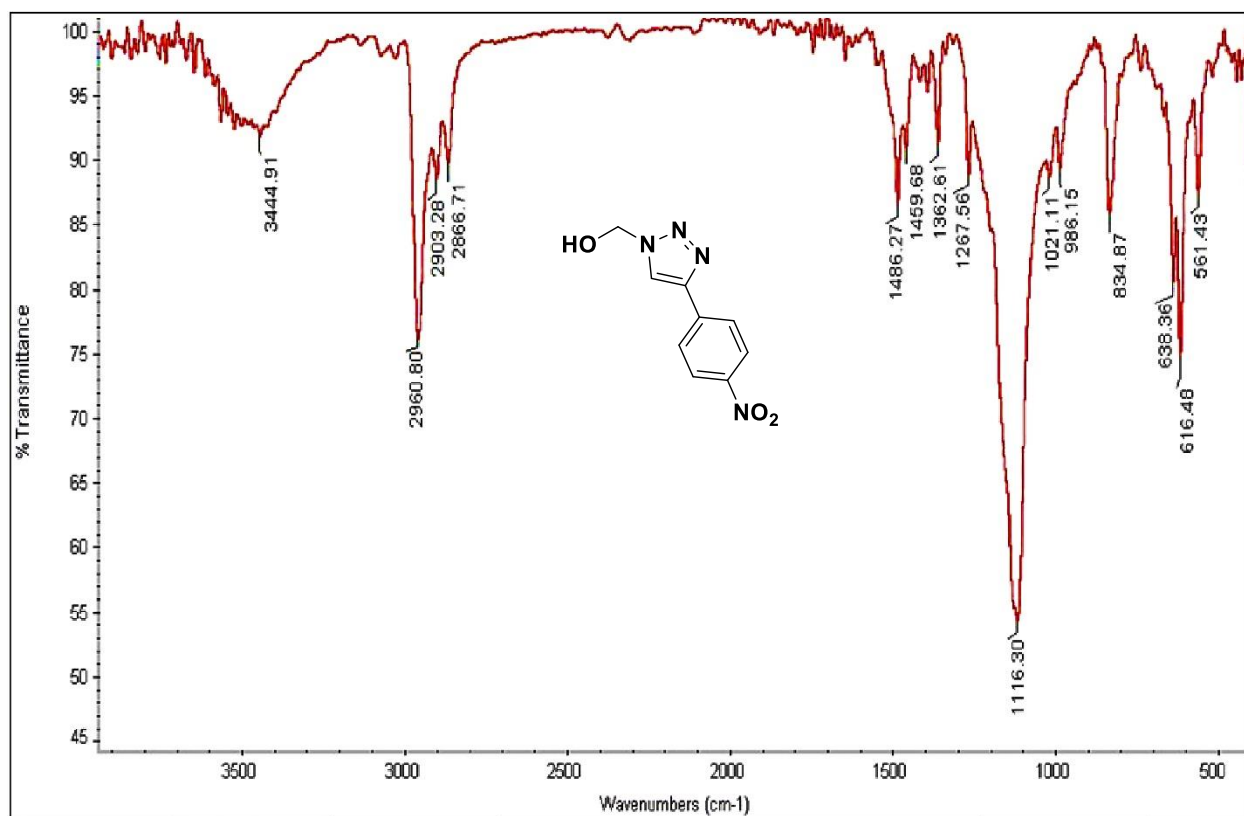


Fig. S16 FT-IR of (4-(4-nitrophenyl)-1H-1,2,3-triazol-1-yl)methanol (**6g**, Table 3, Entry 15)

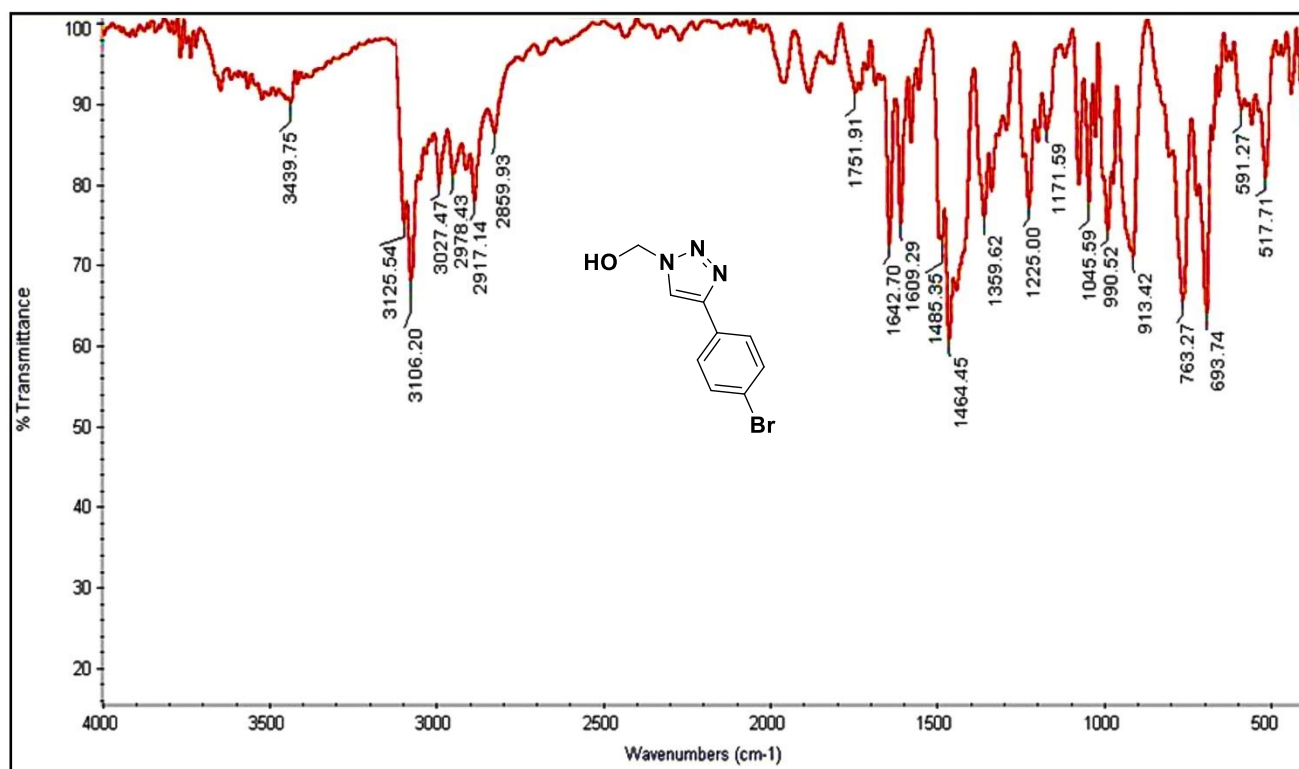


Fig. S17 FT-IR of (4-(4-bromophenyl)-1*H*-1,2,3-triazol-1-yl)methanol (**6h**, Table 3, Entry 16)