

Supporting information for

Development of a silica-organic framework ionic solid Bronsted acid catalyst for the synthesis of 2,4,5-trisubstituted imidazole derivatives

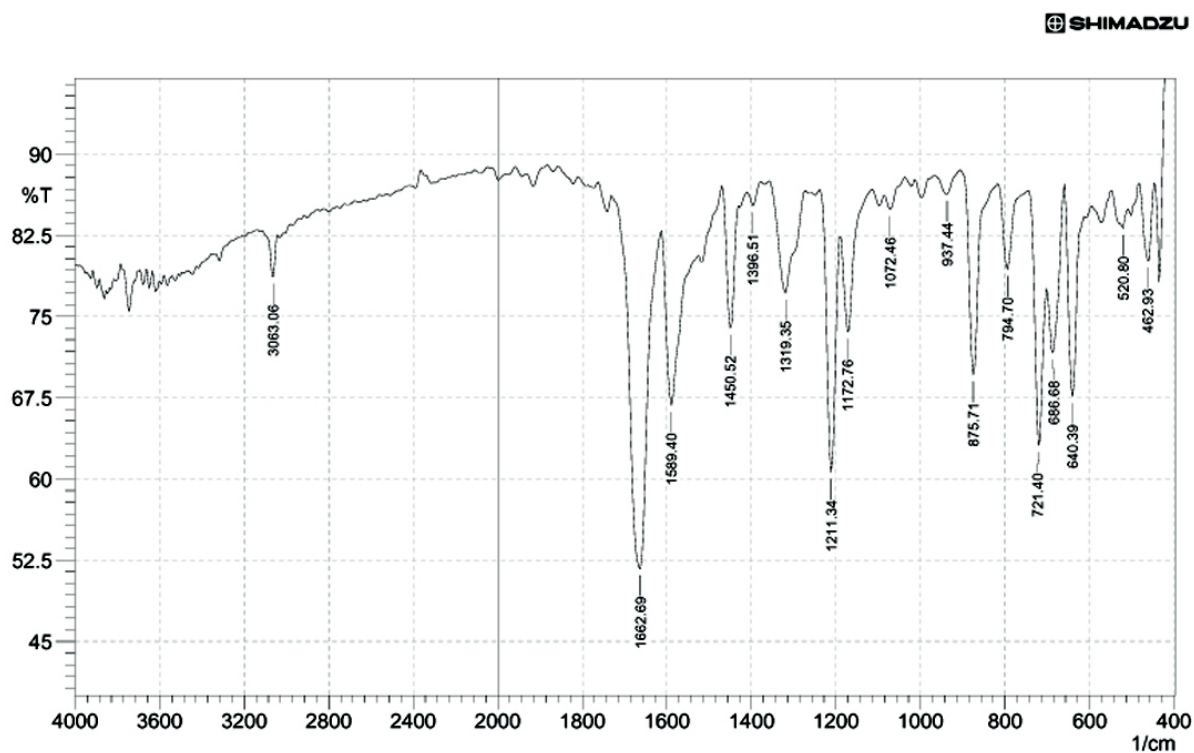
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Mihsen**

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Iraq

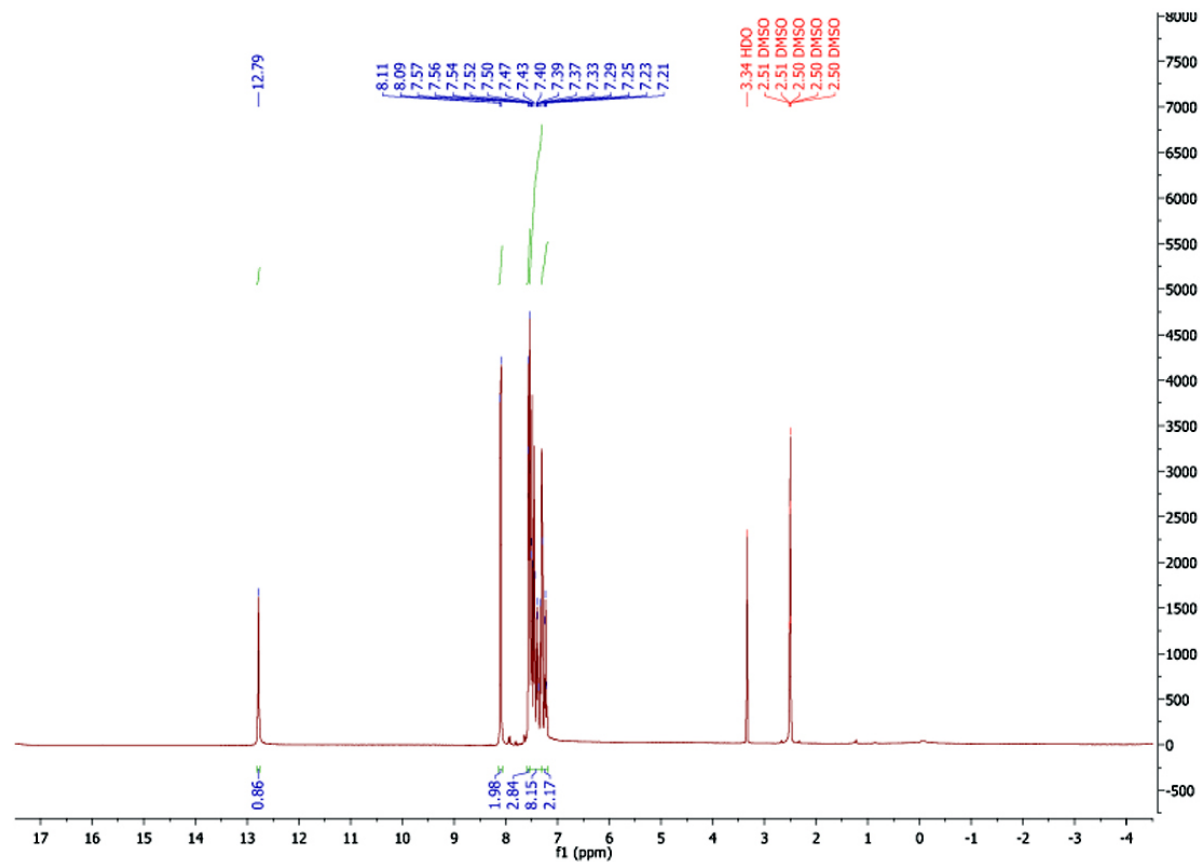
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ORCID: 0000-0001-8108-4477

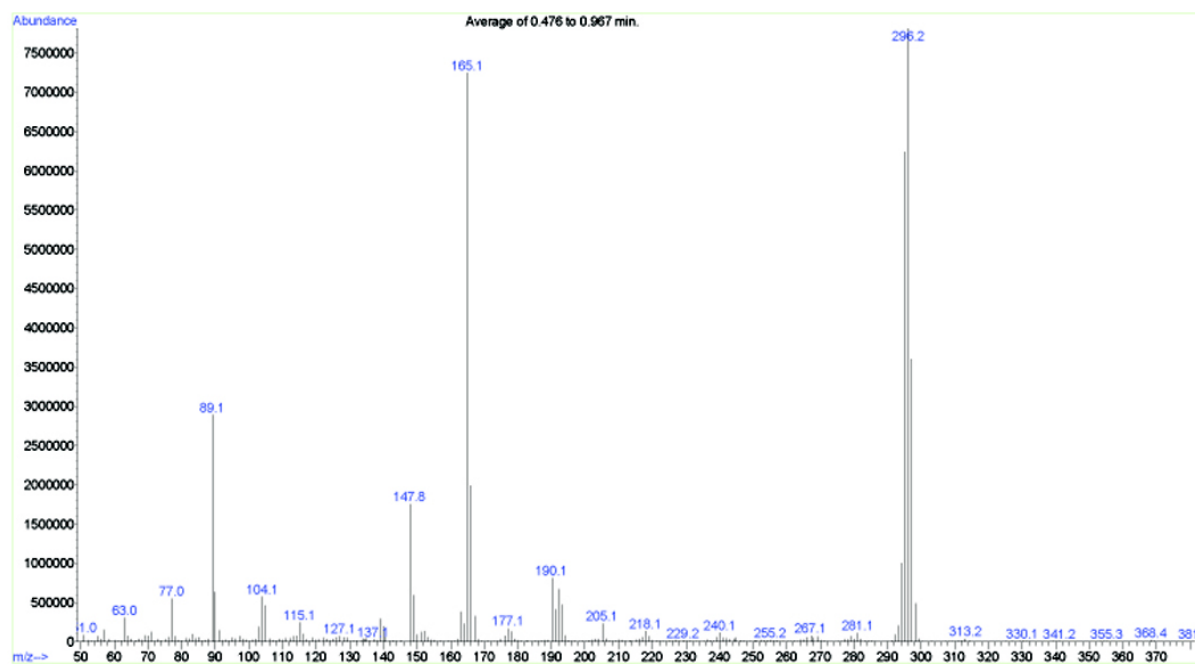
FTIR spectrum of 2,4,5-triphenylimidazole (**4a**)



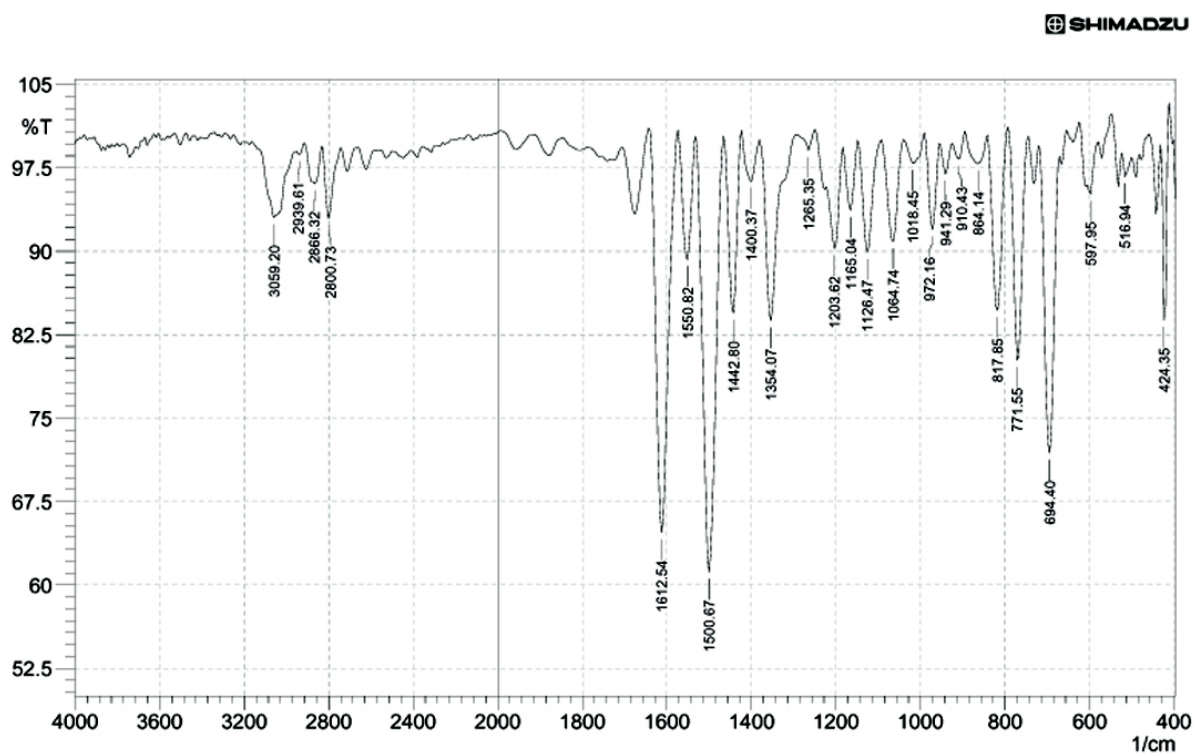
¹H NMR spectrum of 2,4,5-triphenylimidazole (**4a**)



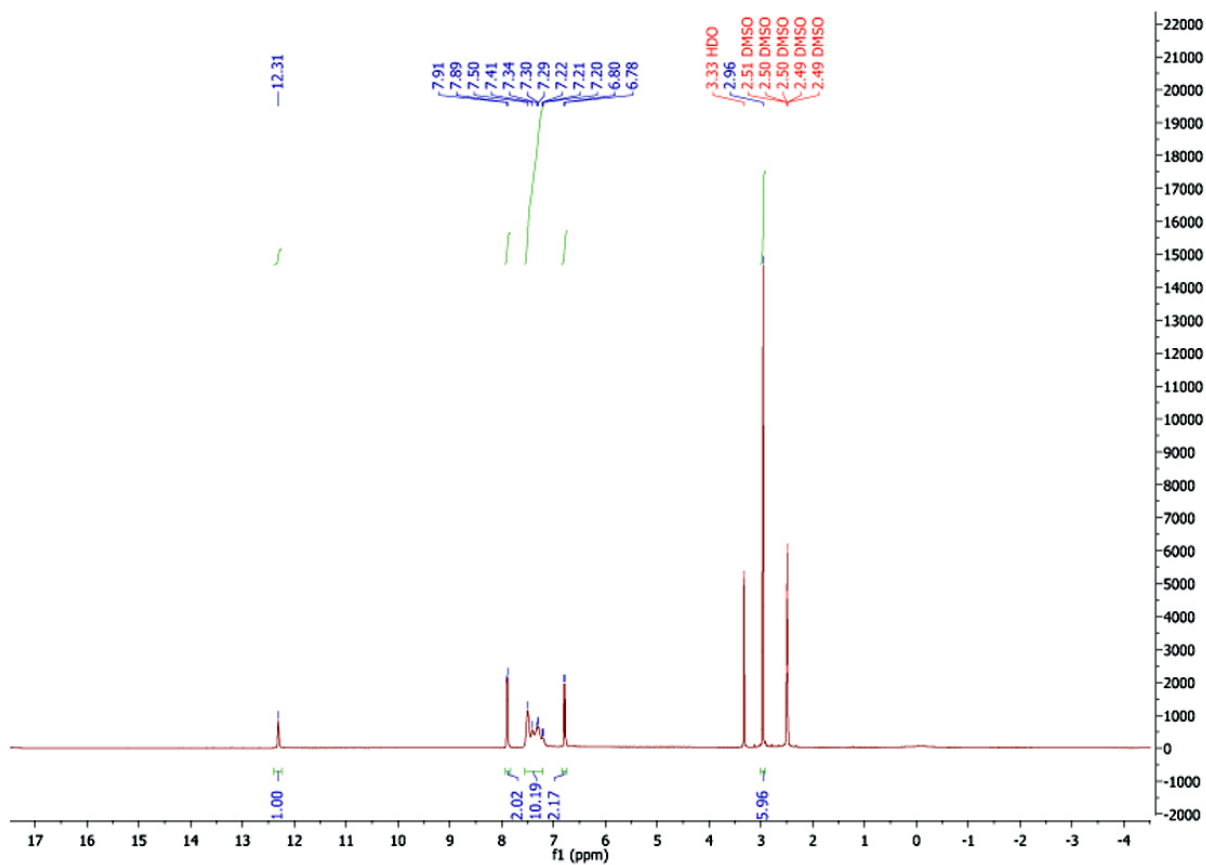
Mass spectrum of 2,4,5-triphenylimidazole (**4a**)



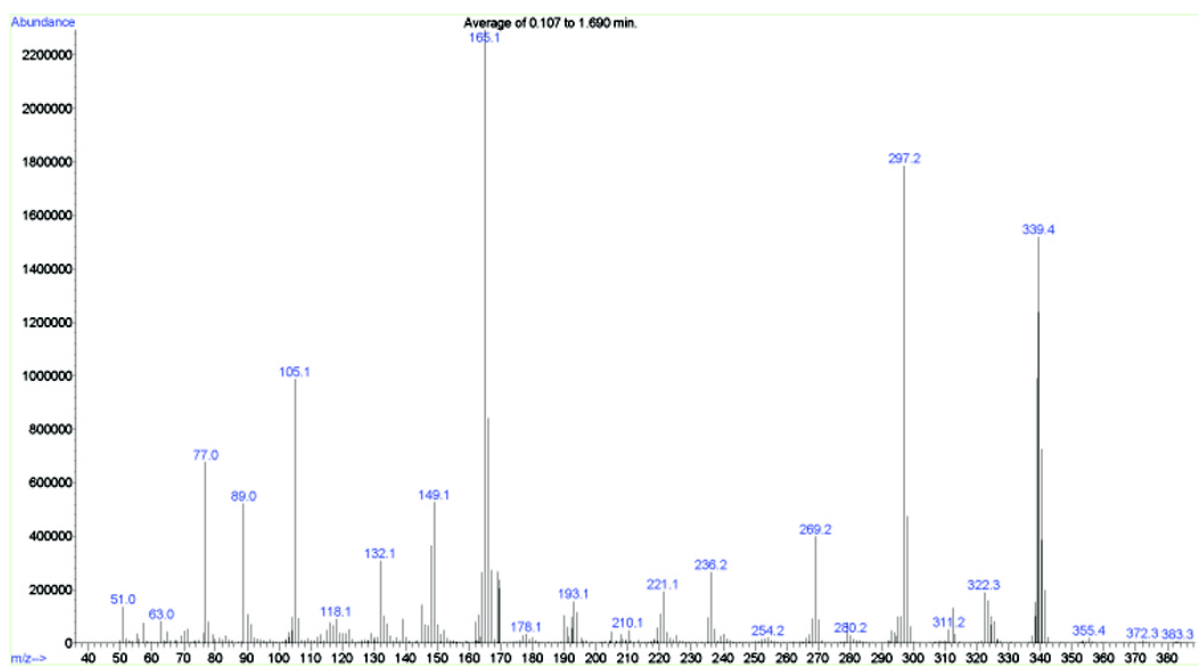
FTIR spectrum of 4-(4,5-diphenylimidazol-2-yl)-*N,N*-dimethylaniline (**4b**)



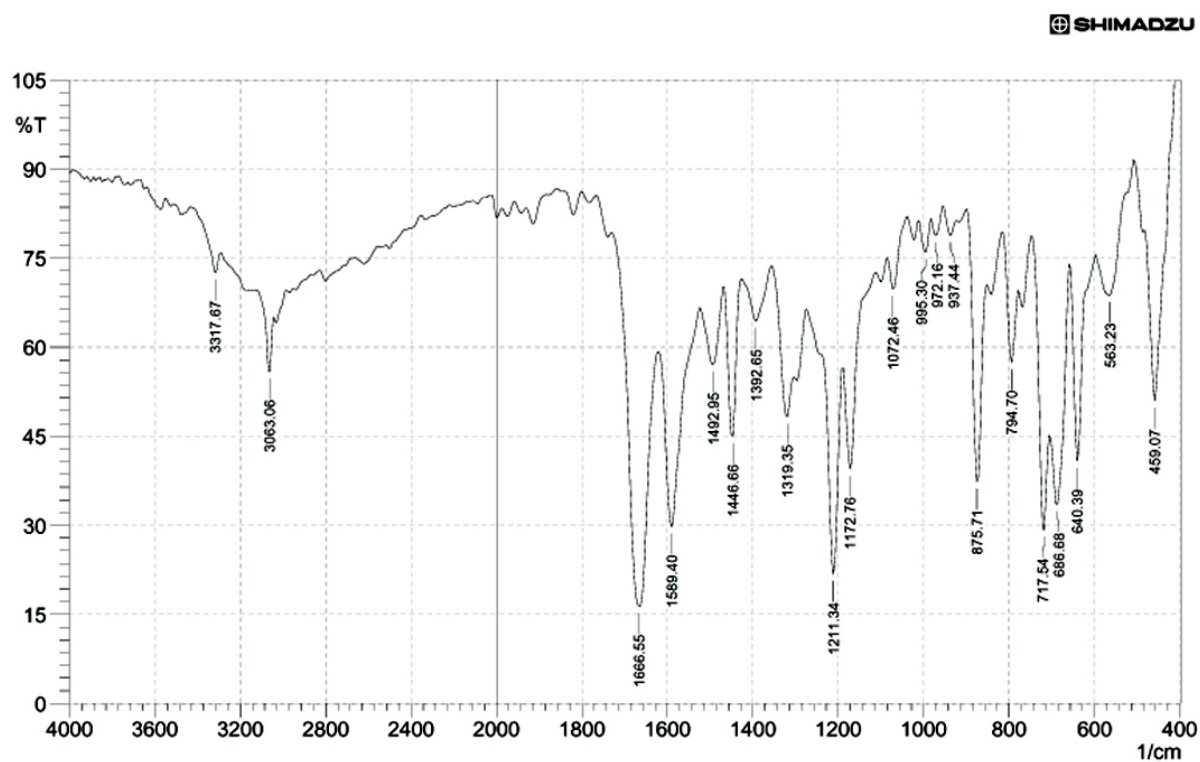
^1H NMR spectrum of 4-(4,5-diphenylimidazol-2-yl)-*N,N*-dimethylaniline (**4b**)



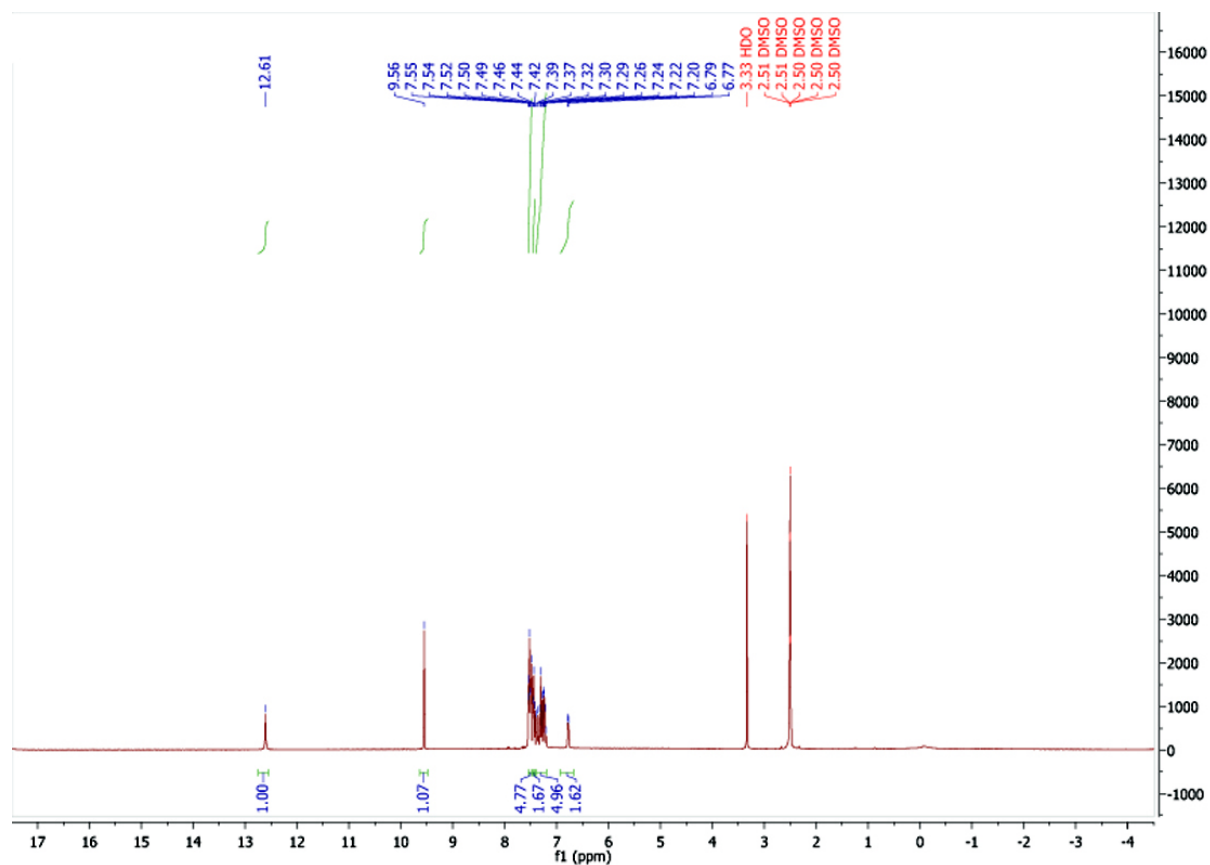
Mass spectrum of 4-(4,5-diphenylimidazol-2-yl)-*N,N*-dimethylaniline (**4b**)



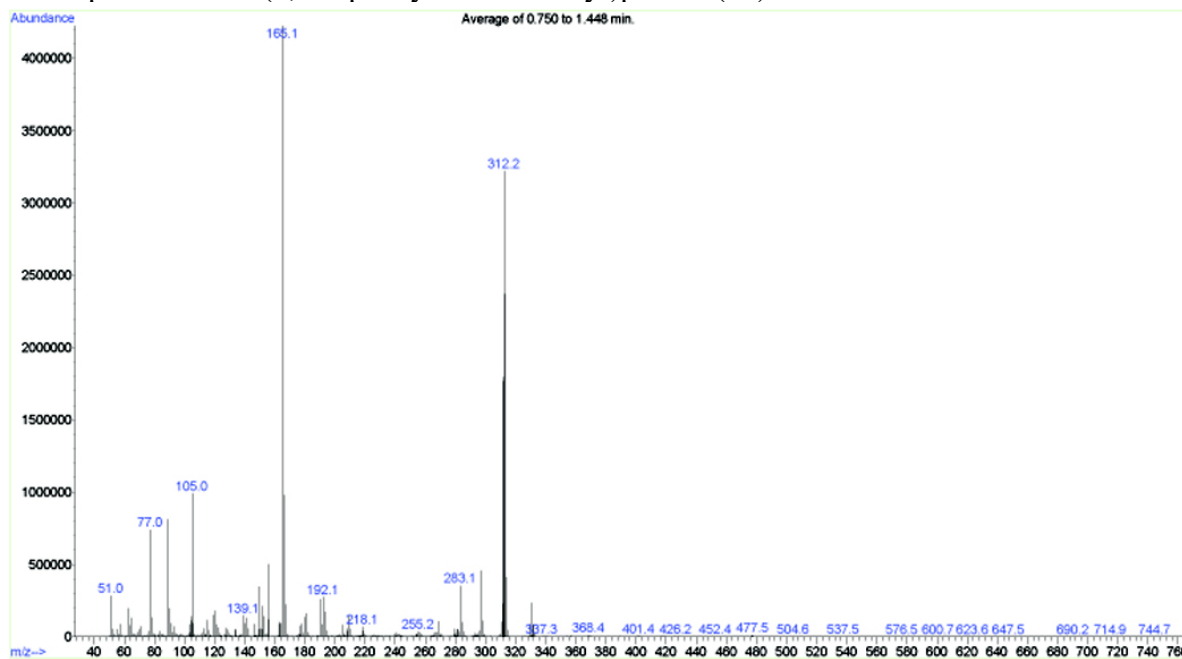
FTIR spectrum of 3-(4,5-diphenylimidazol-2-yl)phenol (**4c**)



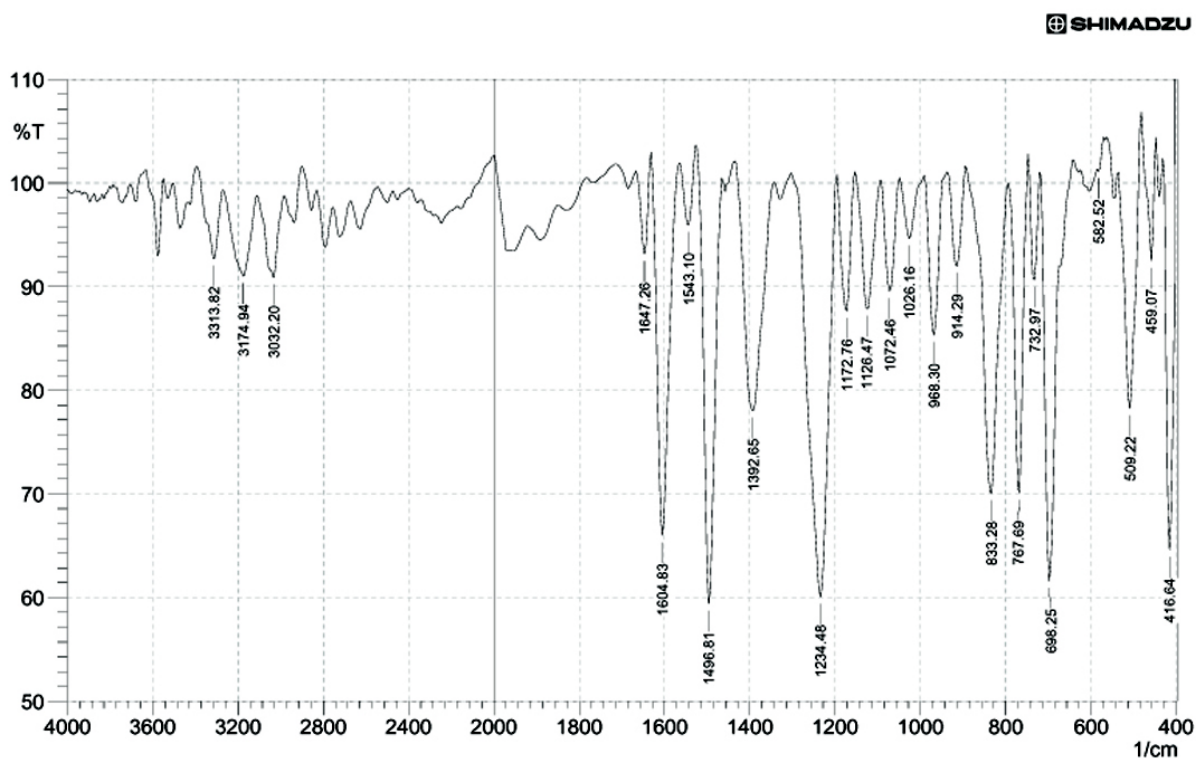
¹H NMR spectrum of 3-(4,5-diphenylimidazol-2-yl)phenol (**4c**)



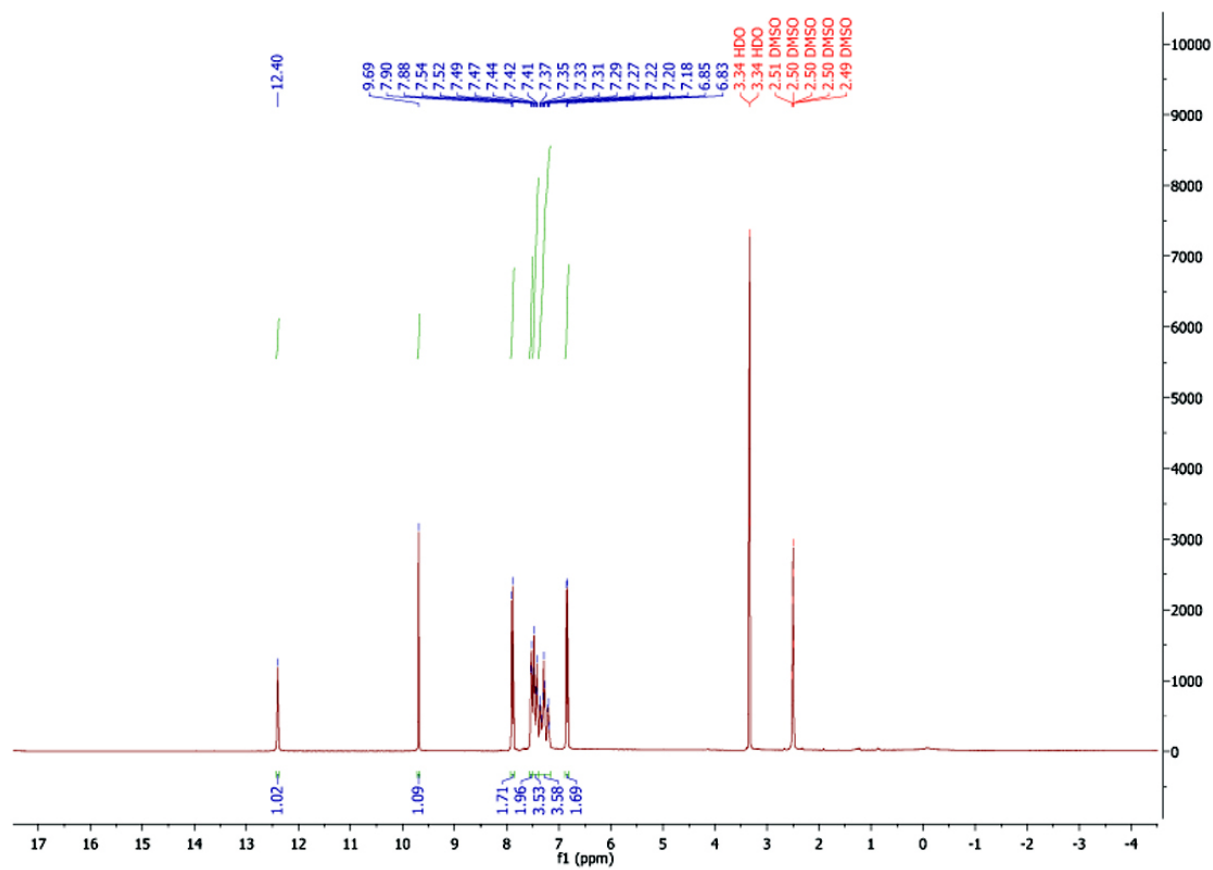
Mass spectrum of 3-(4,5-diphenylimidazol-2-yl)phenol (**4c**)



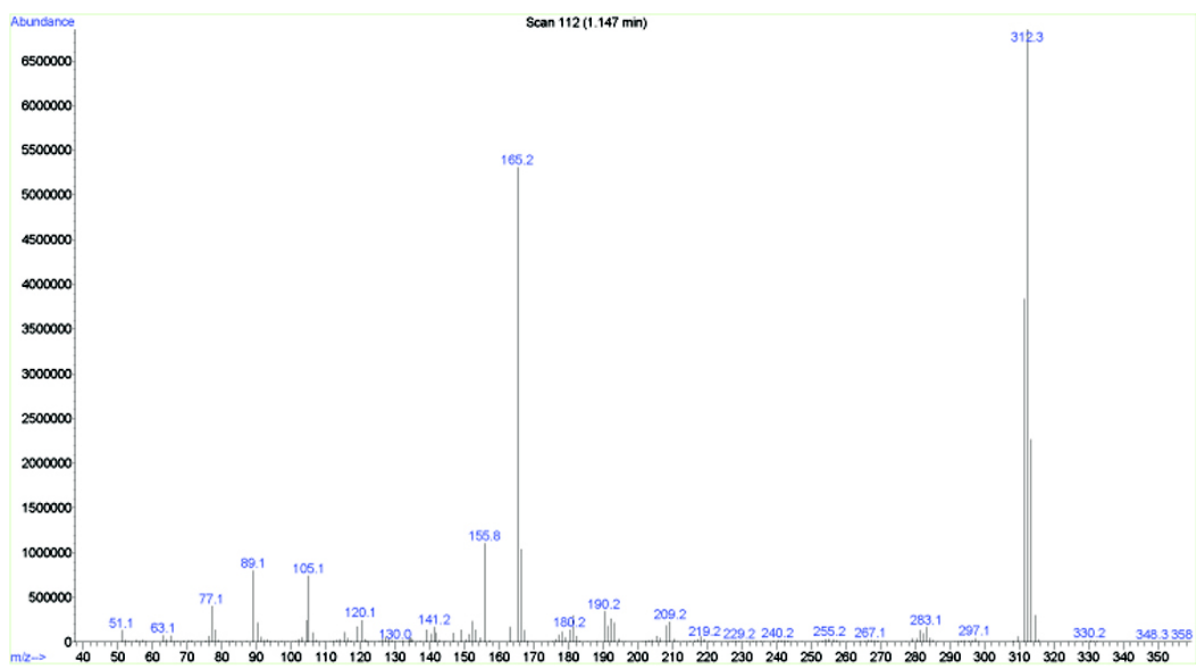
FTIR spectrum of 4-(4,5-diphenylimidazol-2-yl)phenol (**4d**)



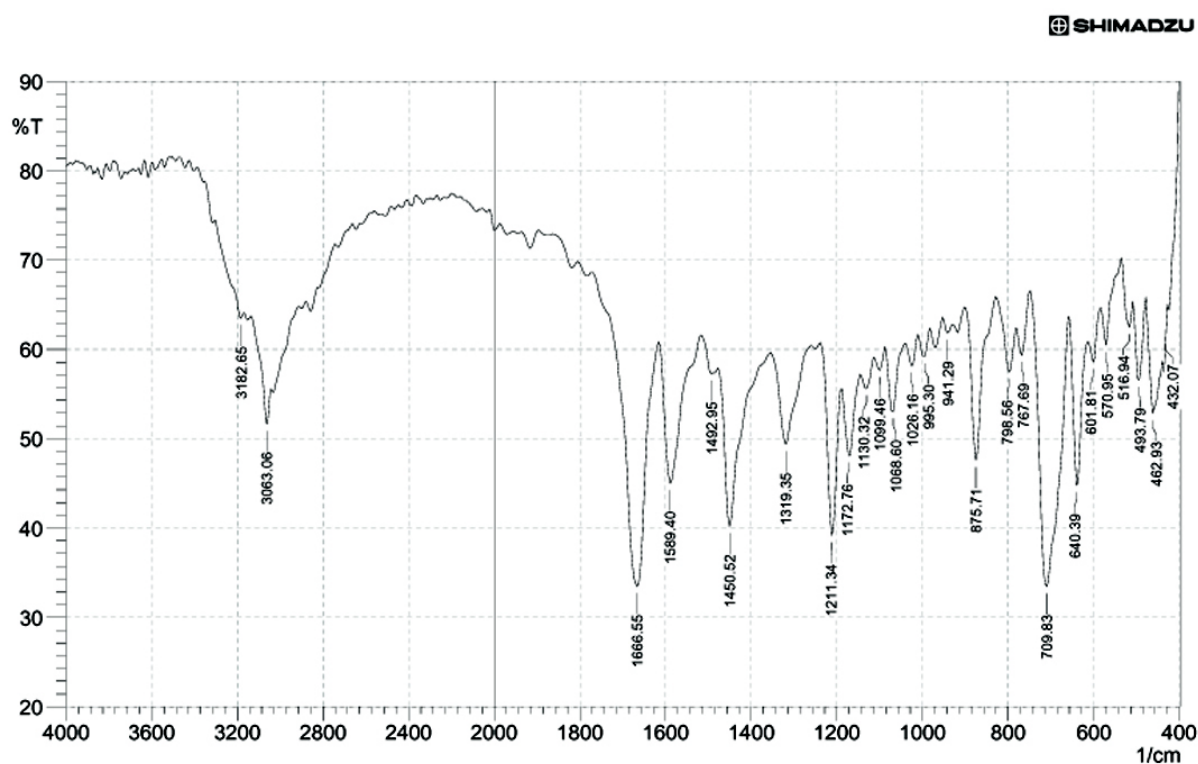
^1H NMR spectrum of 4-(4,5-diphenylimidazol-2-yl)phenol (**4d**)



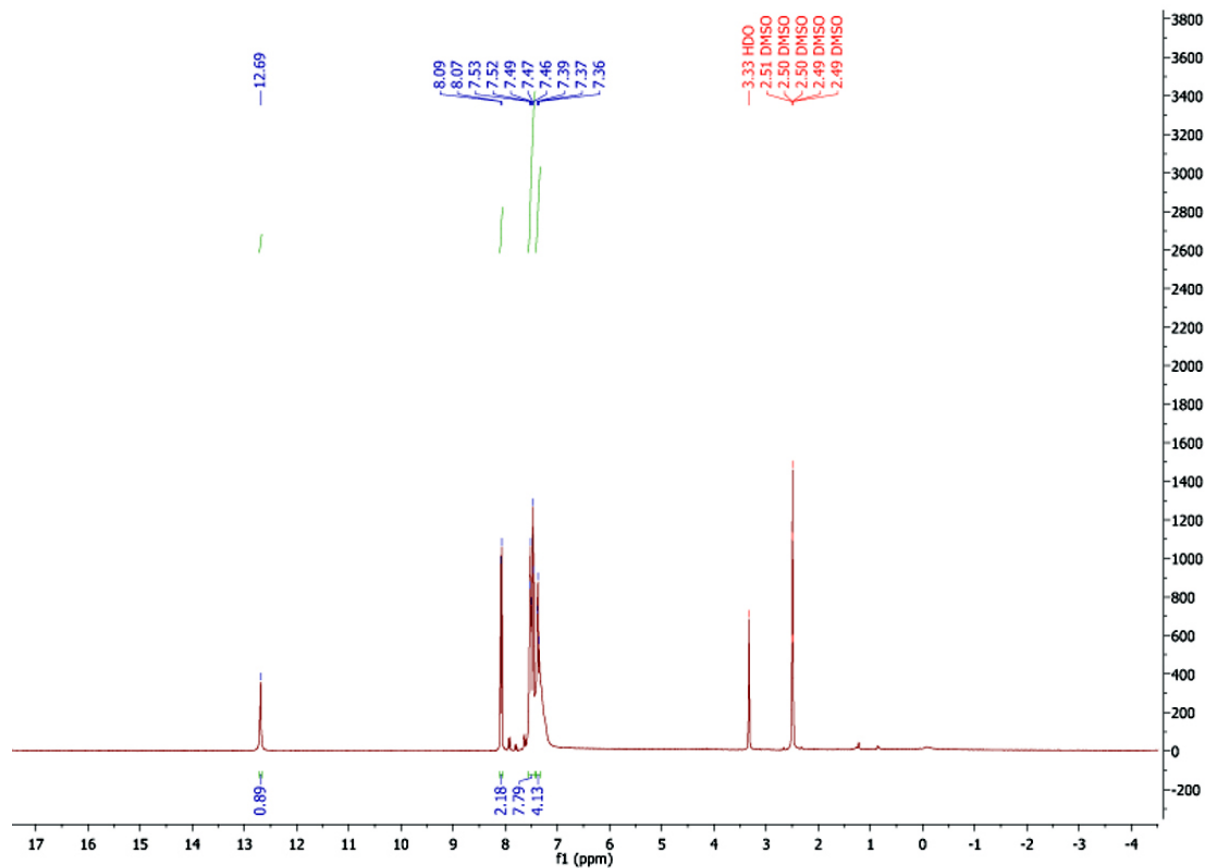
Mass spectrum of 4-(4,5-diphenylimidazol-2-yl)phenol (**4d**)



FTIR spectrum of 2-(4-chlorophenyl)-4,5-diphenylimidazole (**4e**)



^1H NMR spectrum of 2-(4-chlorophenyl)-4,5-diphenylimidazole (**4e**)



Mass spectrum of 2-(4-chlorophenyl)-4,5-diphenylimidazole (**4e**)

