

Electronic Supplementary Information for

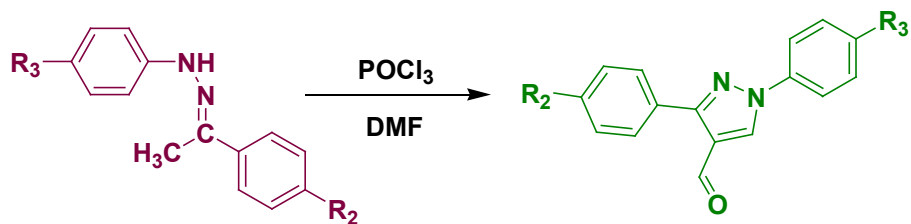
Synthesis of novel pyrazolylbiscoumarin derivatives using FeTUD-1 as Mesoporous solid acid catalyst

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Scheme S1. Synthesis of pyrazole aldehyde from acetophenone phenylhydrazone

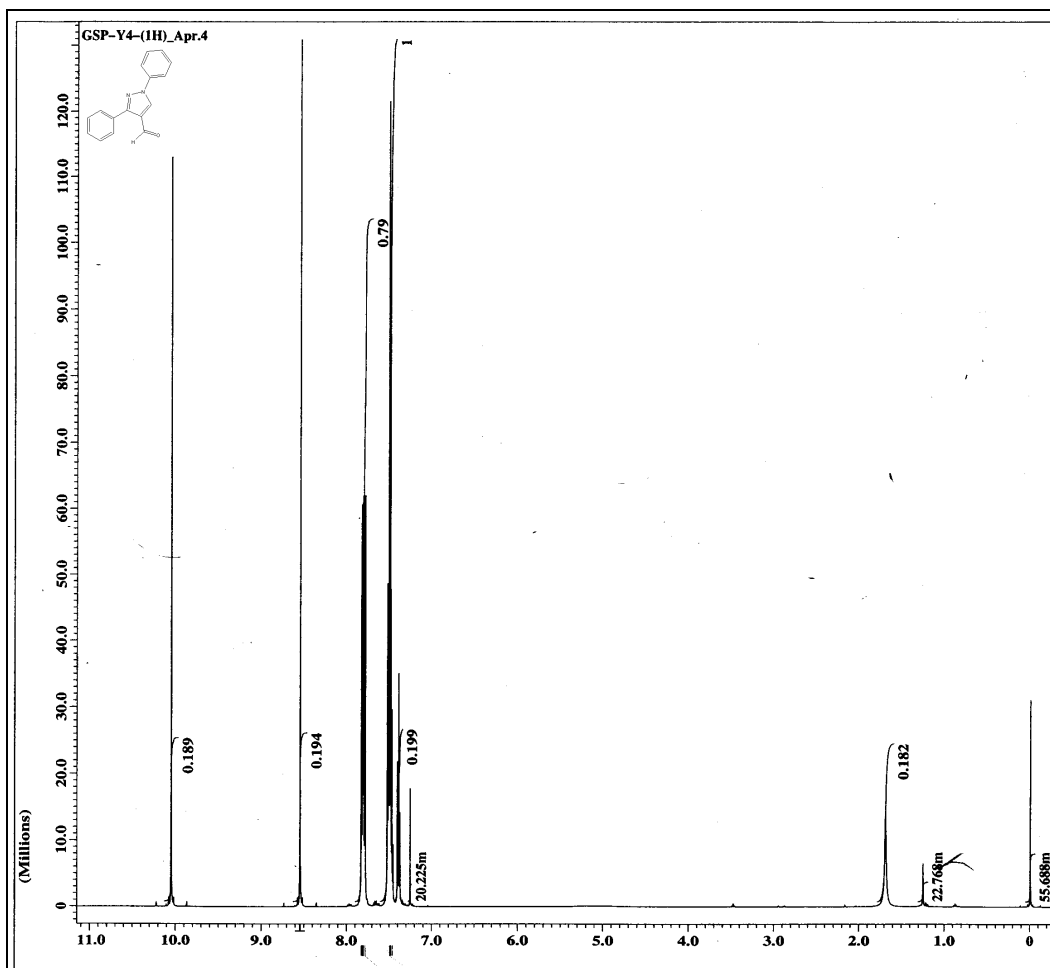


Figure S1. ^1H NMR spectrum of 1,3-diphenyl-1H-pyrazole-4-carbaldehyde.

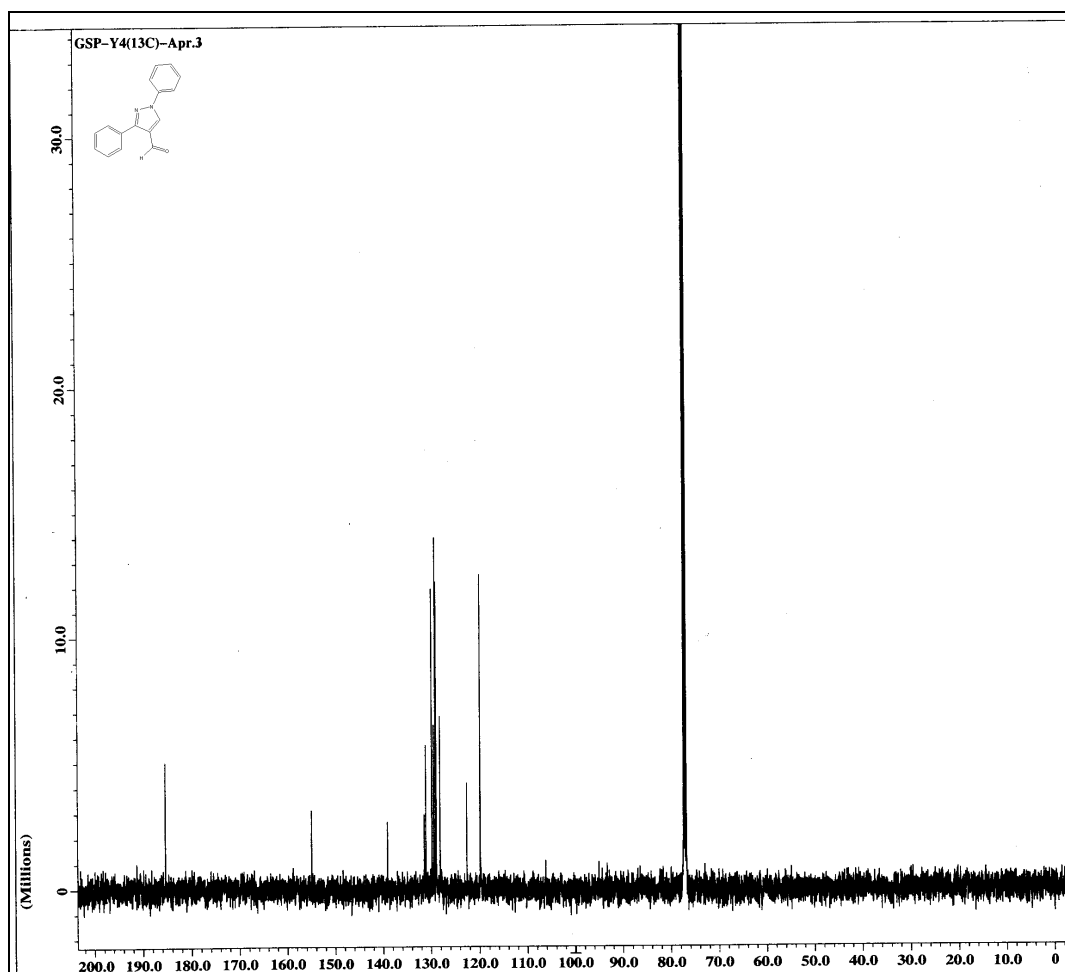


Figure S2. ^{13}C NMR spectrum of 1,3-diphenyl-1H-pyrazole-4-carbaldehyde.

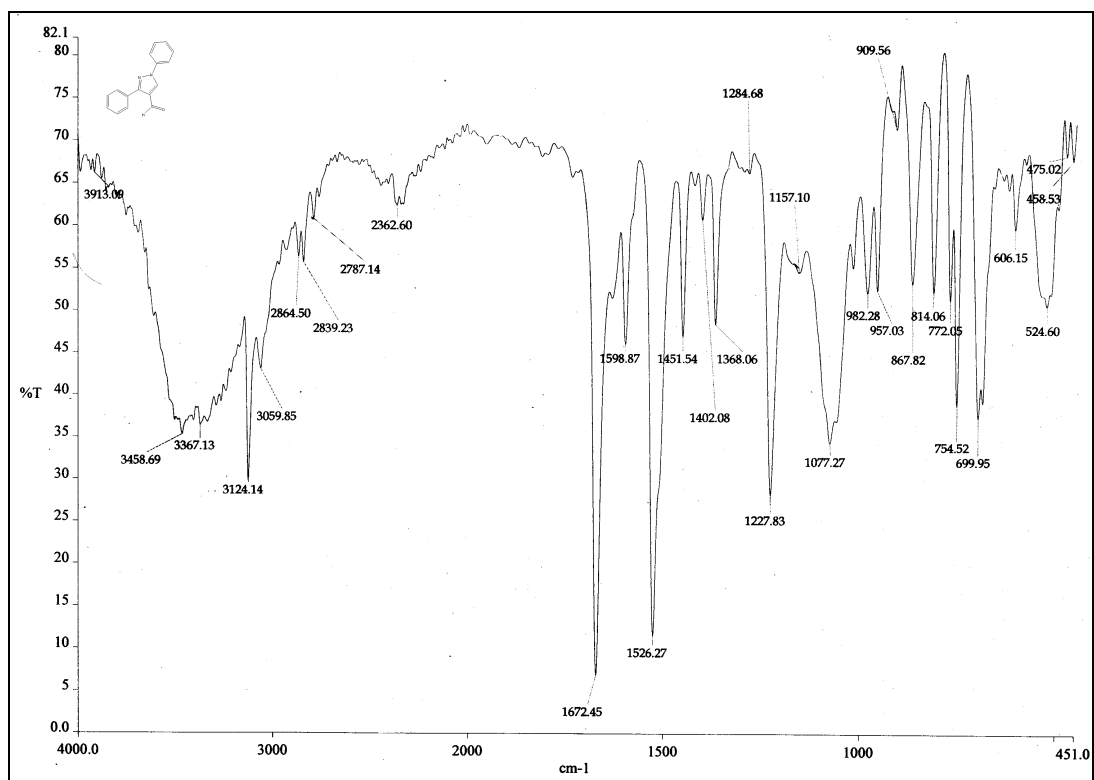


Figure S3. FTIR spectrum of 1,3-diphenyl-1H-pyrazole-4-carbaldehyde.

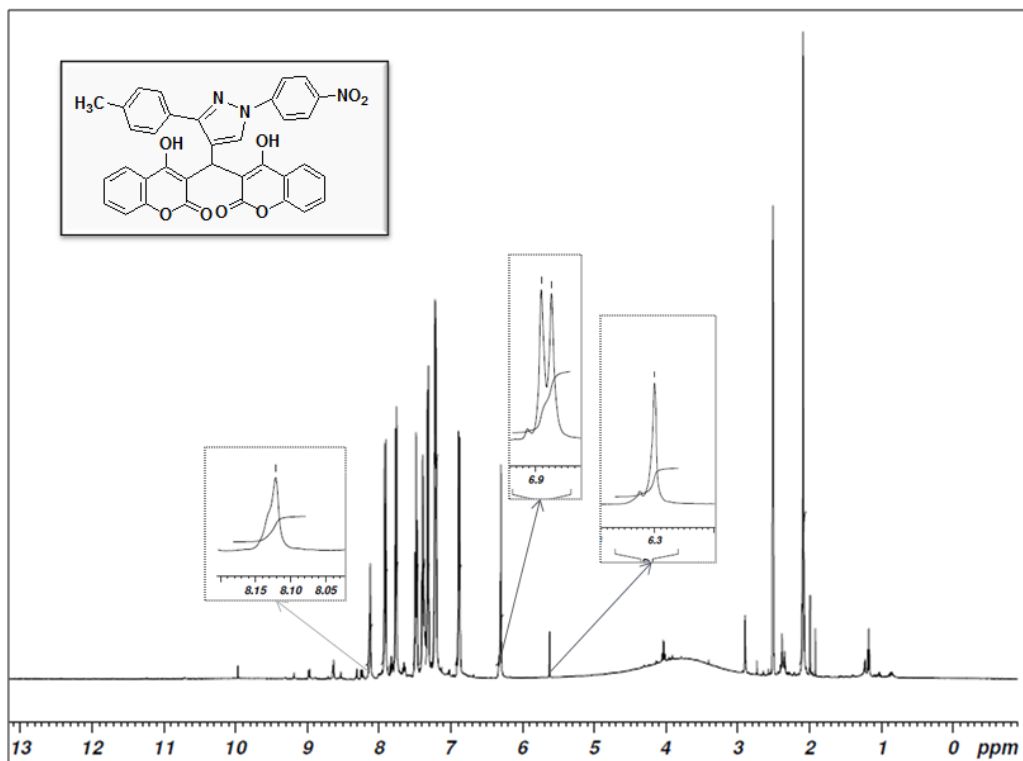


Figure S4. ¹H NMR spectrum of 4-hydroxy-3-((4-hydroxy-2-oxo-2H-chromen-3-yl)(1-(4-nitrophenyl)-3-p-tolyl-1H-pyrazol-4-yl)methyl)-2H-chromen-2-one [Table.1-Product 6].

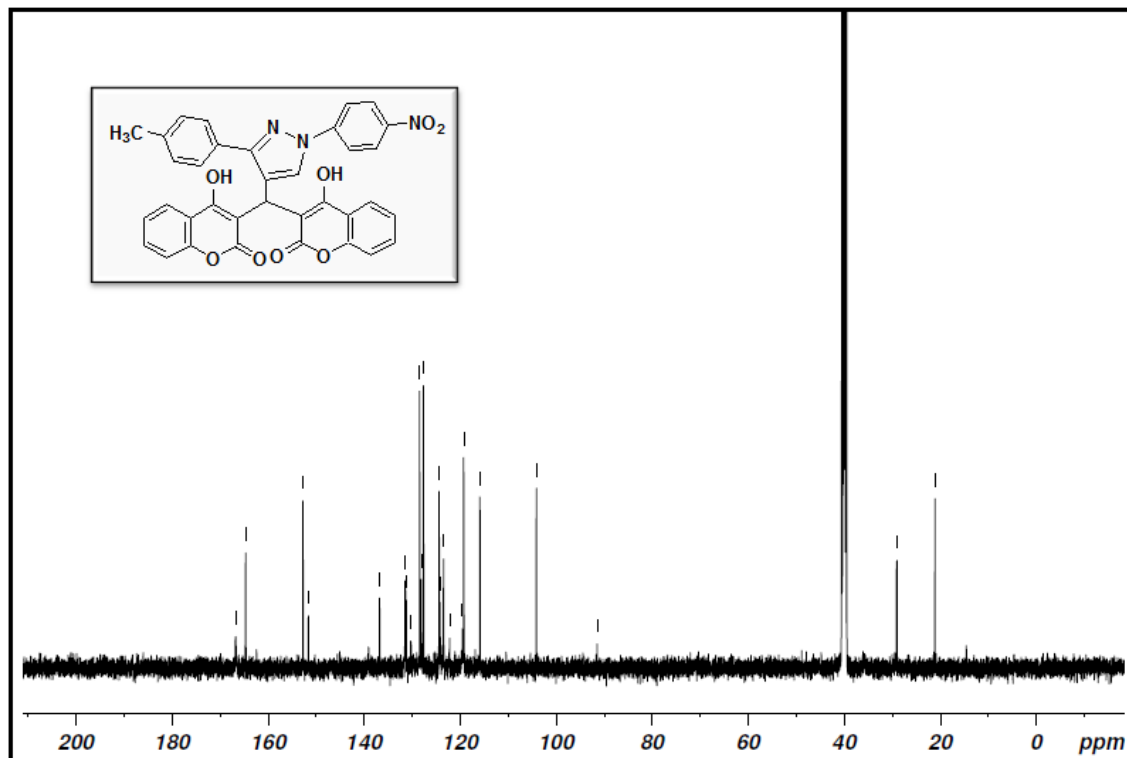


Figure S5. ¹³C NMR spectrum of 4-hydroxy-3-((4-hydroxy-2-oxo-2H-chromen-3-yl)(1-(4-nitrophenyl)-3-p-tolyl-1H-pyrazol-4-yl)methyl)-2H-chromen-2-one [Table.1-Product 6].

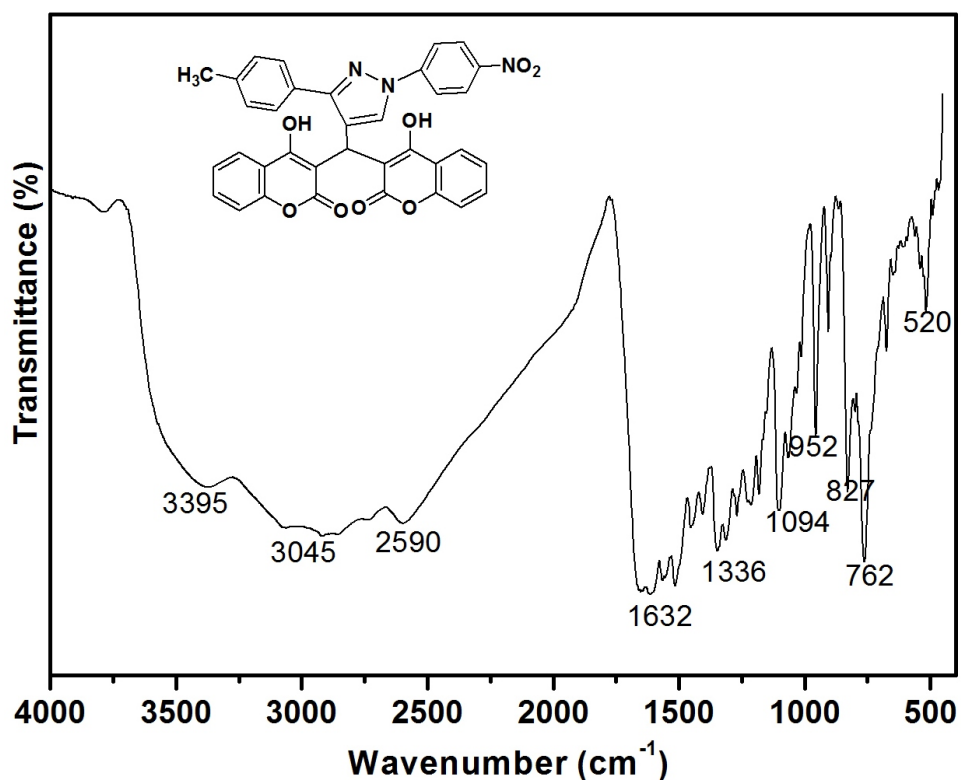


Figure S6. FTIR spectrum of 4-hydroxy-3-((4-hydroxy-2-oxo-2H-chromen-3-yl)(1-(4-nitrophenyl)-3-p-tolyl-1H-pyrazol-4-yl)methyl)-2H-chromen-2-one [Table.1-Product 6]

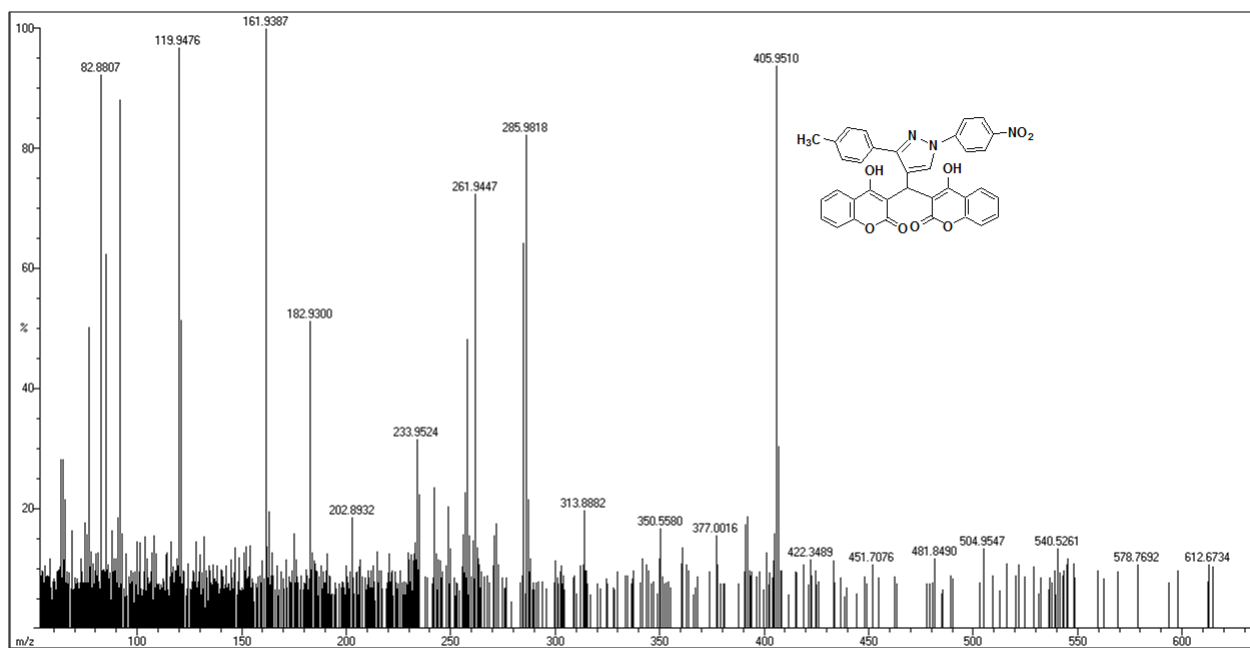


Figure S7. GC-MS data of 4-hydroxy-3-((4-hydroxy-2-oxo-2H-chromen-3-yl)(1-(4-nitrophenyl)-3-p-tolyl-1H-pyrazol-4-yl)methyl)-2H-chromen-2-one [Table.1-Product 6]