

Supporting information

$\text{Fe}_3\text{O}_4@\text{C-SO}_3\text{H}$ Novel, green and recyclable acid catalysts for the synthesis of 2-amino-4H-chromene derivatives

Raju Shekhanavar, Santosh Khatavi, Aravind Kamath and Kantharaju Kamanna*

Department of Chemistry, Rani Channamma University, Belagavi, P-B, NH-4-591156, Karnataka.

*Corresponding author: Email: kk@rcub.ac.in

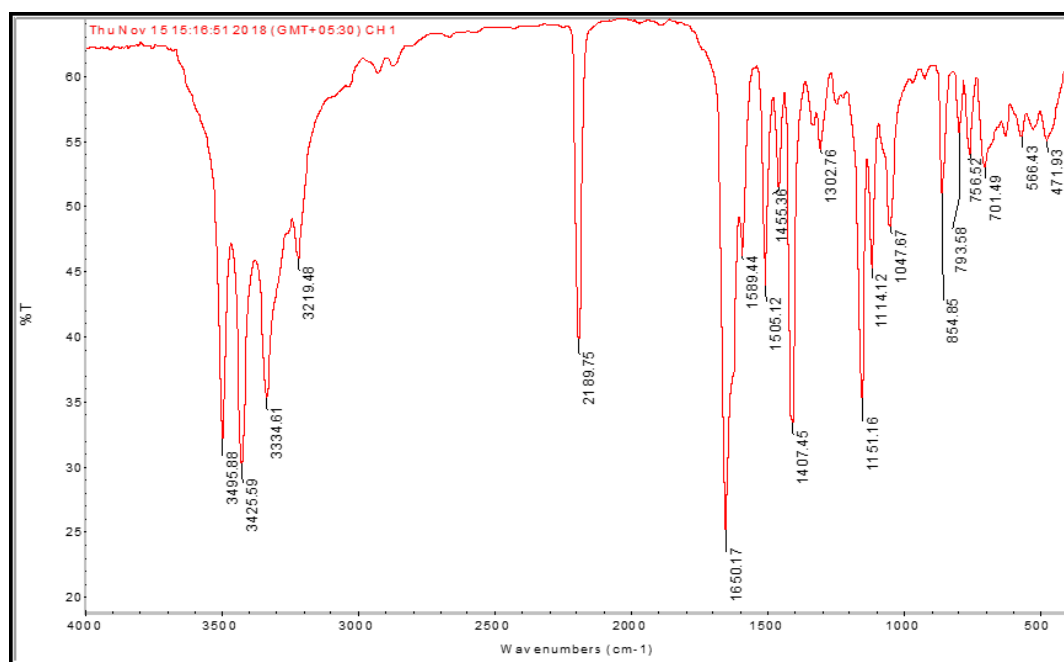


Figure S1. FT-IR Spectrum of 2-amino-3-cyano-7-hydroxy-4-phenyl-4H-chromene (**4a**)

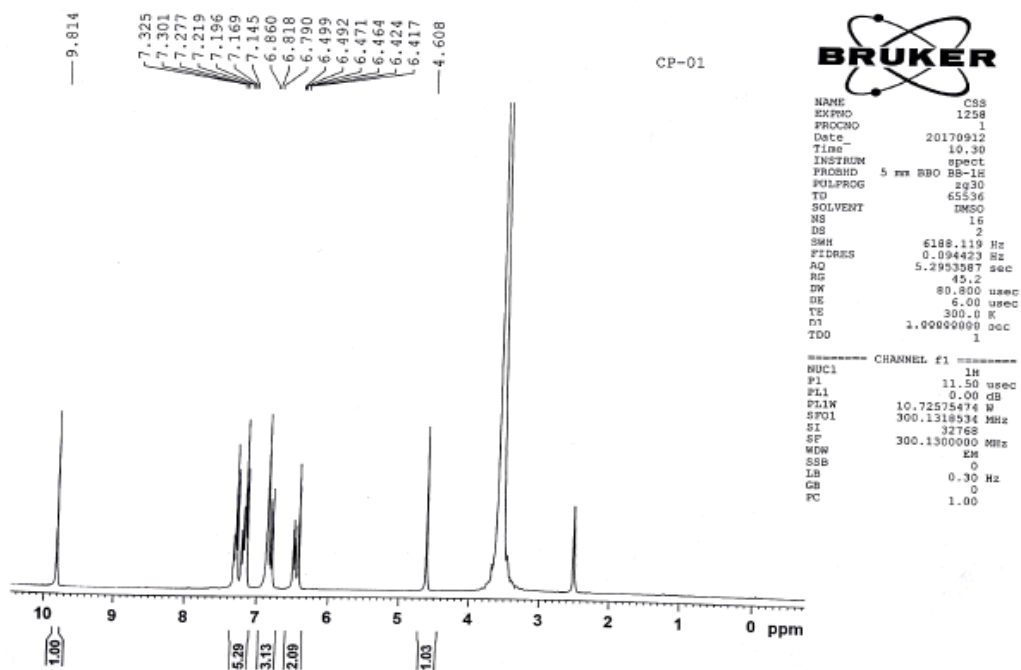


Figure S2. $^1\text{H-NMR}$ Spectrum of 2-amino-3-cyano-7-hydroxy-4-phenyl-4*H*-chromene (**4a**)

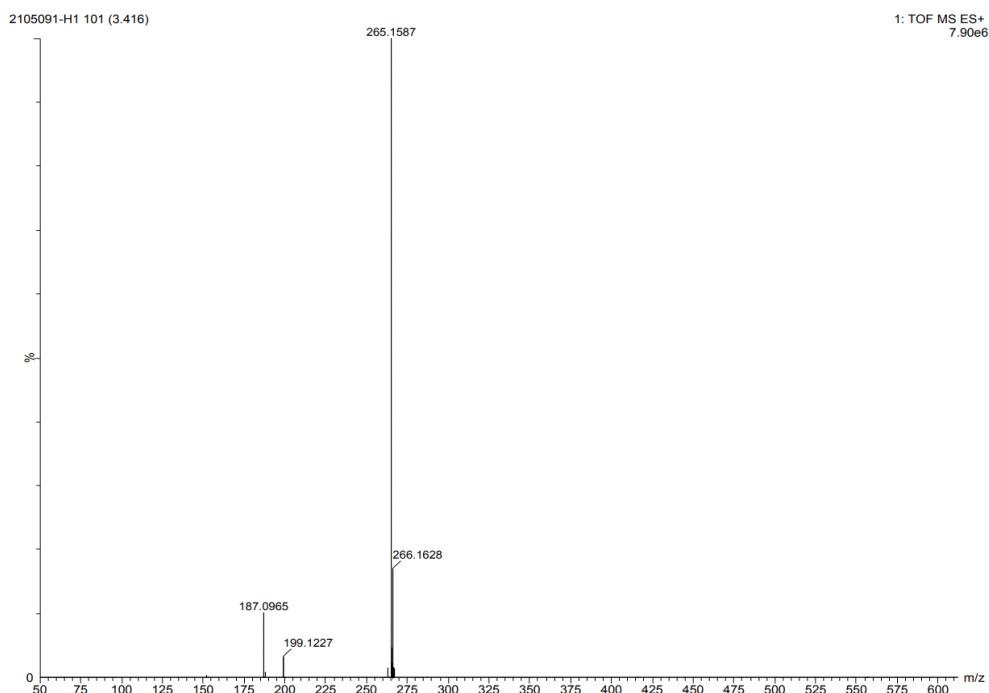


Figure S3. LC-MS Spectrum of 2-amino-3-cyano-7-hydroxy-4-phenyl-4*H*-chromene (**4a**)

Figure S4. FT-IR Spectrum of 2-amino-4-(2,3-dimethoxyphenyl)-7-hydroxy-4H-chromene-3-carbonitrile (**4e**)

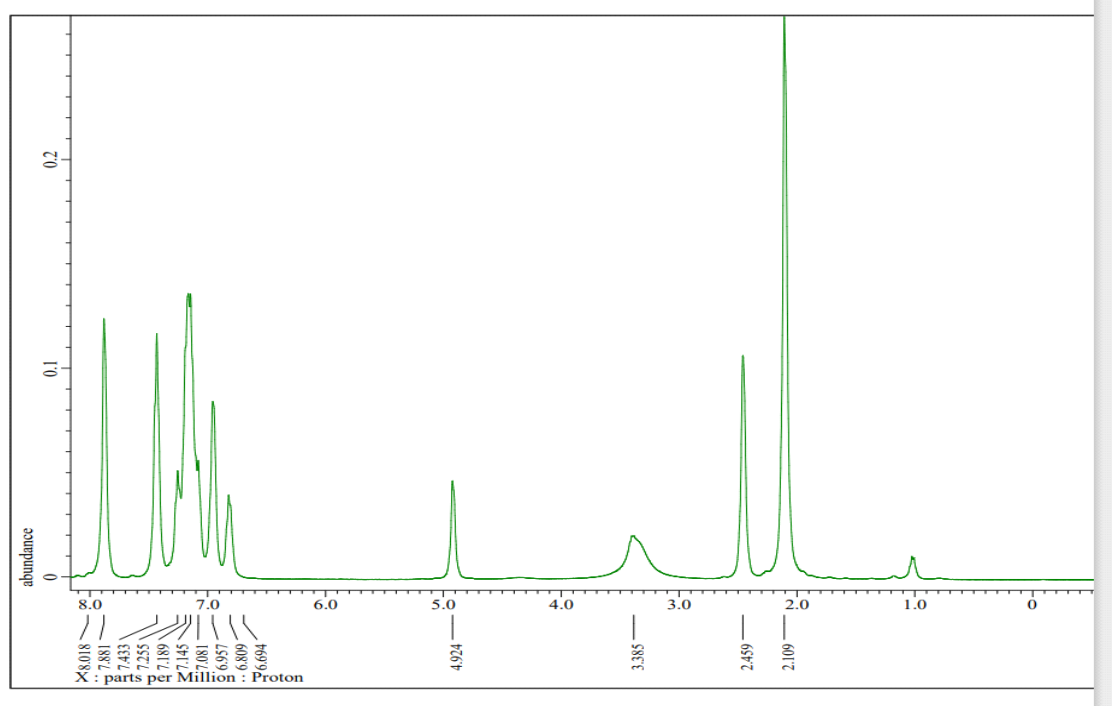


Figure S5. ¹H-NMR Spectrum of 2-amino-4-(2,3-dimethoxyphenyl)-7-hydroxy-4H-chromene-3-carbonitrile (**4e**)

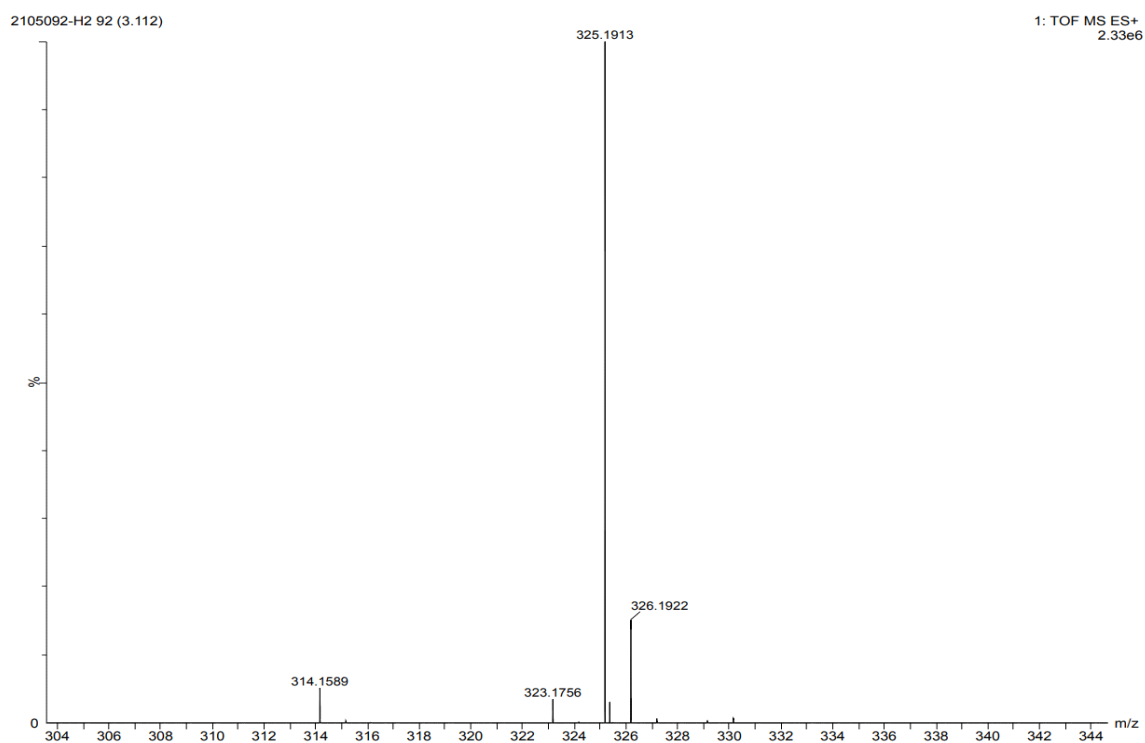


Figure S6. LC-MS Spectrum of 2-amino-4-(2,3-dimethoxyphenyl)-7-hydroxy-4H-chromene-3-carbonitrile (**4e**)

Figure S7. FT-IR spectrum of 2-amino-4-(4-(dimethylamino)phenyl)-7-hydroxy-4H-chromene-3-carbonitrile (**4g**)

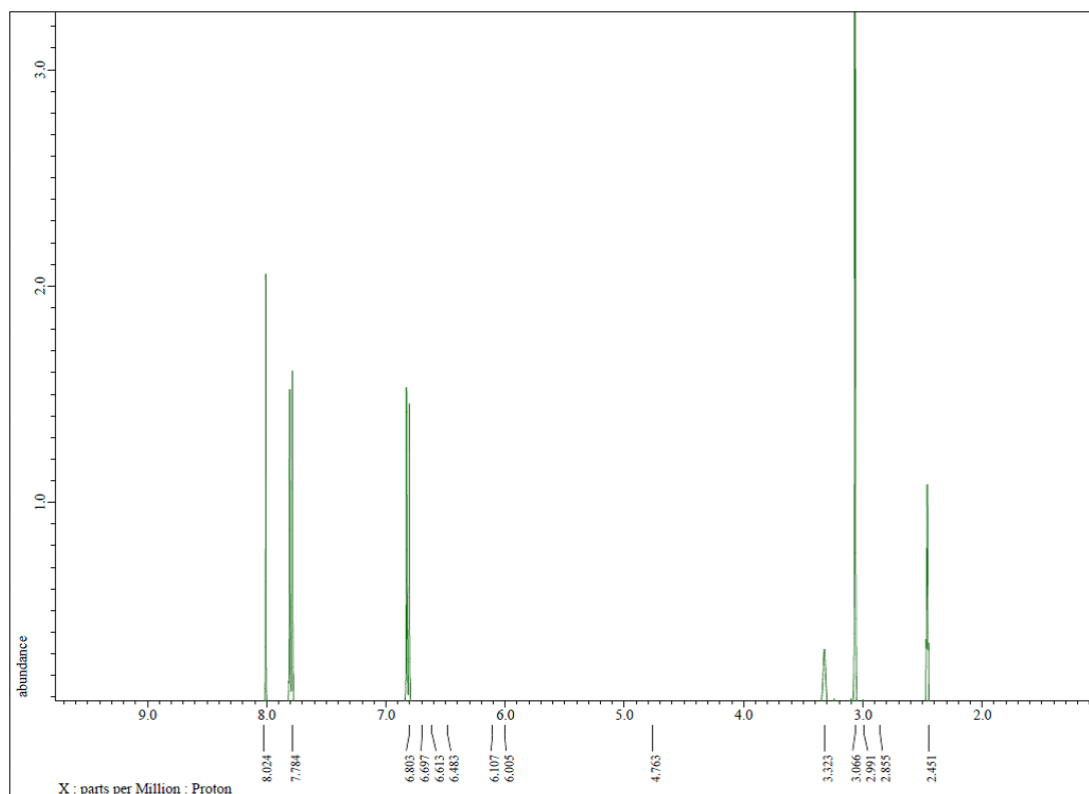


Figure S8. ¹H-NMR spectrum of 2-amino-4-(4-(dimethylamino)phenyl)-7-hydroxy-4H-chromene-3-carbonitrile (**4g**)

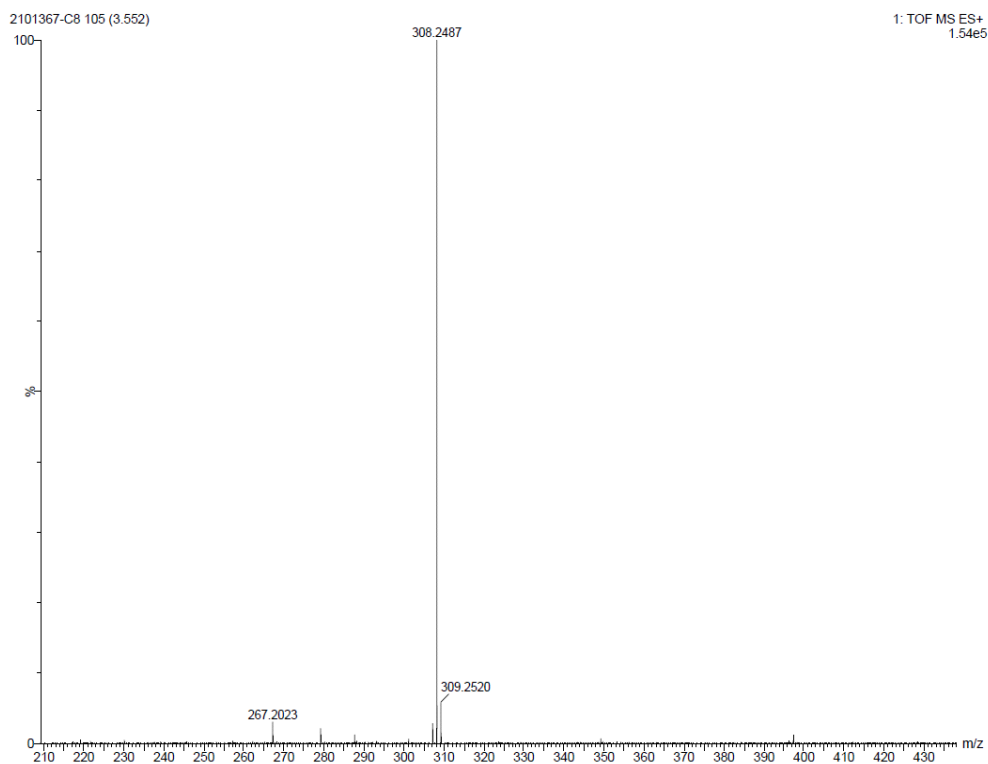
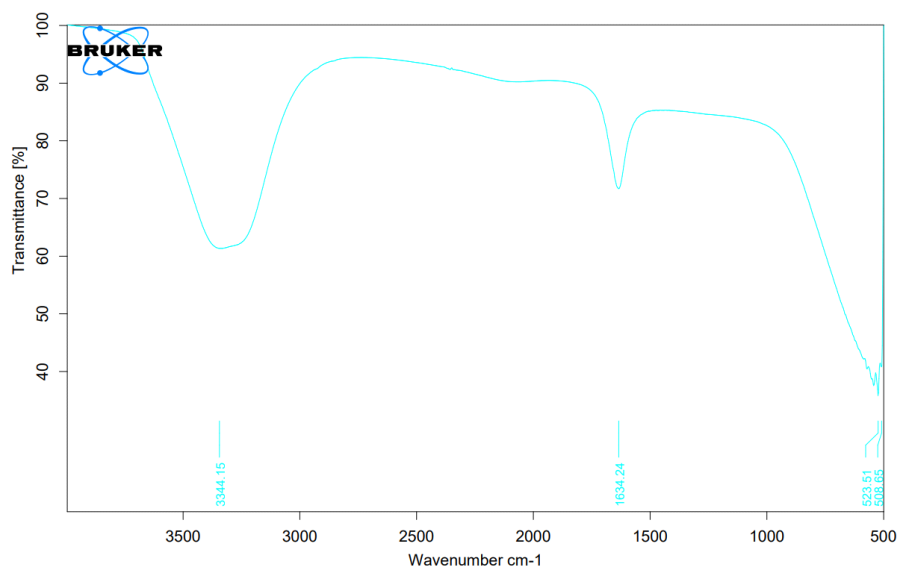


Figure S9. LC-MS spectrum of 2-amino-4-(4-(dimethylamino)phenyl)-7-hydroxy-4H-chromene-3-carbonitrile (**4g**)



C:\Users\Chem\Desktop\2024\April\rs-F1.1

rs-F1

Instrument type and / or accessory

16-04-2024

Figure S10. FT-IR spectra of reused $\text{Fe}_3\text{O}_4@\text{C-SO}_3\text{H}$ catalyst

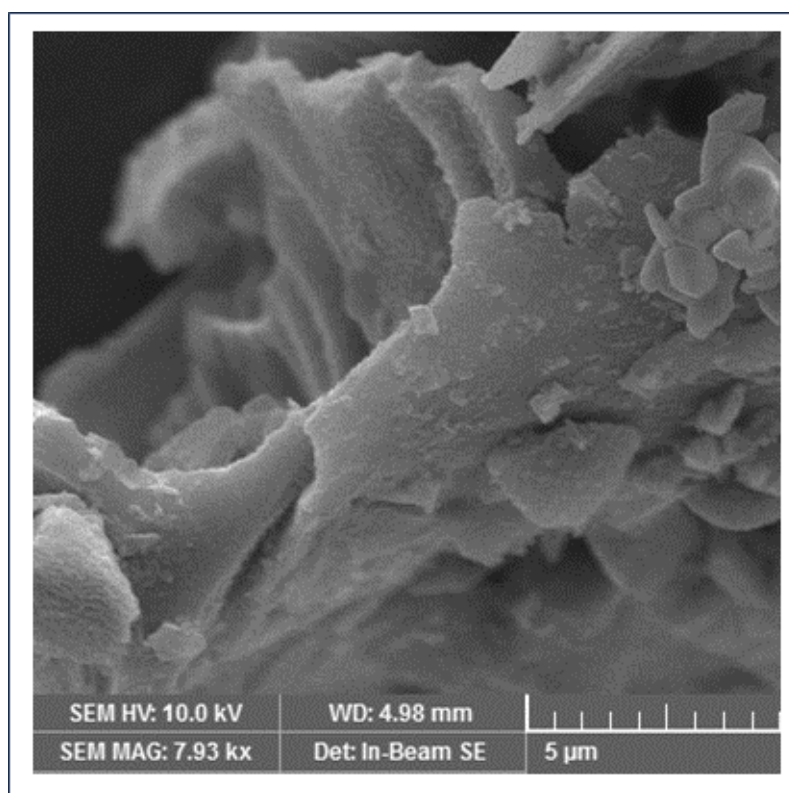


Figure S11. FE-SEM of reused $\text{Fe}_3\text{O}_4@\text{C-SO}_3\text{H}$ catalyst.

