Electronic Supplementary Information

Base-iodine-promoted metal-catalyst-free reactions of [60]fullerene with β-keto esters for selective formation of [60]fullerene derivatives

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Table of Contents

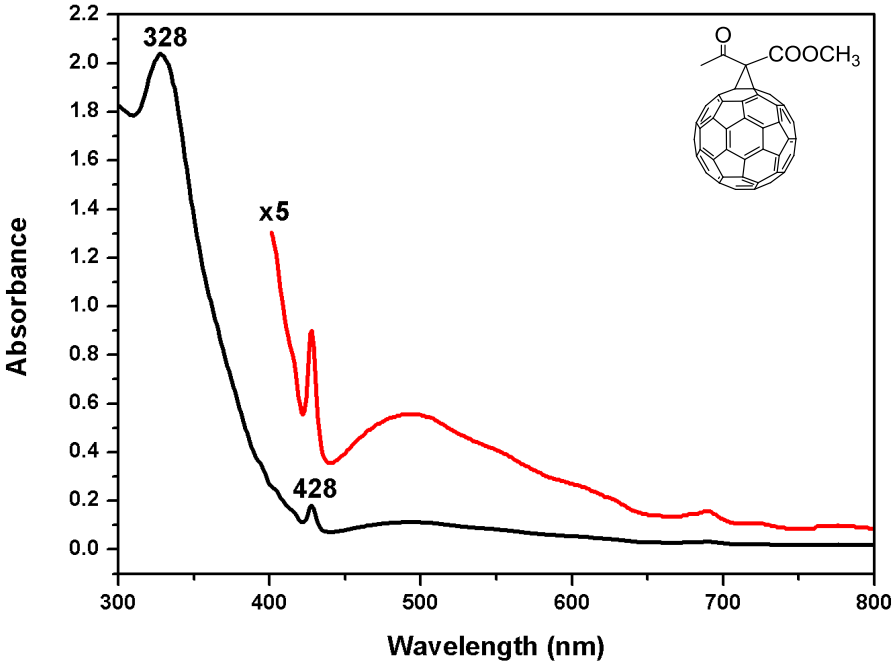

Figure S1. UV-visible spectrum of compound **2a** in toluene.

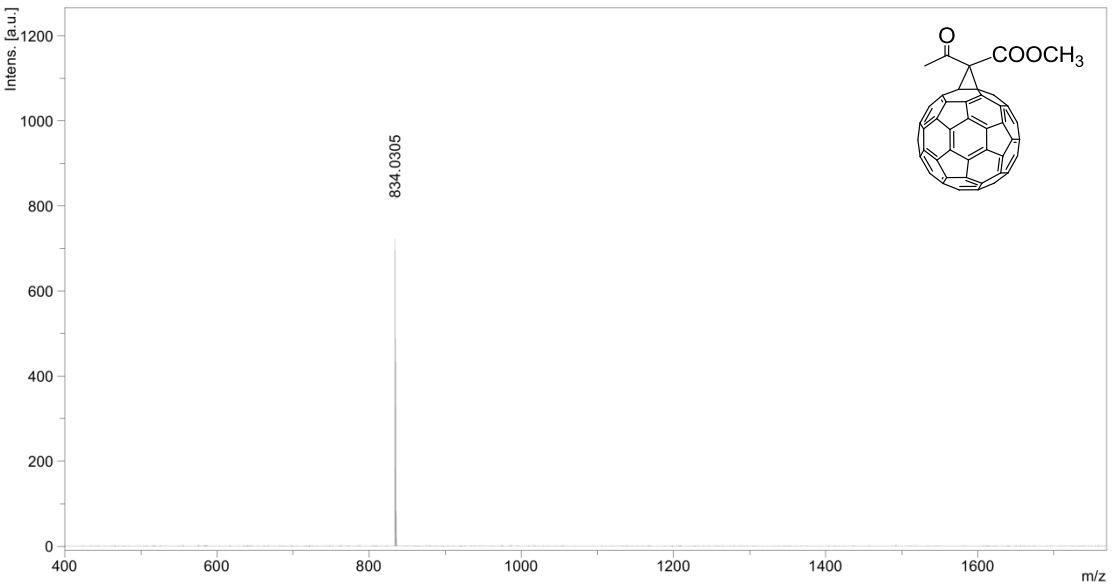

Figure S2. MALDI-TOF MS of compound **2a**

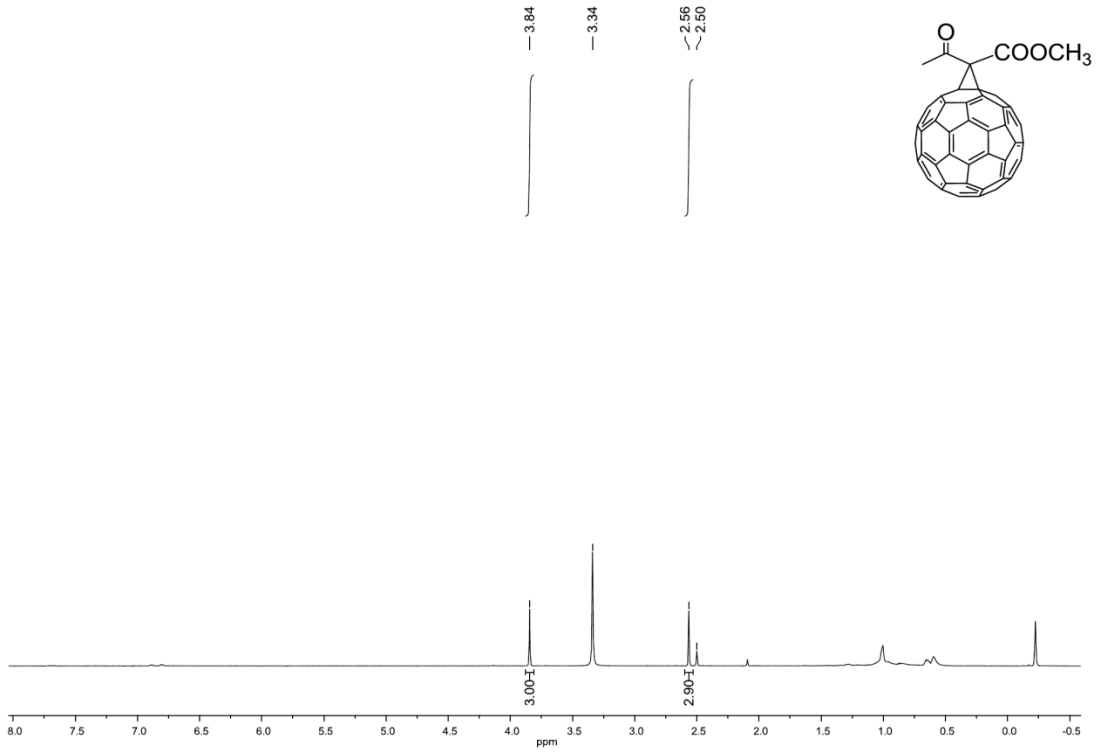

Figure S3. ^{1}H NMR spectrum (600 MHz) of compound **2a** recorded in CS_2 with DMSO-d_6 as the external lock. The resonances at 2.5 ppm and 3.3 ppm are due to the DMSO solvent and H_2O in DMSO respectively.

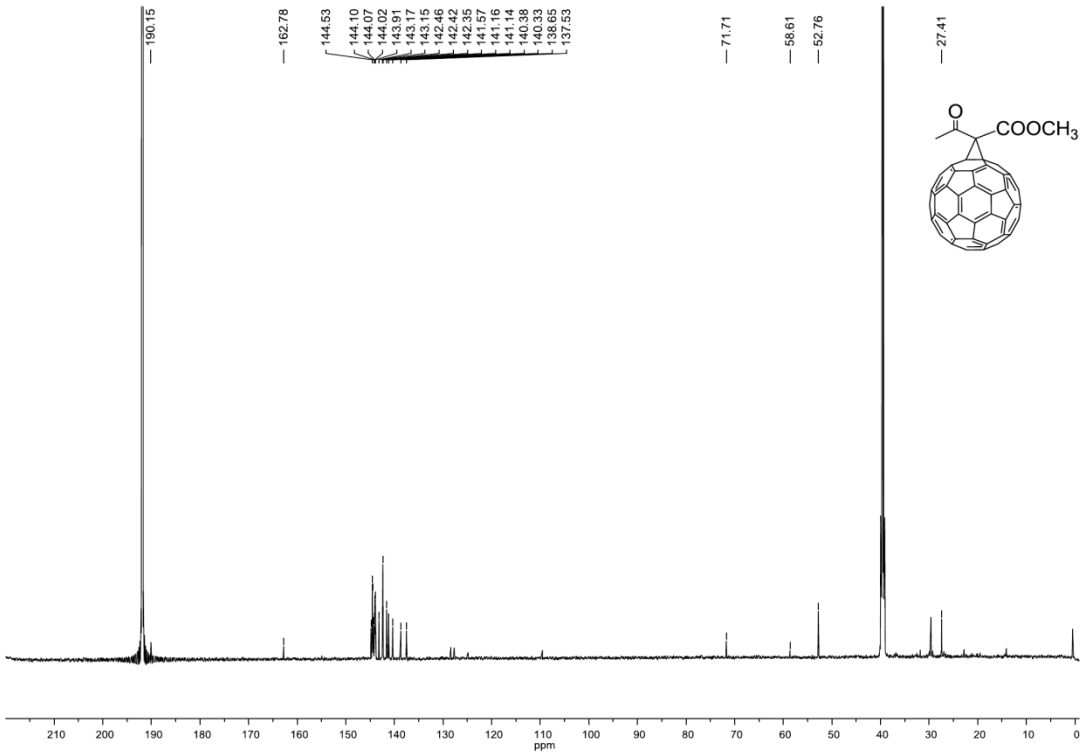

Figure S4. ^{13}C NMR spectrum (151 MHz) of compound **2a** recorded in CS_2 with DMSO-d_6 as the external lock.

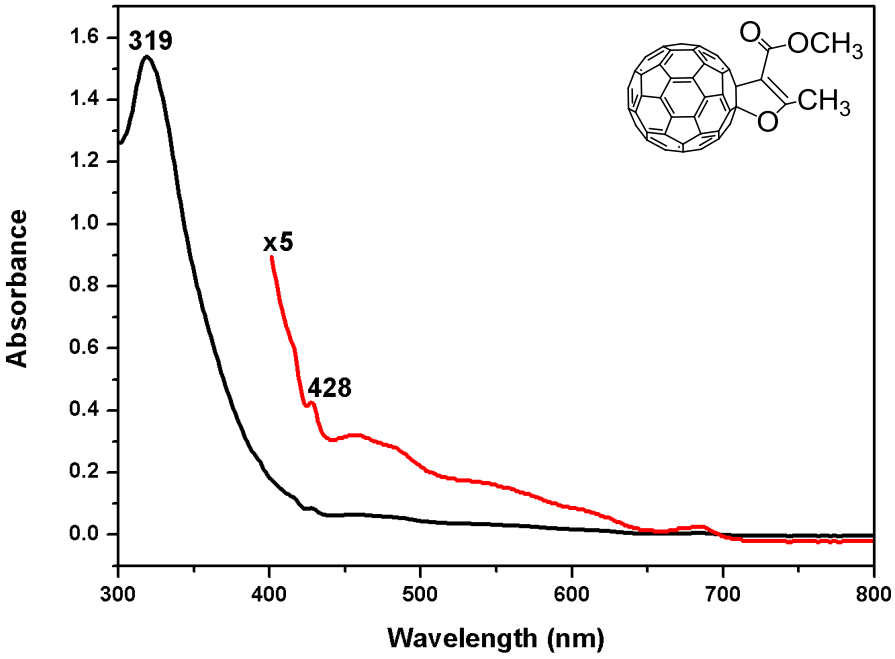

Figure S5. UV-visible spectrum of compound **3a** in toluene.

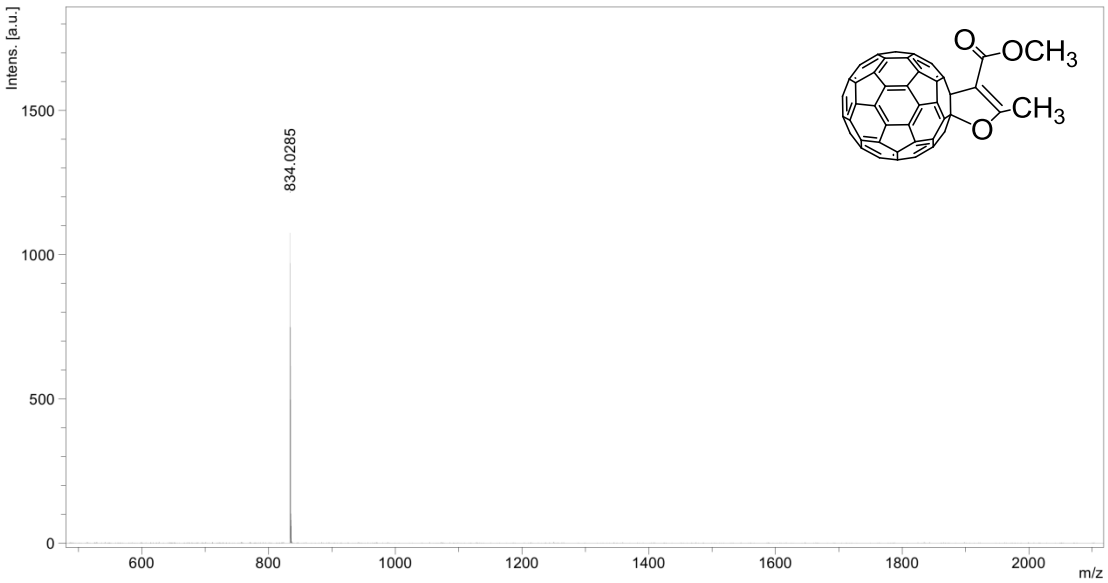

Figure S6. MALDI-TOF MS of compound **3a**

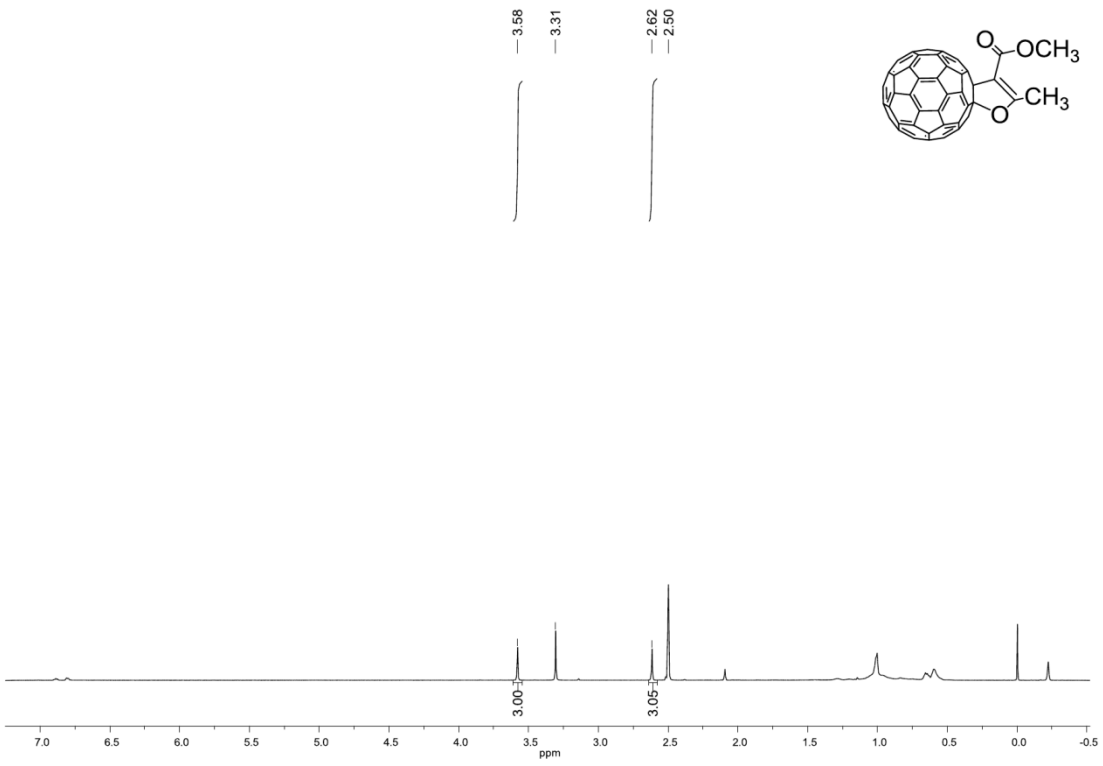

Figure S7. ^{1}H NMR spectrum (600 MHz) of compound **3a** recorded in CS_2 with DMSO-d_6 as the external lock. The resonances at 2.5 ppm and 3.3 ppm are due to the DMSO solvent and H_2O in DMSO respectively.

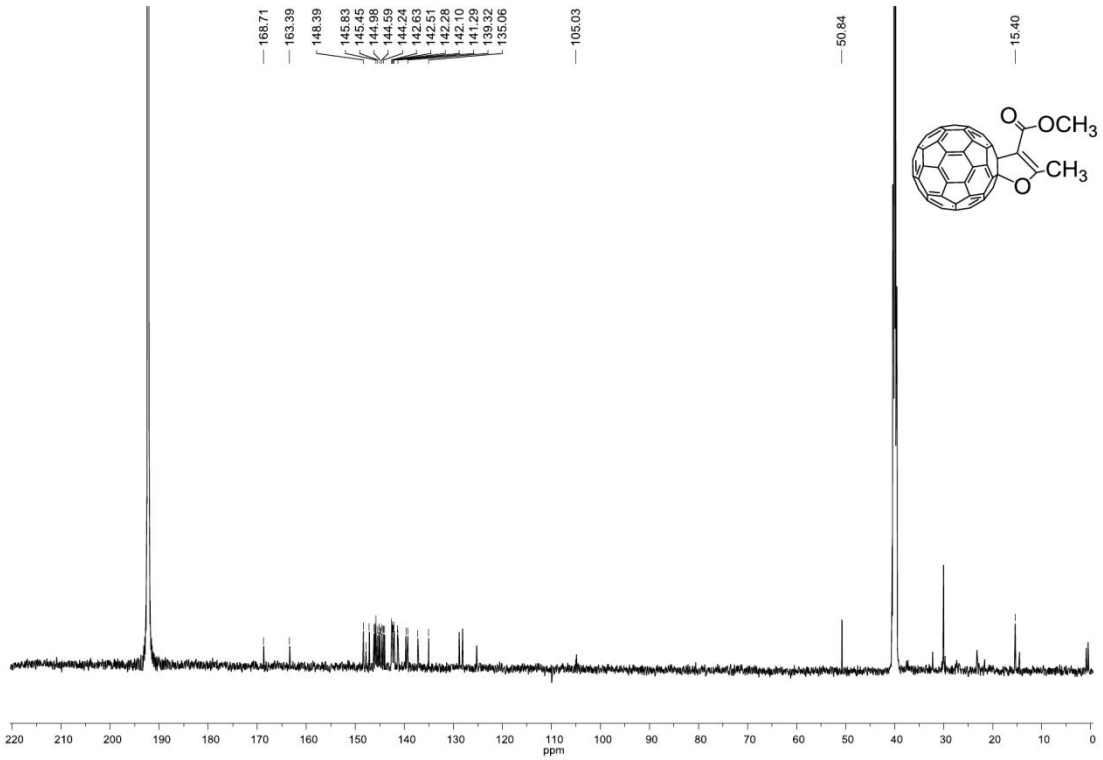

Figure S8. ^{13}C NMR spectrum (151 MHz) of compound **3a** recorded in CS_2 with DMSO-d_6 as the external lock.

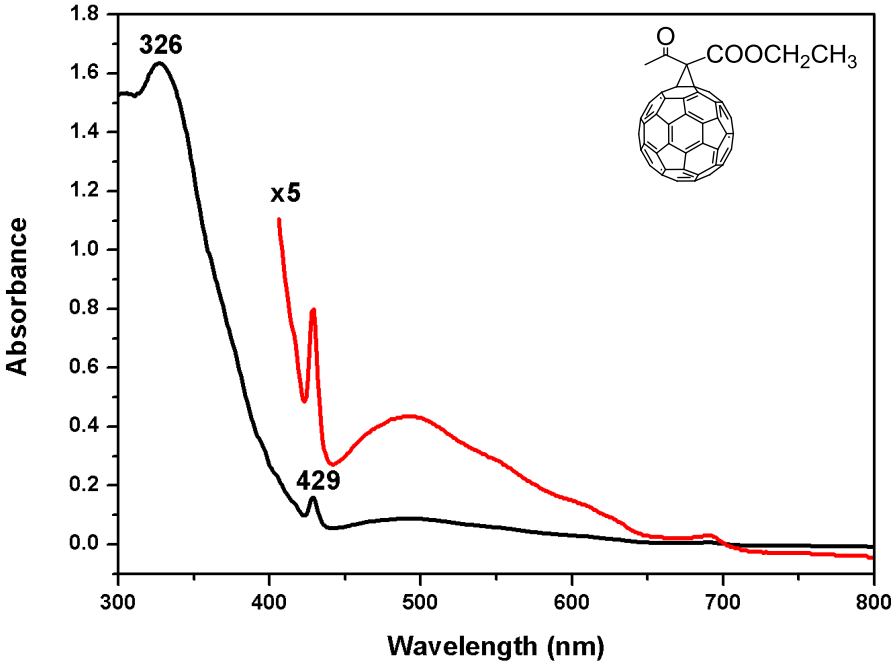

Figure S9. UV-visible spectrum of compound **2b** in toluene.

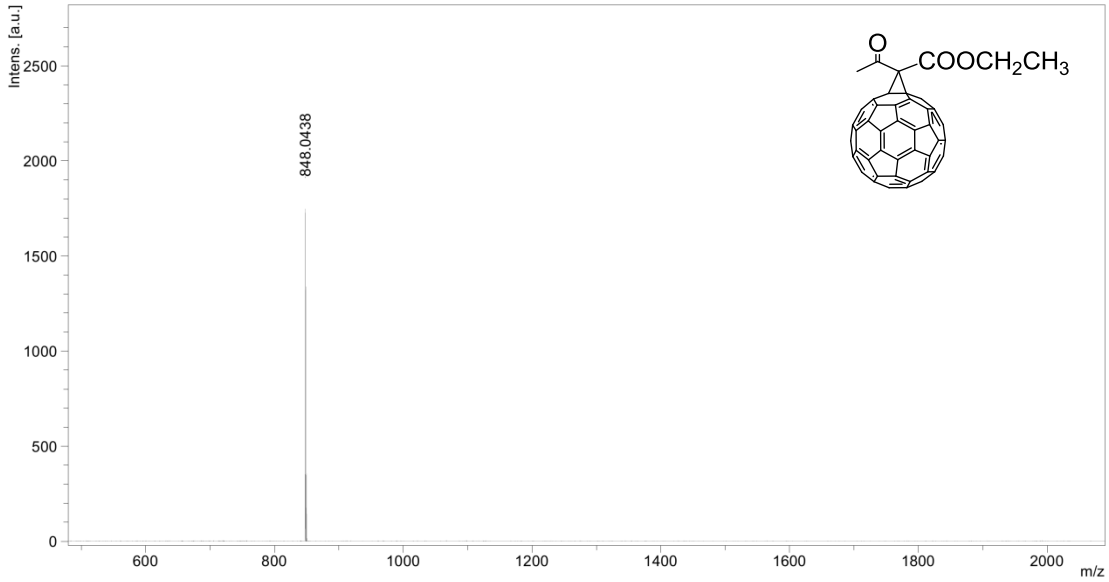

Figure S10. MALDI-TOF MS of compound **2b**

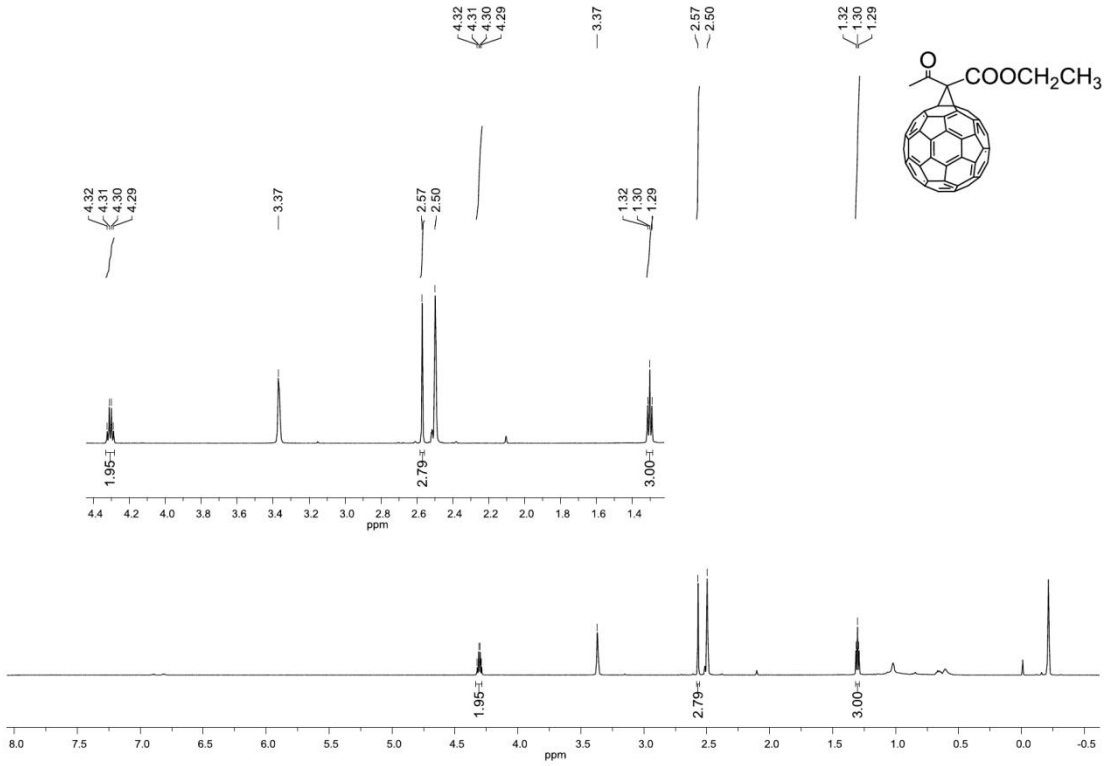

Figure S11. ^{1}H NMR spectrum (600 MHz) of compound **2b** recorded in CS_2 with DMSO-*d*6 as the external lock. The resonances at 2.5 ppm and 3.3 ppm are due to the DMSO solvent and H_2O in DMSO respectively.

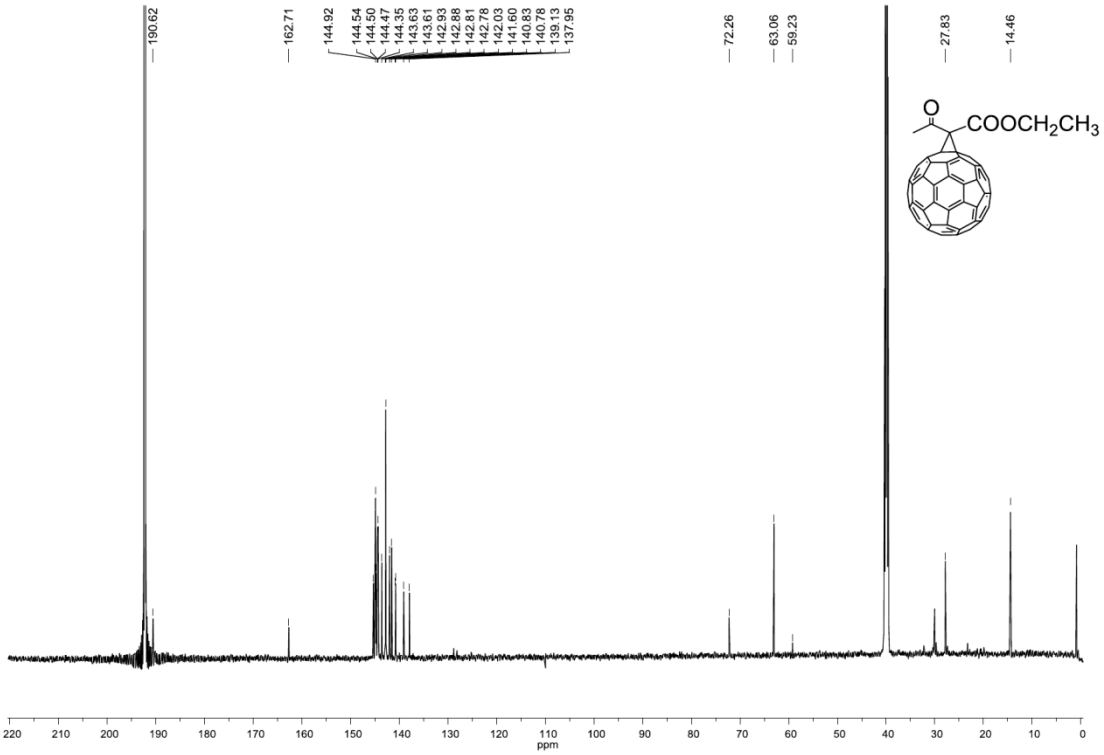

Figure S12. ^{13}C NMR spectrum (151 MHz) of compound **2b** recorded in CS_2 with DMSO-d_6 as the external lock.

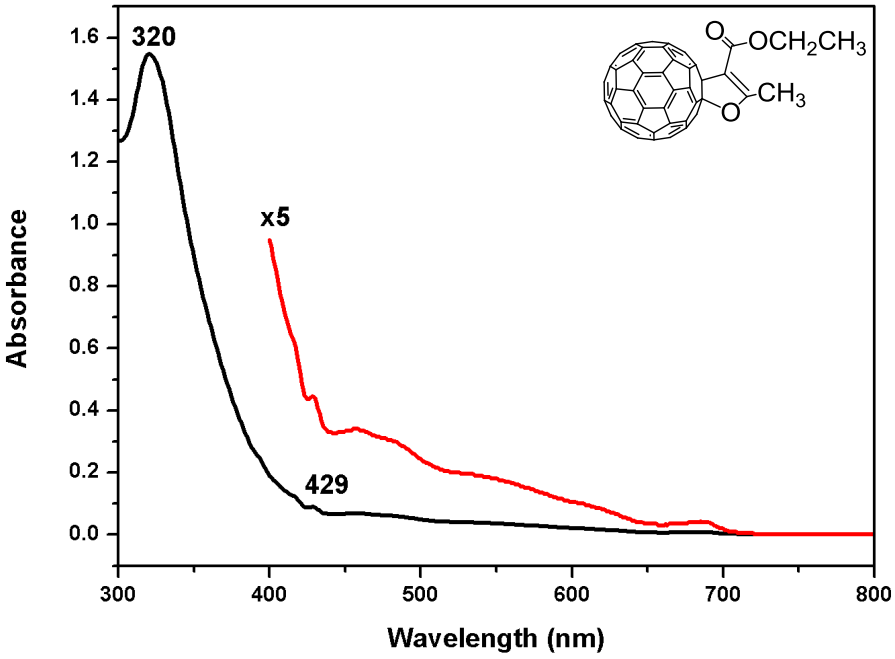

Figure S13. UV-visible spectrum of compound **3b** in toluene.

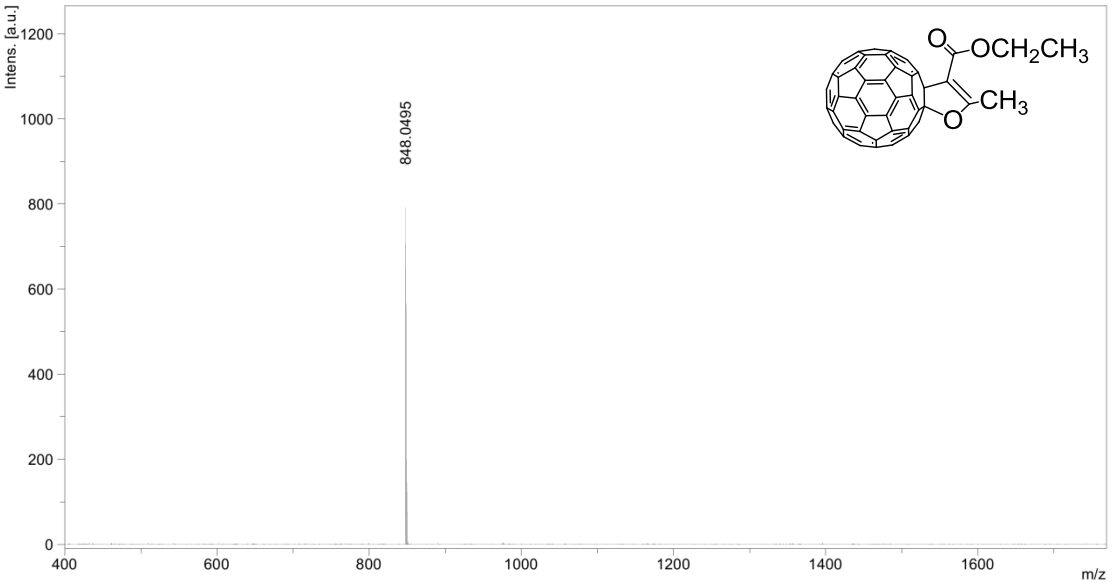

Figure S14. MALDI-TOF MS of compound **3b**

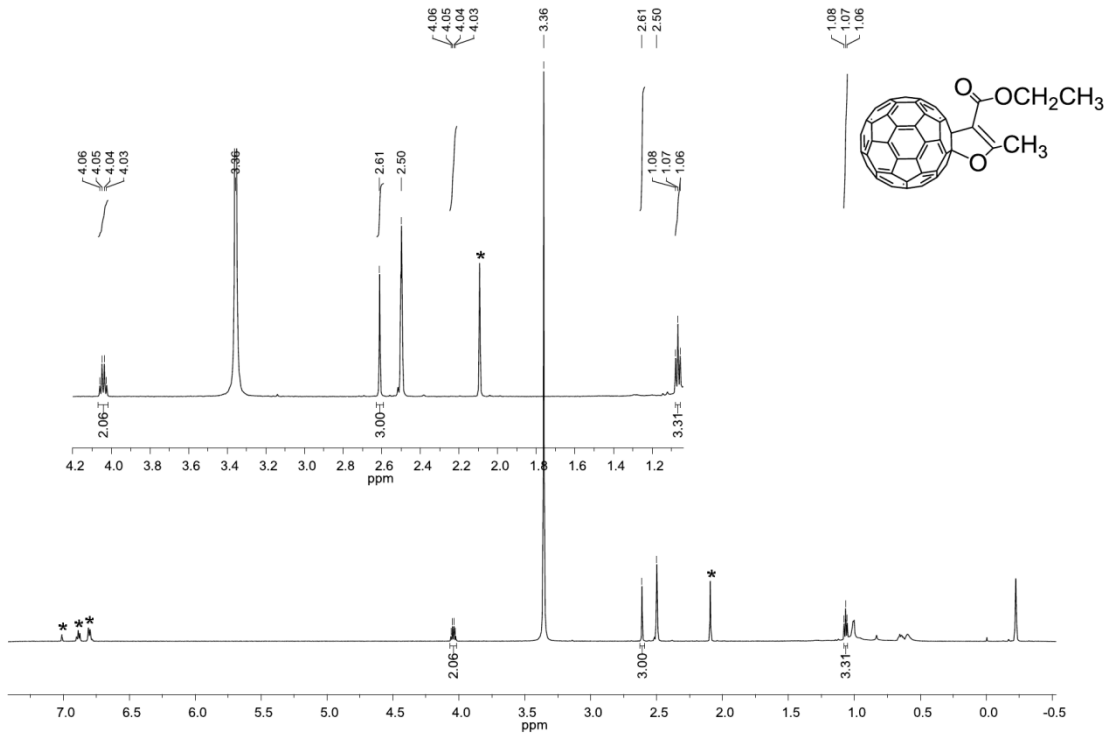

Figure S15. ^{1}H NMR spectrum (600 MHz) of compound **3b** recorded in CS_2 with DMSO-*d*6 as the external lock. The resonances at 2.5 ppm and 3.3 ppm are due to the DMSO solvent and H_2O in DMSO respectively. The peaks labeled with asterisks belong to toluene residue in the sample.

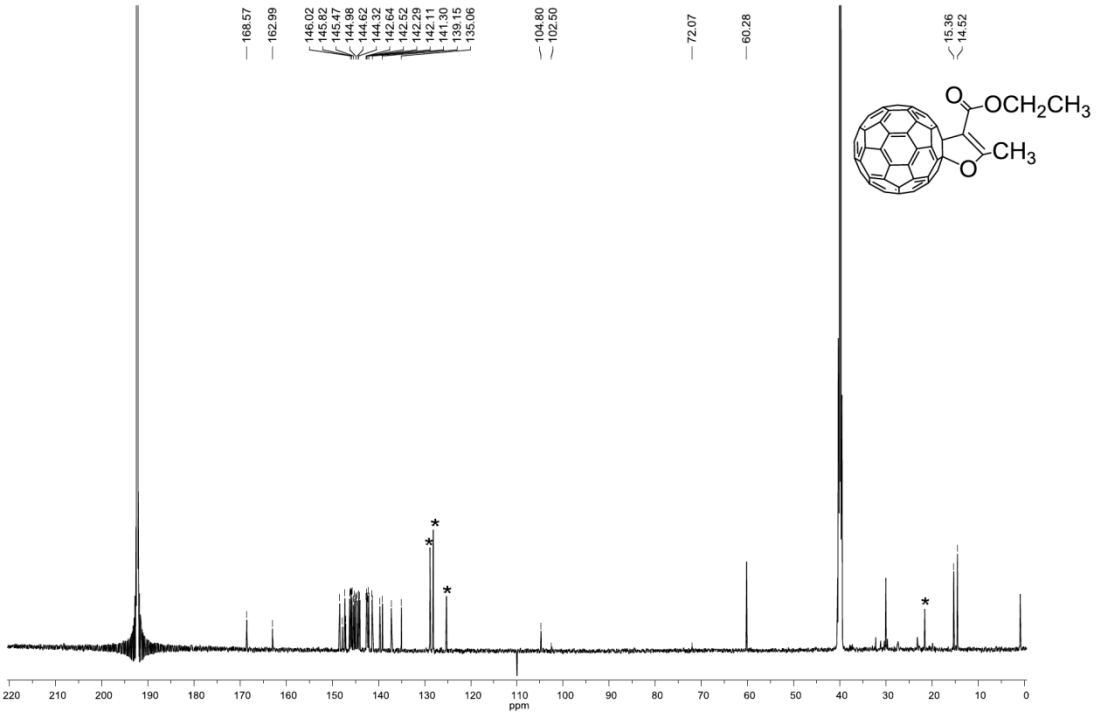

Figure S16. ^{13}C NMR spectrum (151 MHz) of compound **3b** recorded in CS_2 with DMSO-d_6 as the external lock. The peaks labeled with asterisks belong to toluene residue in the sample.

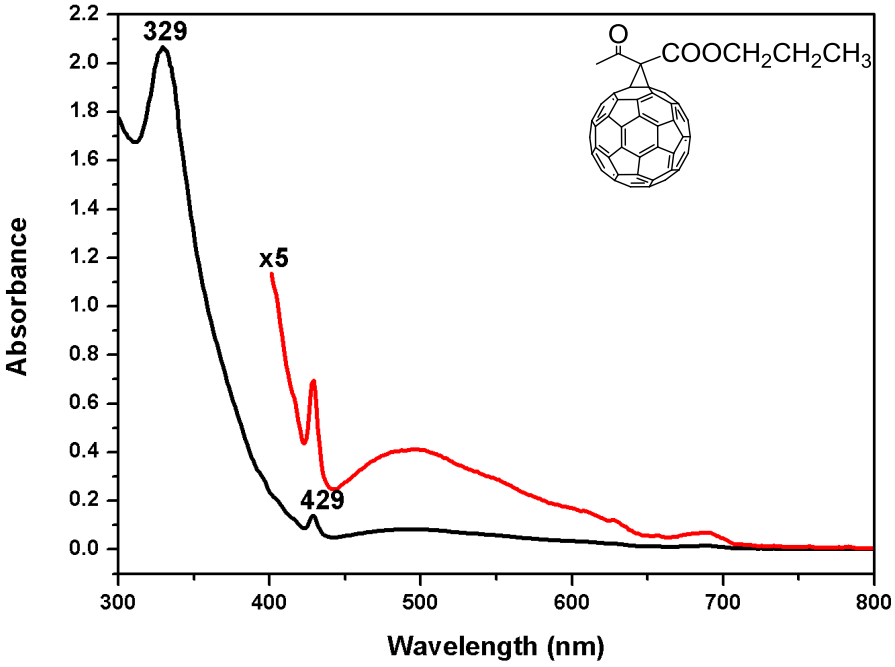

Figure S17. UV-visible spectrum of compound **2c** in toluene.

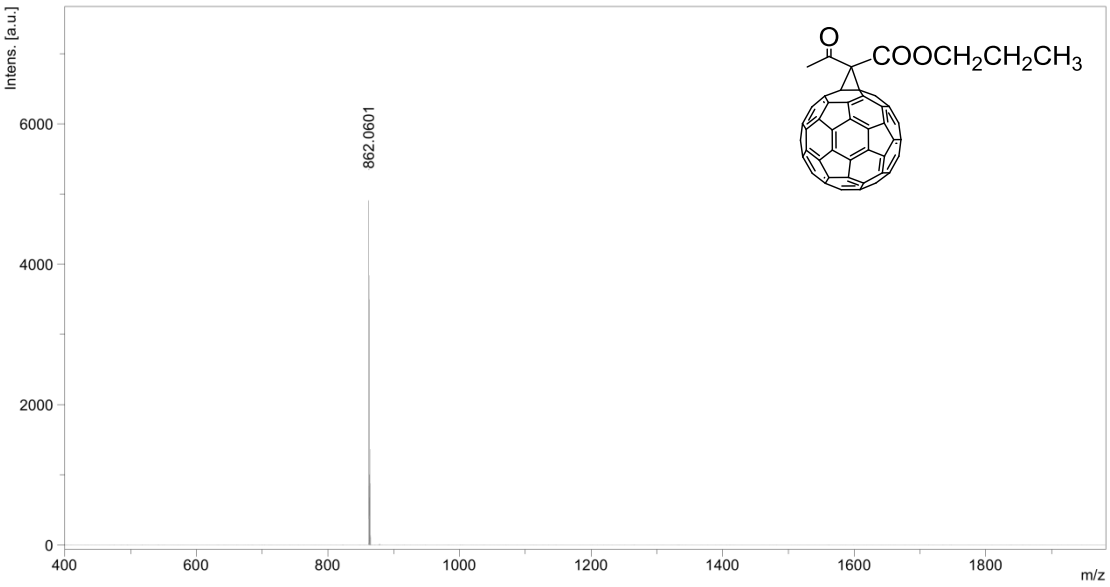

Figure S18. MALDI-TOF MS of compound **2c**

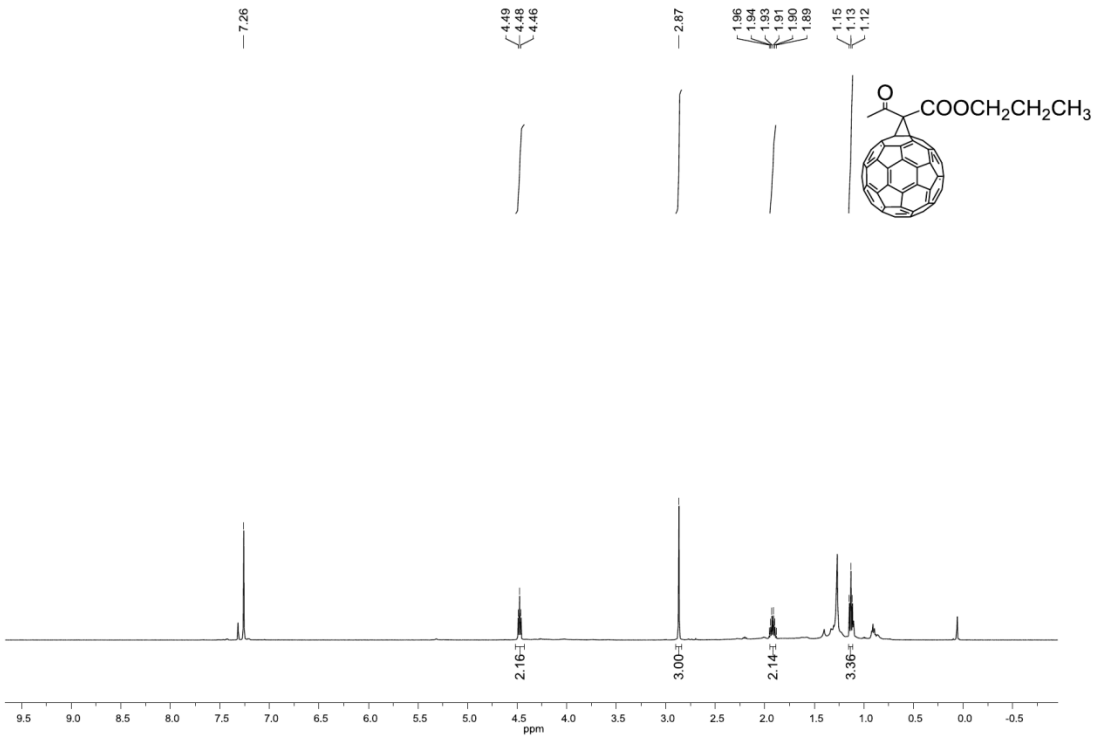

Figure S19. ^{1}H NMR spectrum (500 MHz) of compound **2c** recorded in CS_2-$CDCl_3$ (v/v=2:1). The resonance at 7.26 ppm is due to the $CHCl_3$ solvent.

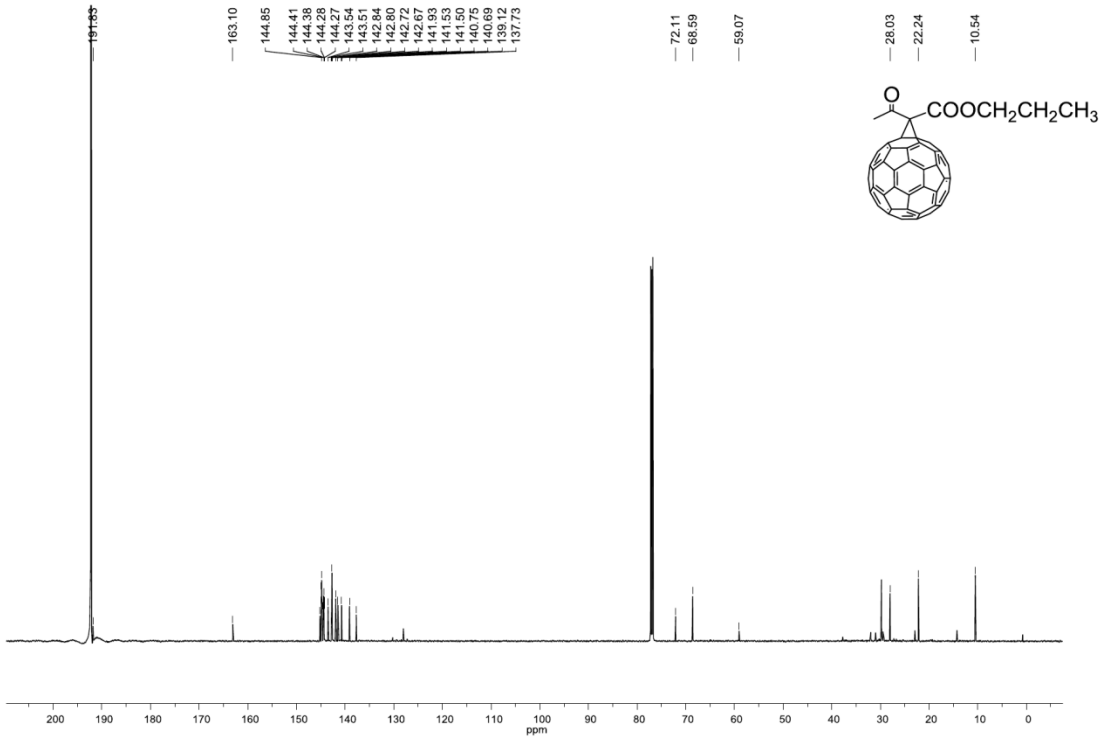

Figure S20. ^{13}C NMR spectrum (151 MHz) of compound **2c** recorded in CS_2-$CDCl_3$ (v/v=2:1).

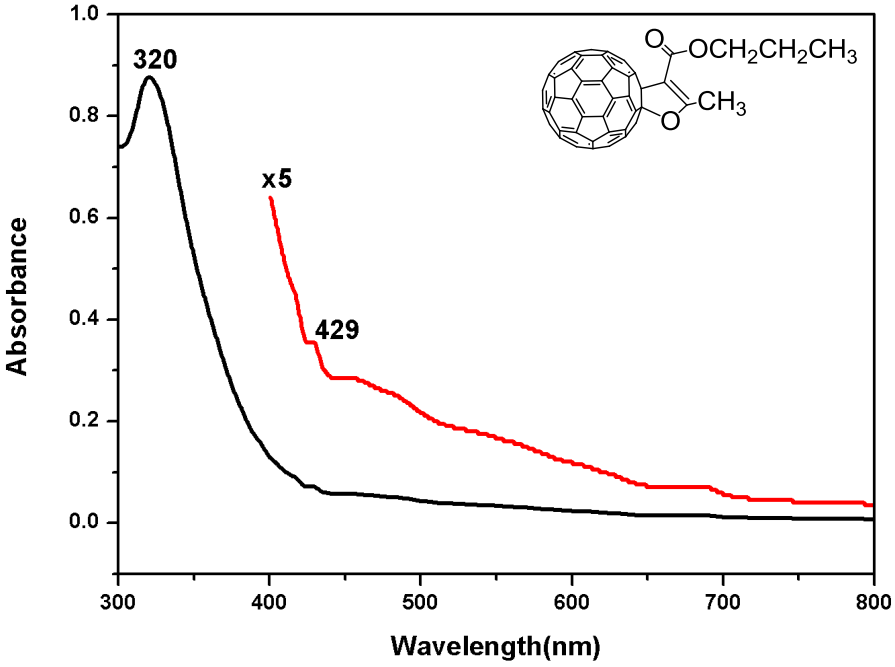

Figure S21. UV-visible spectrum of compound **3c** in toluene.

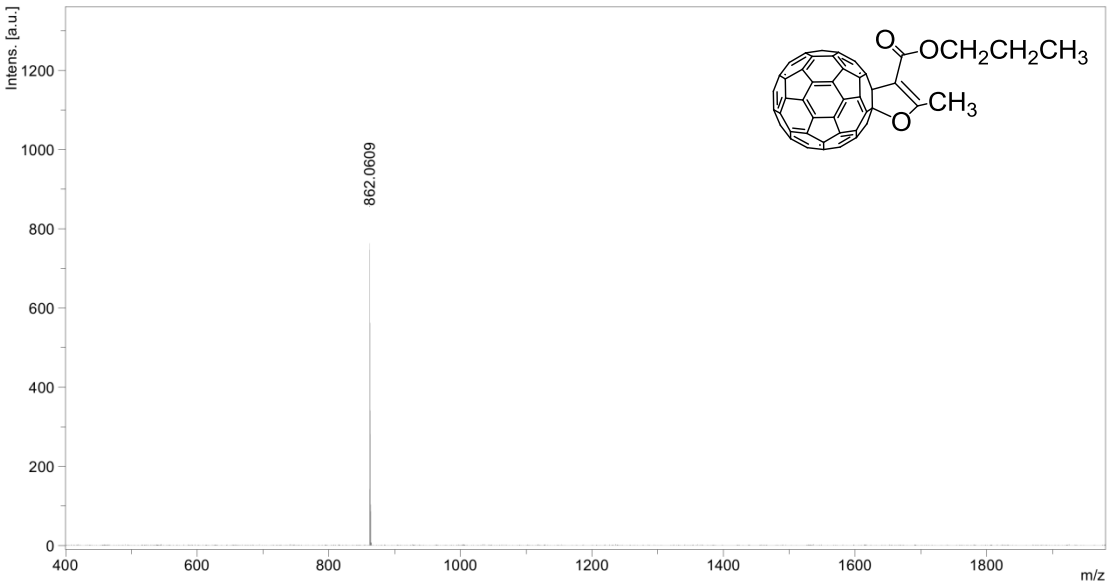

Figure S22. MALDI-TOF MS of compound **3c**

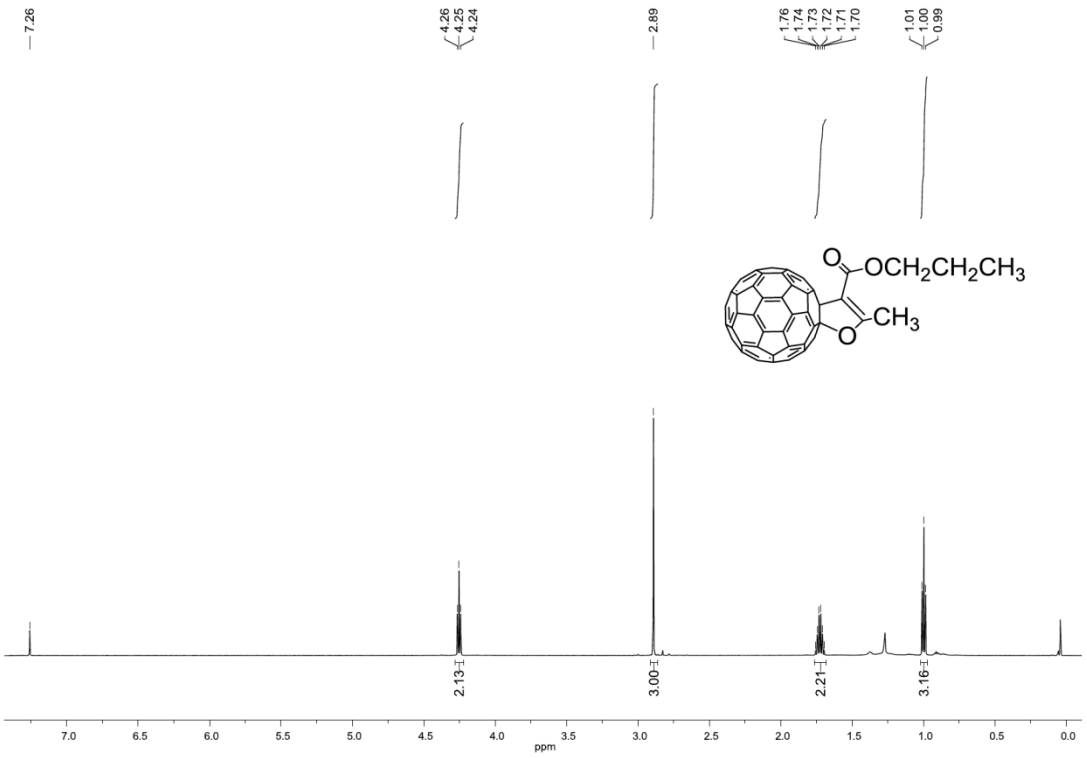

Figure S23. ^{1}H NMR spectrum (600 MHz) of compound **3c** recorded in CS_2-$CDCl_3$ (v/v=2:1). The resonance at 7.26 ppm is due to the $CHCl_3$ solvent.

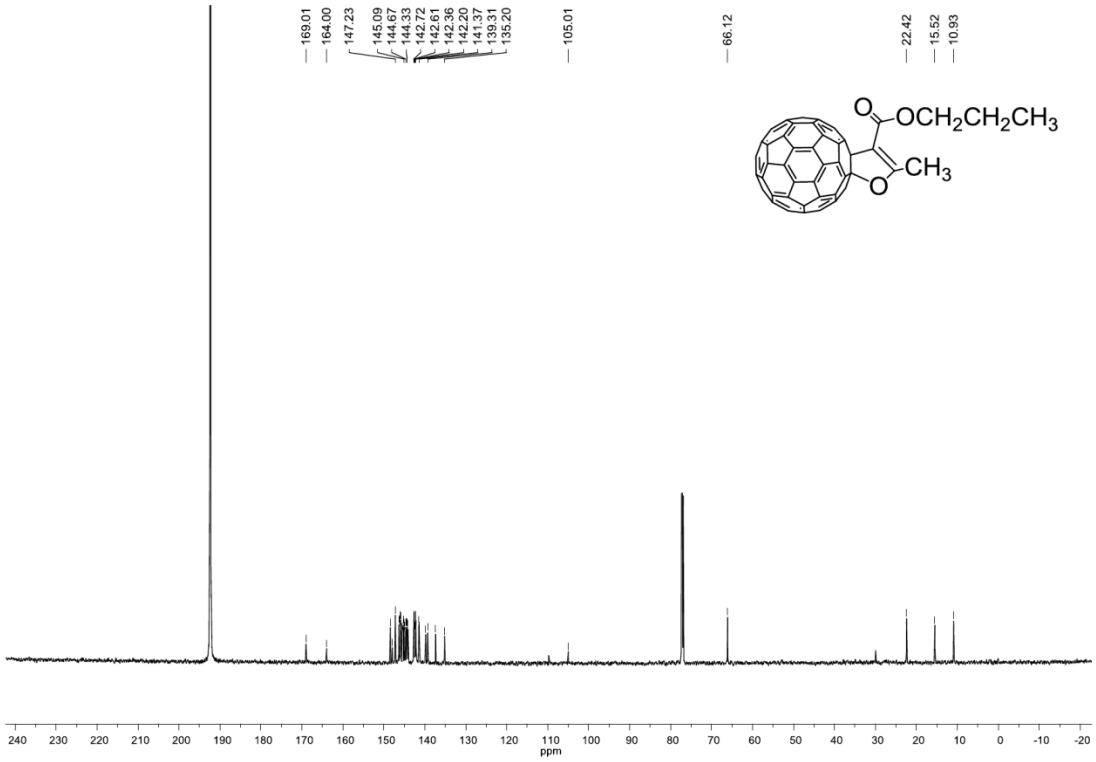

Figure S24. ^{13}C NMR spectrum (151 MHz) of compound **3c** recorded in CS_2-$CDCl_3$ (v/v=2:1).

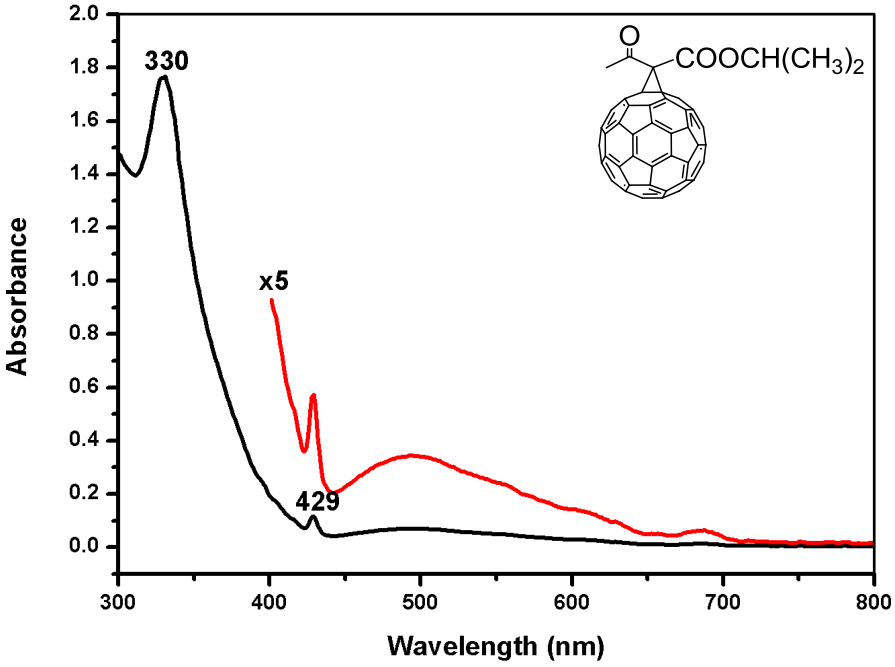

Figure S25. UV-visible spectrum of compound **2d** in toluene.

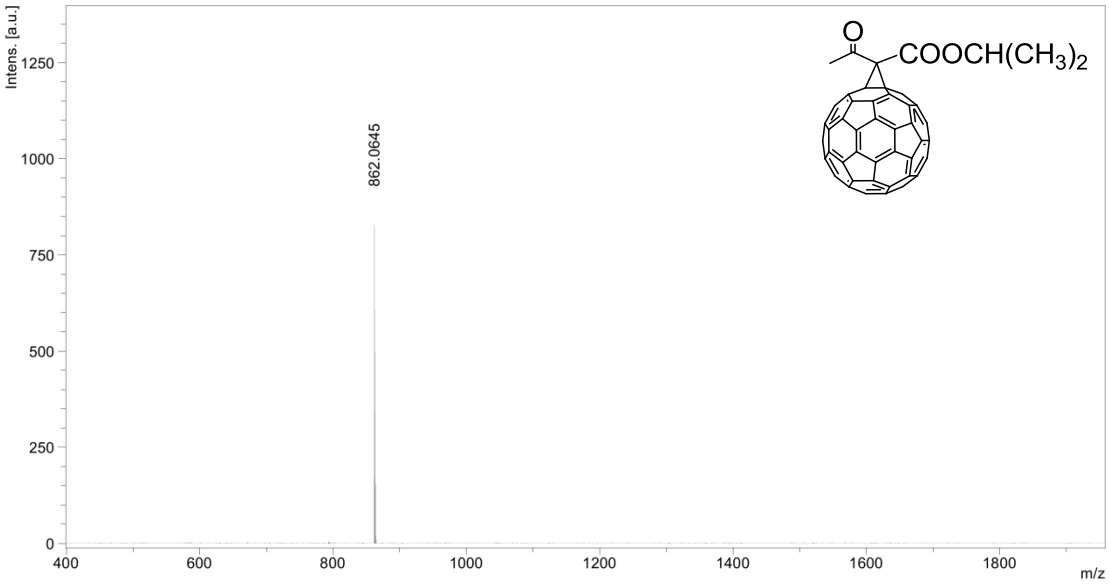

Figure S26. MALDI-TOF MS of compound **2d**

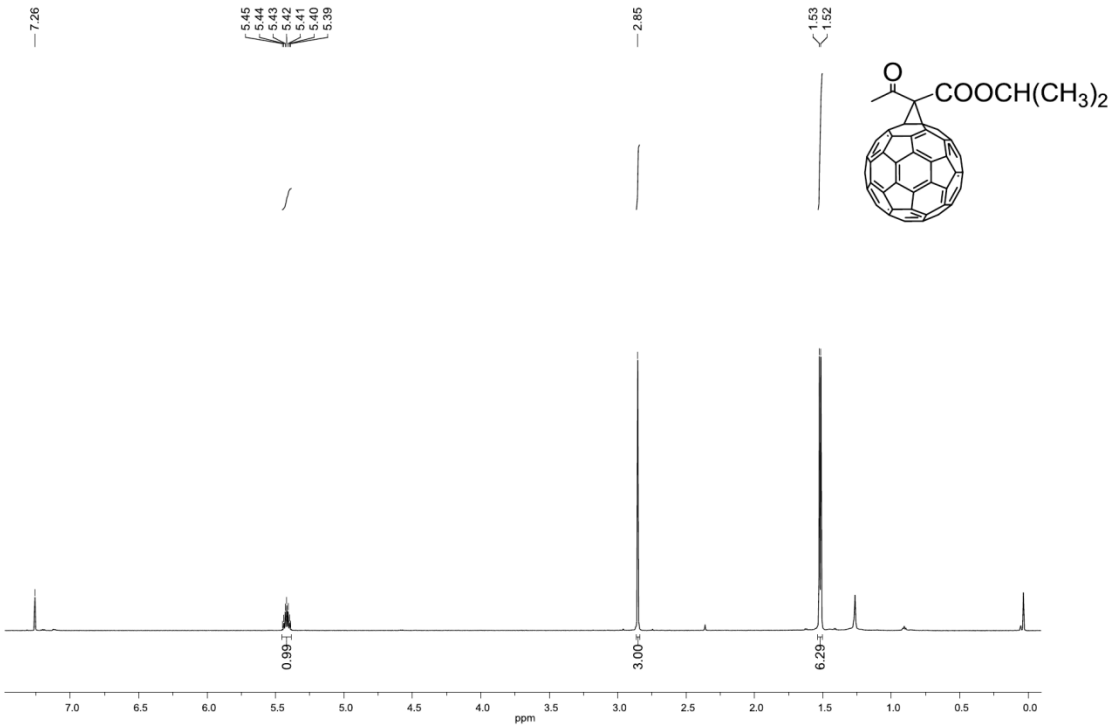

Figure S27. ^{1}H NMR spectrum (600 MHz) of compound **2d** recorded in CS_2-$CDCl_3$ (v/v=2:1). The resonance at 7.26 ppm is due to the $CHCl_3$ solvent.

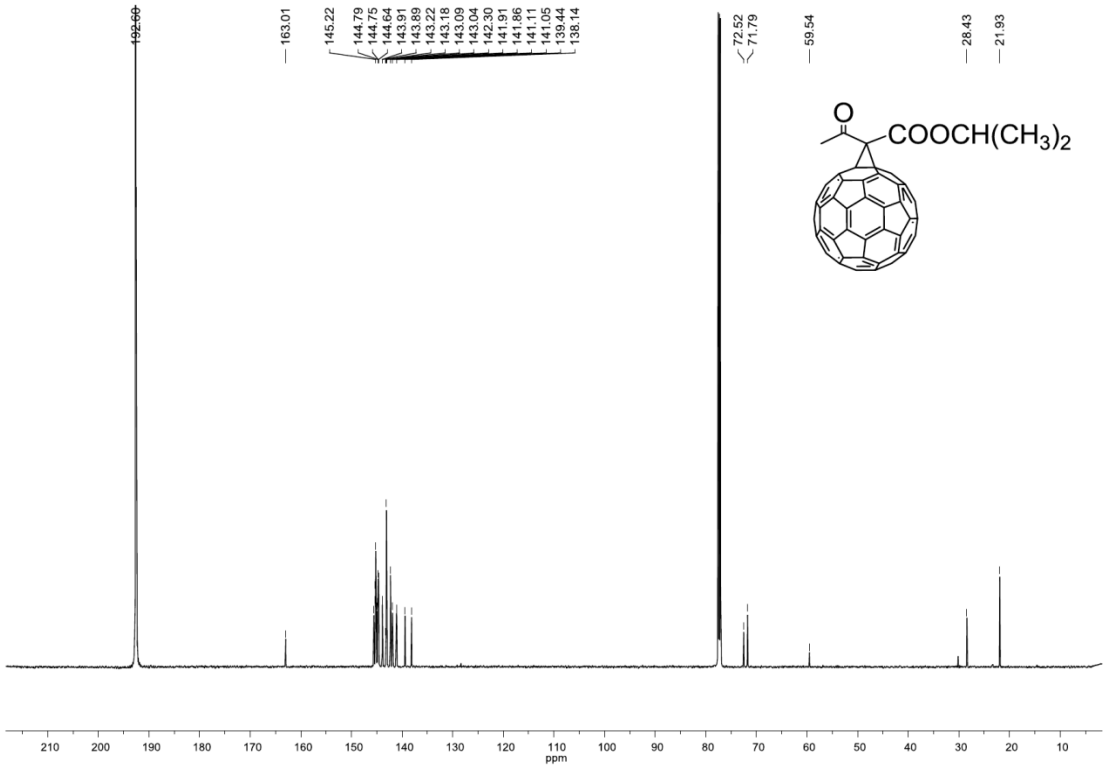

Figure S28. ^{13}C NMR spectrum (151 MHz) of compound **2d** recorded in CS_2-$CDCl_3$ (v/v=2:1).

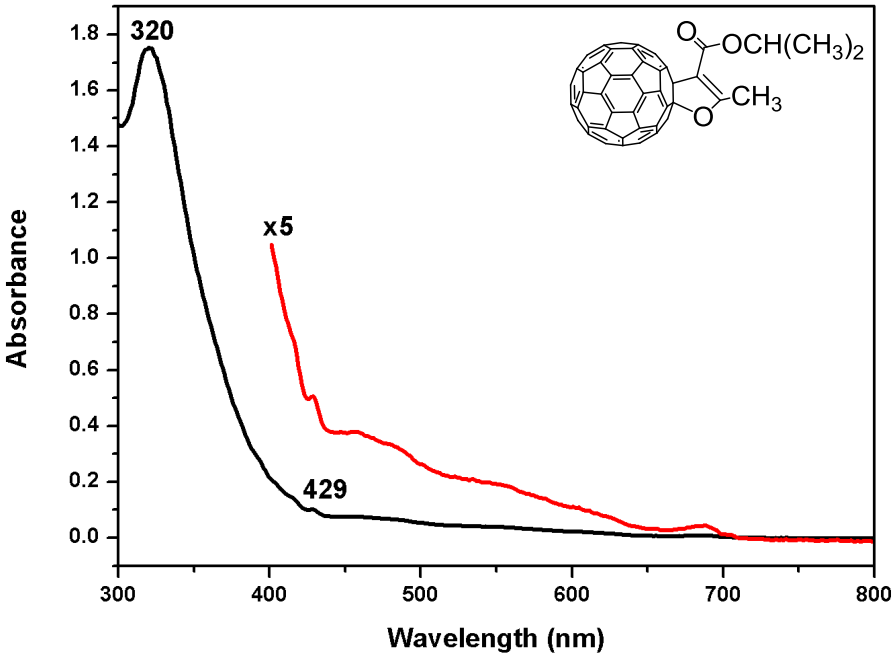

Figure S29. UV-visible spectrum of compound **3d** in toluene.

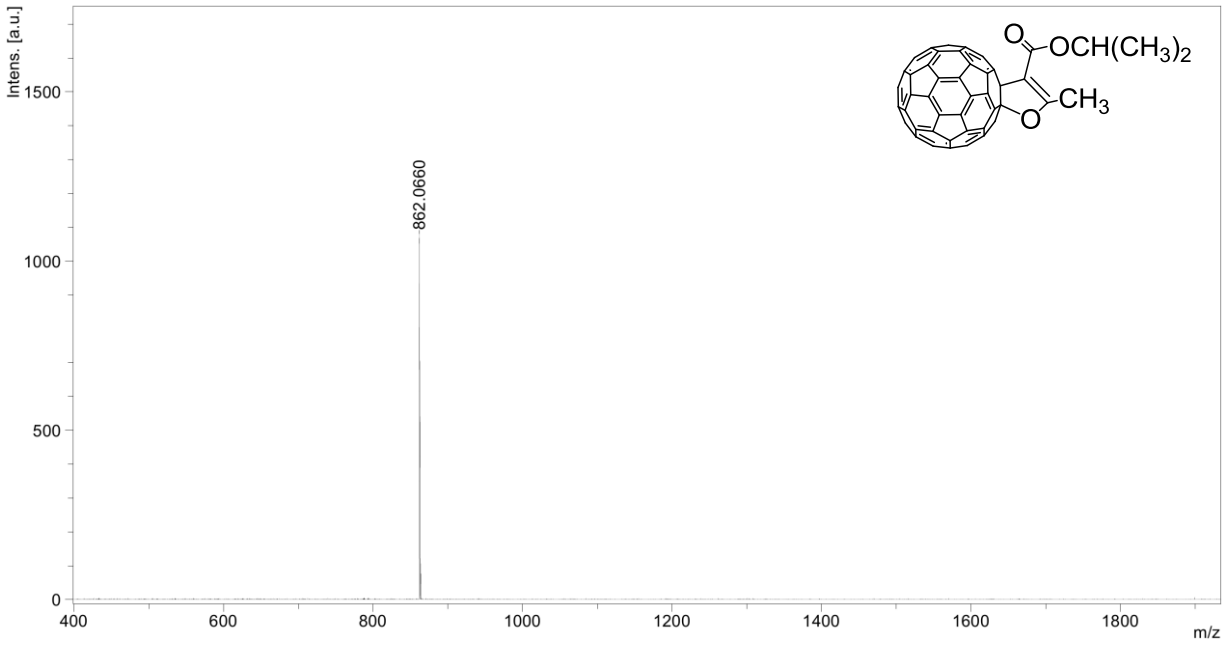

Figure S30. MALDI-TOF MS of compound **3d**

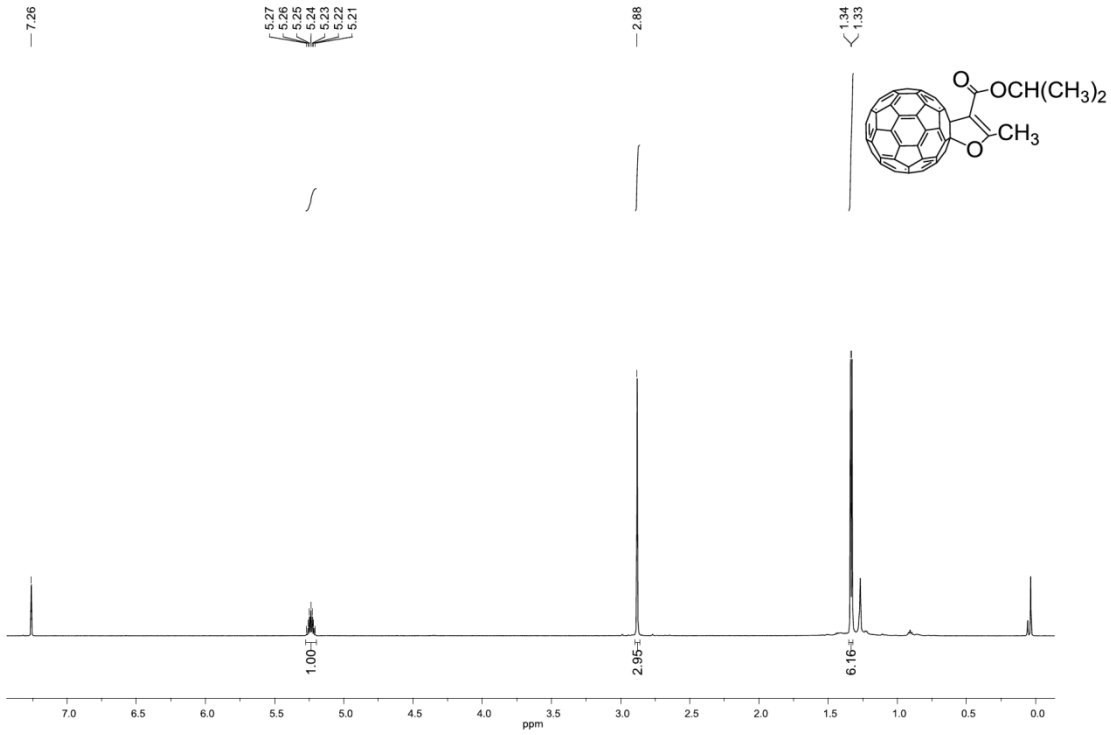

Figure S31. ^{1}H NMR spectrum (600 MHz) of compound **3d** recorded in CS_2-$CDCl_3$ (v/v=2:1). The resonance at 7.26 ppm is due to the $CHCl_3$ solvent.

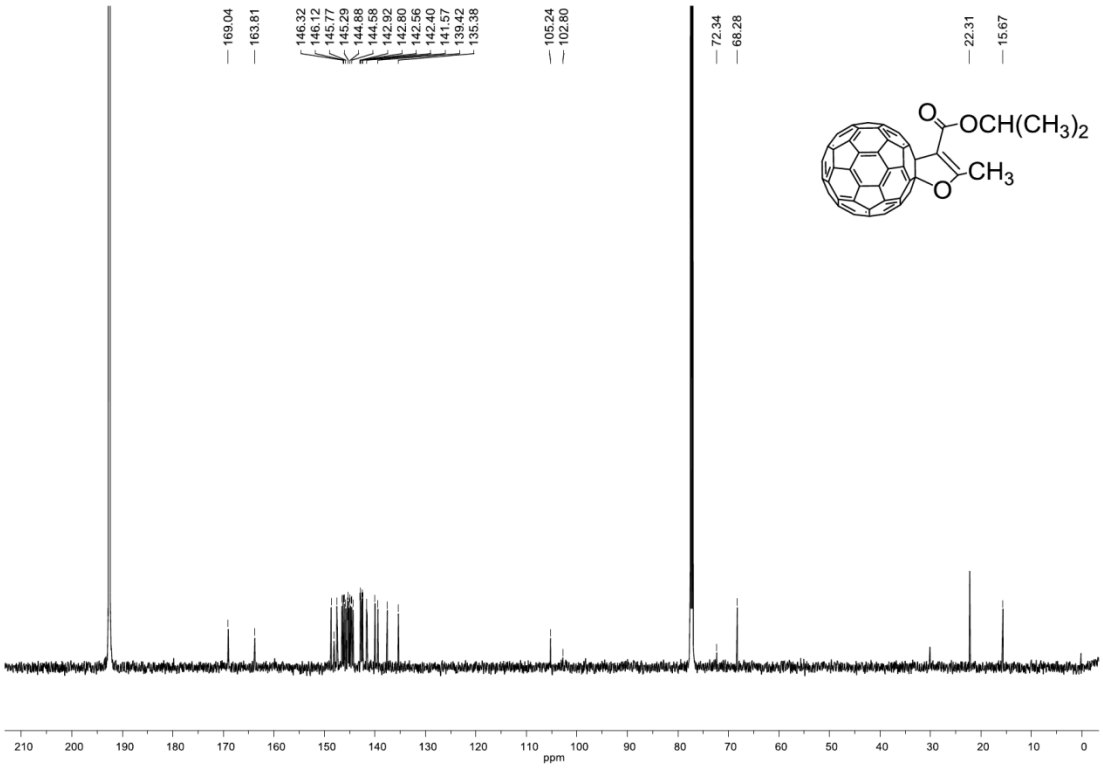

Figure S32. ^{13}C NMR spectrum (151 MHz) of compound **3d** recorded in CS_2-$CDCl_3$ (v/v=2:1).

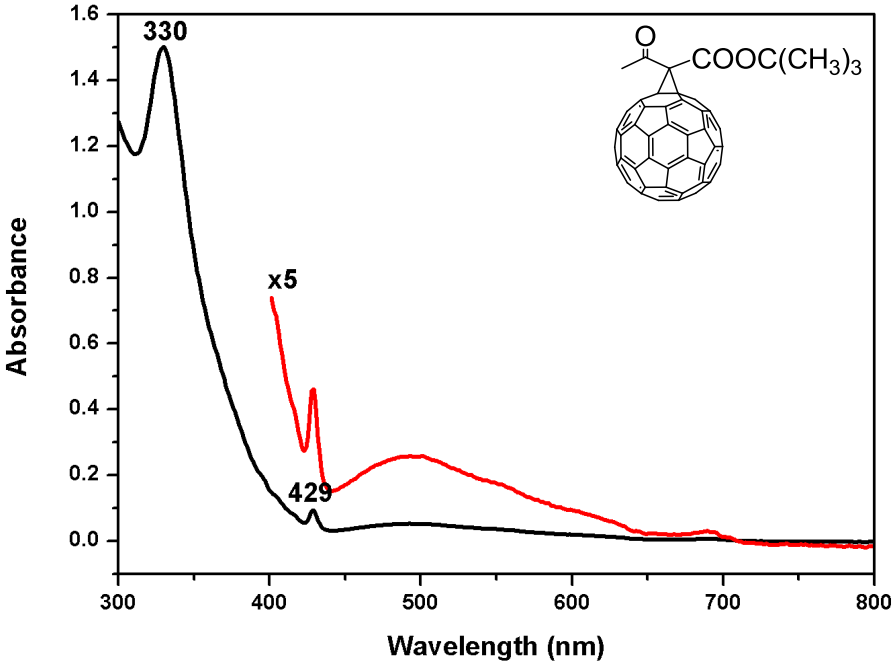

Figure S33. UV-visible spectrum of compound **2e** in toluene.

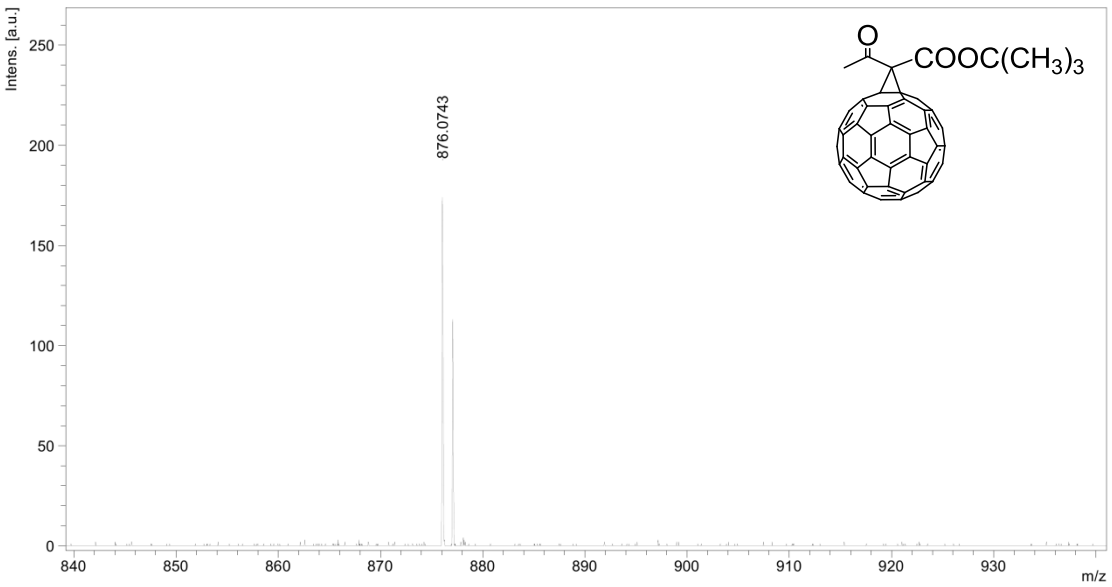

Figure S34. MALDI-TOF MS of compound **2e**

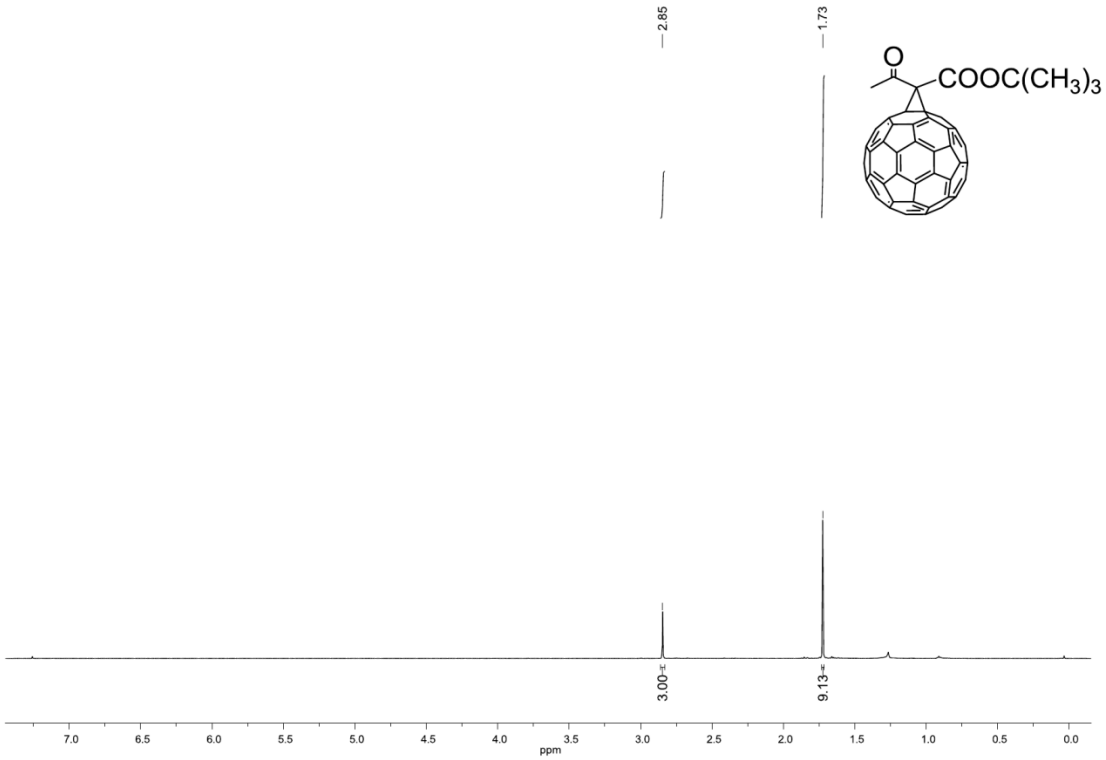

Figure S35. ^{1}H NMR spectrum (600 MHz) of compound **2e** recorded in CS_2-$CDCl_3$ (v/v=2:1).

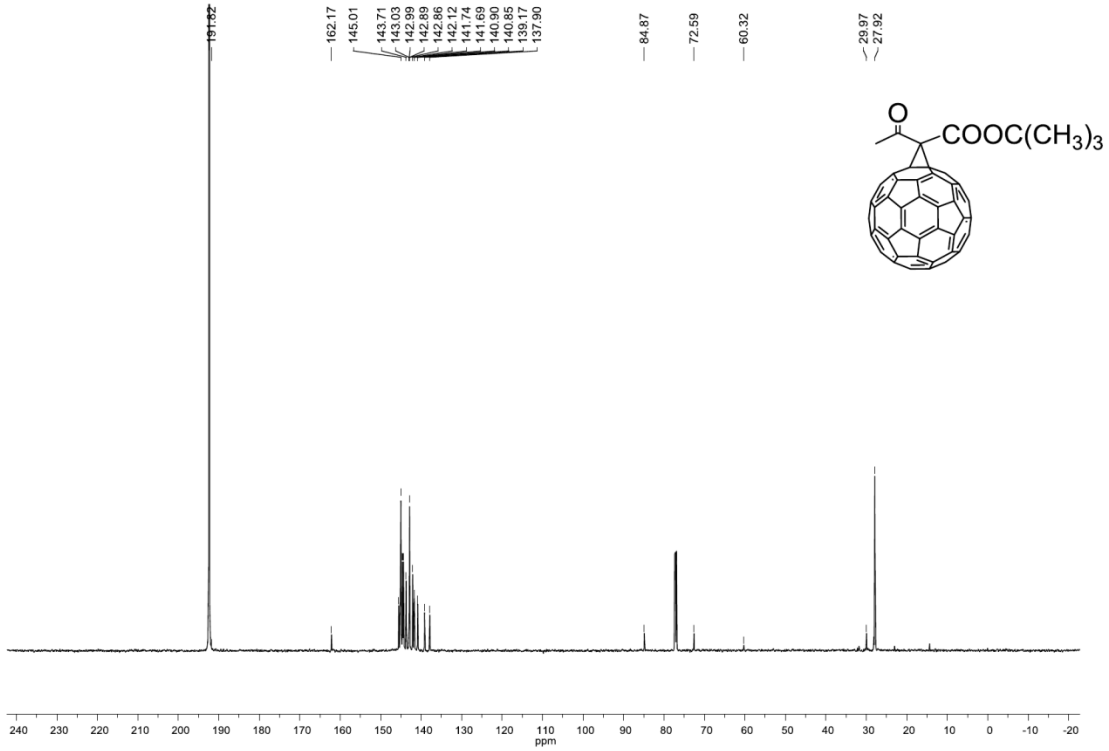

Figure S36. ^{13}C NMR spectrum (151 MHz) of compound **2e** recorded in CS_2-$CDCl_3$ (v/v=2:1).

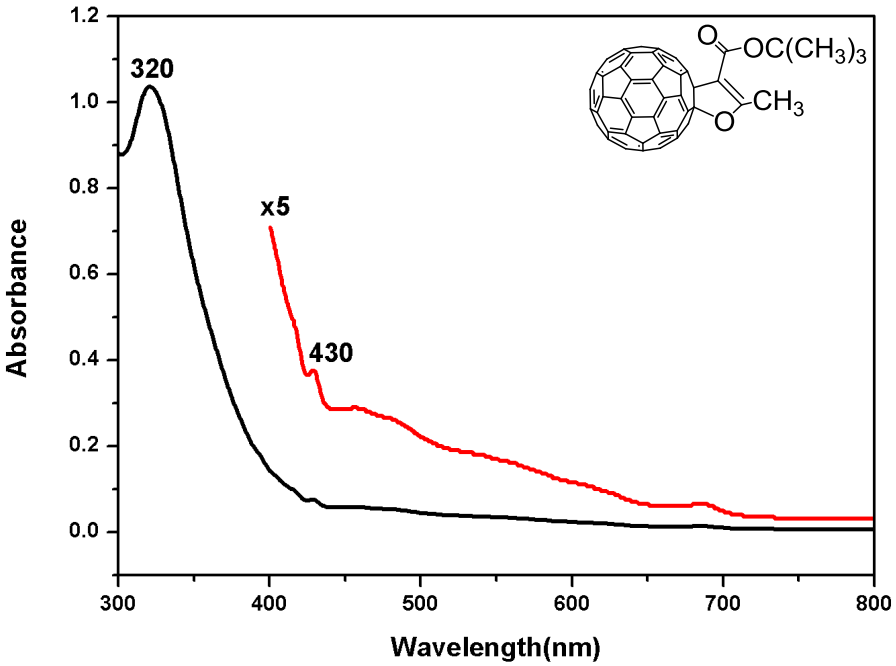

Figure S37. UV-visible spectrum of compound **3e** in toluene.

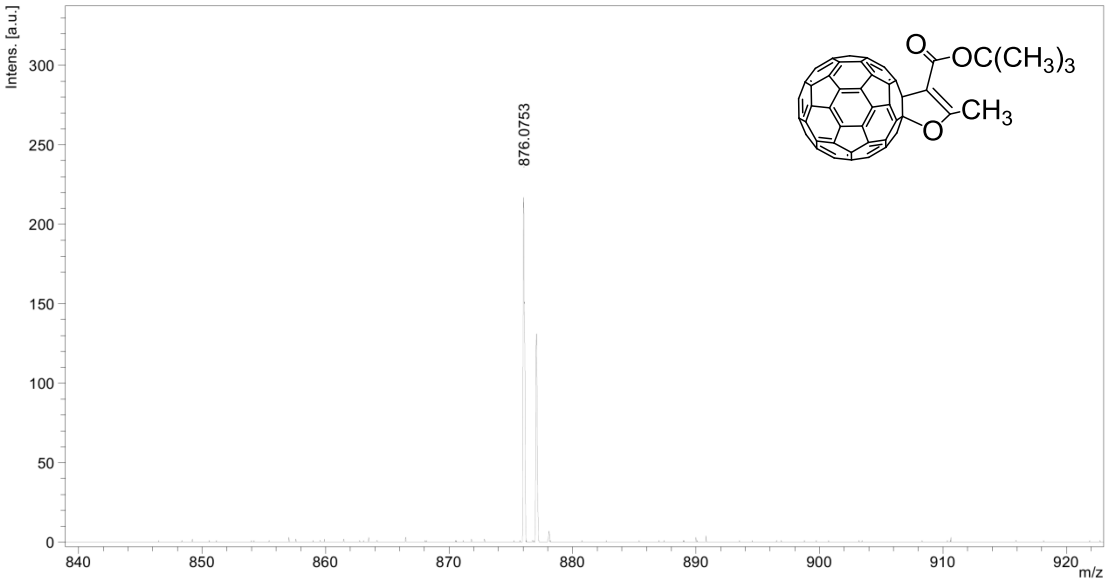

Figure S38. MALDI-TOF MS of compound **3e**

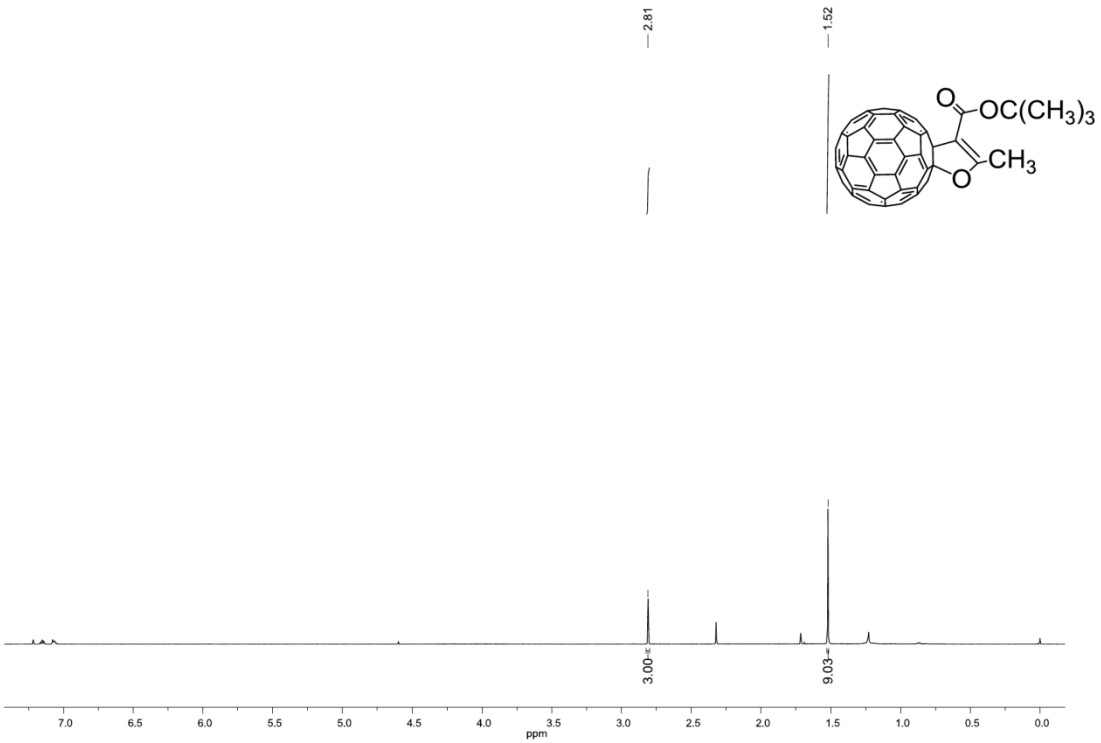

Figure S39. ^{1}H NMR spectrum (600 MHz) of compound **3e** recorded in CS_2-$CDCl_3$ (v/v=2:1).

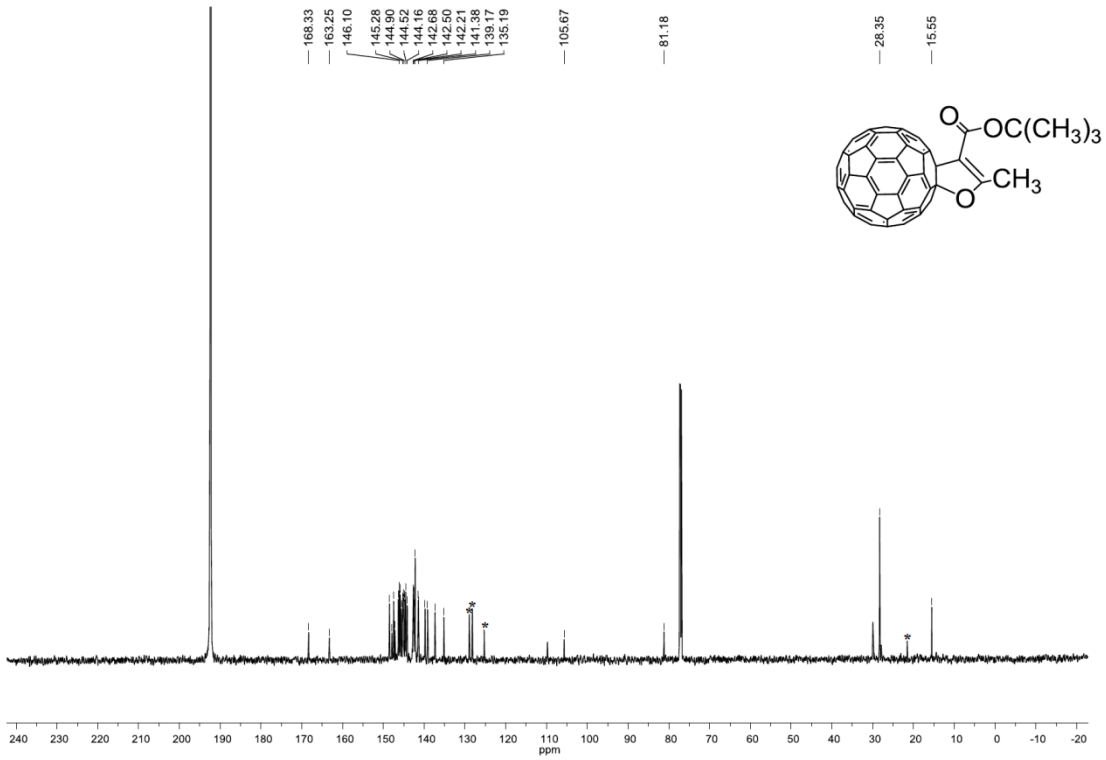

Figure S40. ^{13}C NMR spectrum (151 MHz) of compound **3e** recorded in CS_2-$CDCl_3$ (v/v=2:1). The peaks labeled with asterisks belong to toluene residue in the sample.

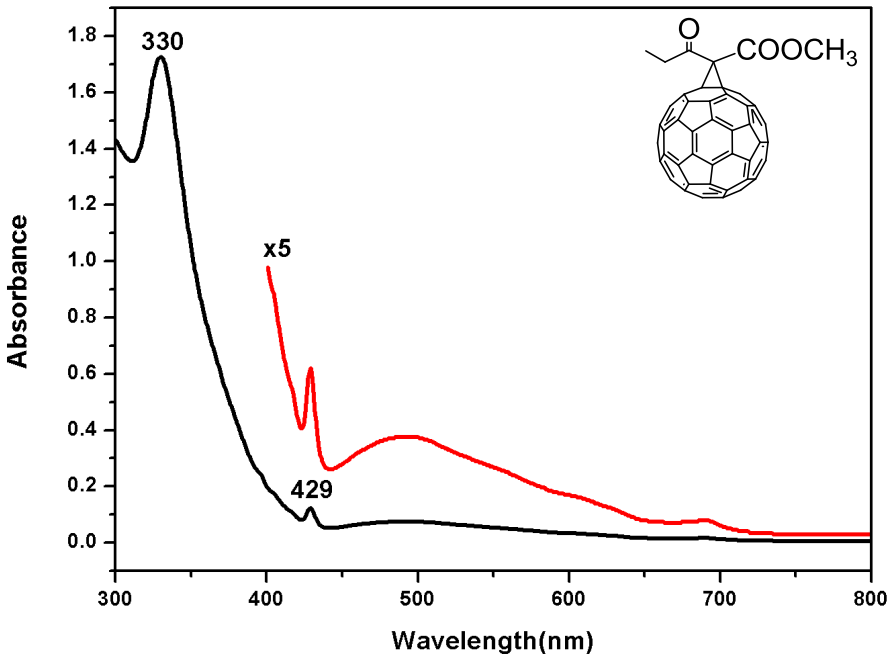

Figure S41. UV-visible spectrum of compound **2f** in toluene.

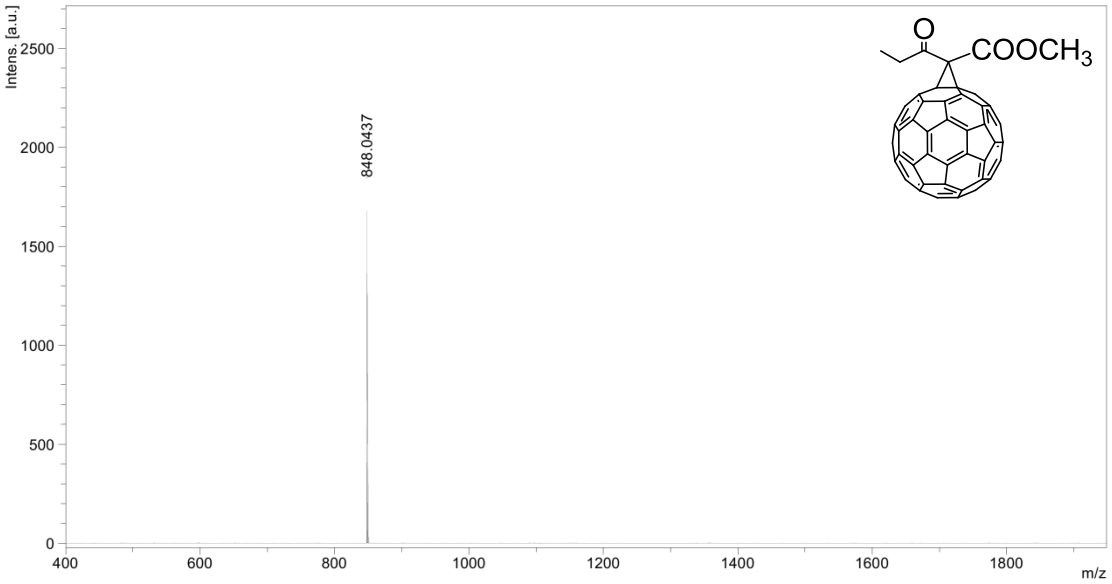

Figure S42. MALDI-TOF MS of compound **2f**

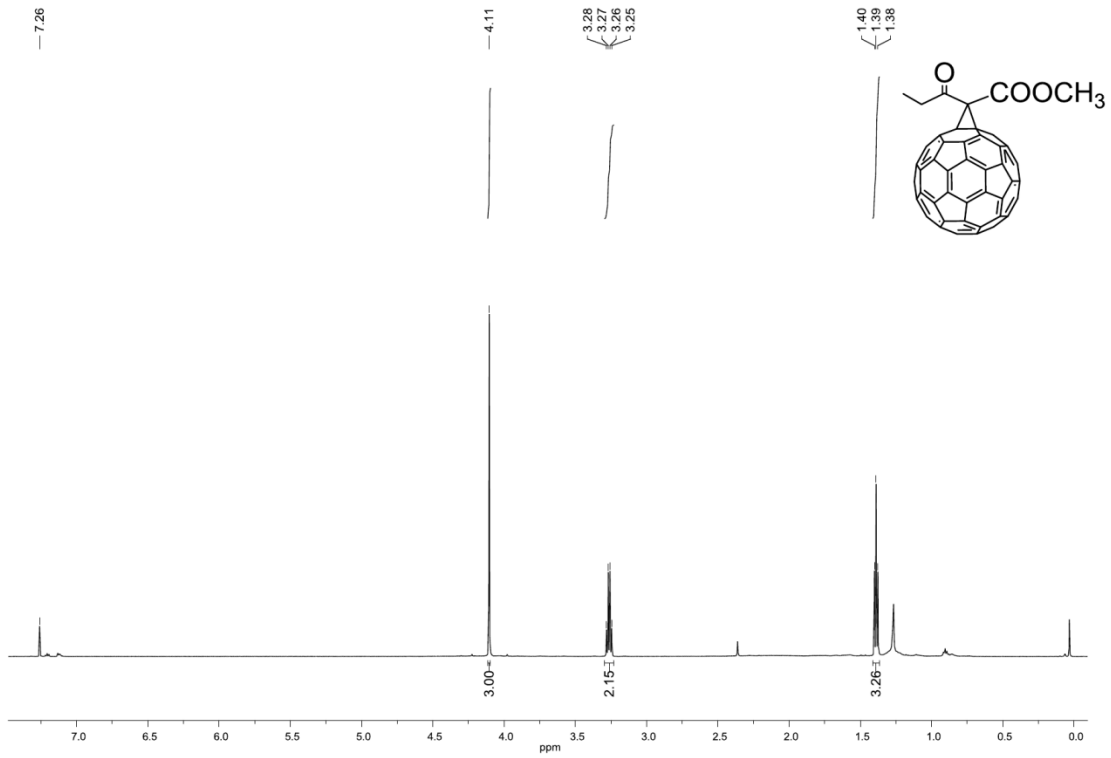

Figure S43. ^{1}H NMR spectrum (600 MHz) of compound **2f** recorded in CS_2-$CDCl_3$ (v/v=2:1). The resonance at 7.26 ppm is due to the $CHCl_3$ solvent.

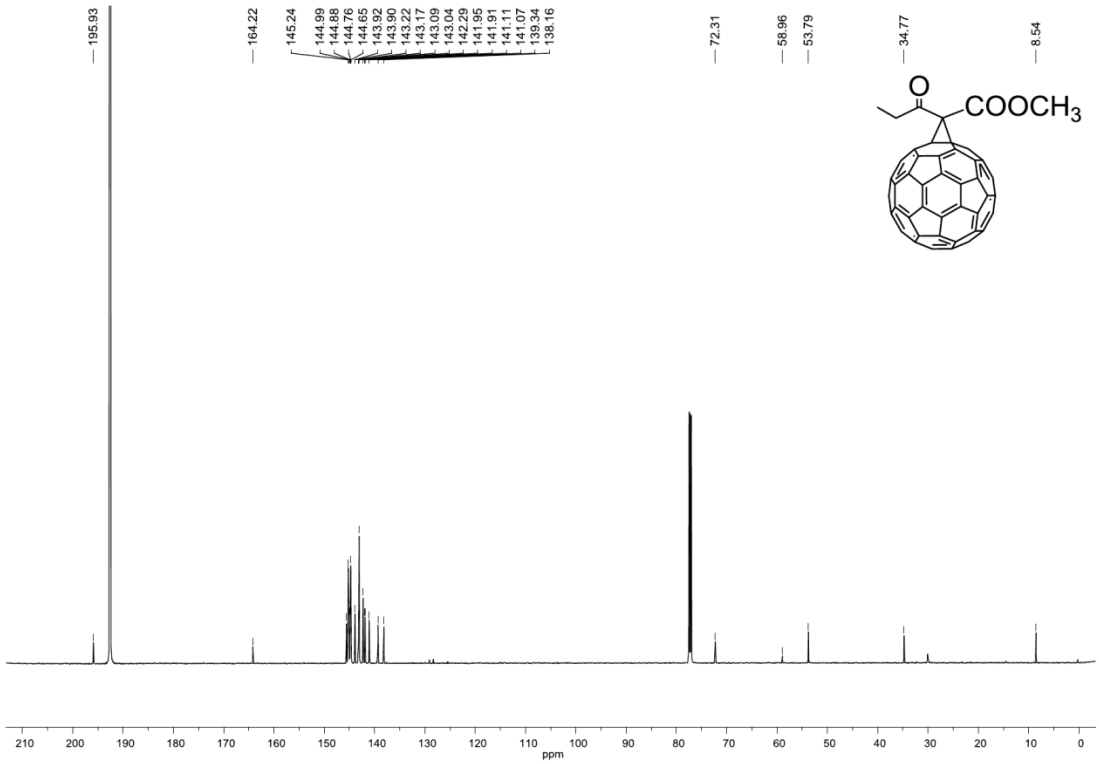

Figure S44. ^{13}C NMR spectrum (151 MHz) of compound **2f** recorded in CS_2-$CDCl_3$ (v/v=2:1).

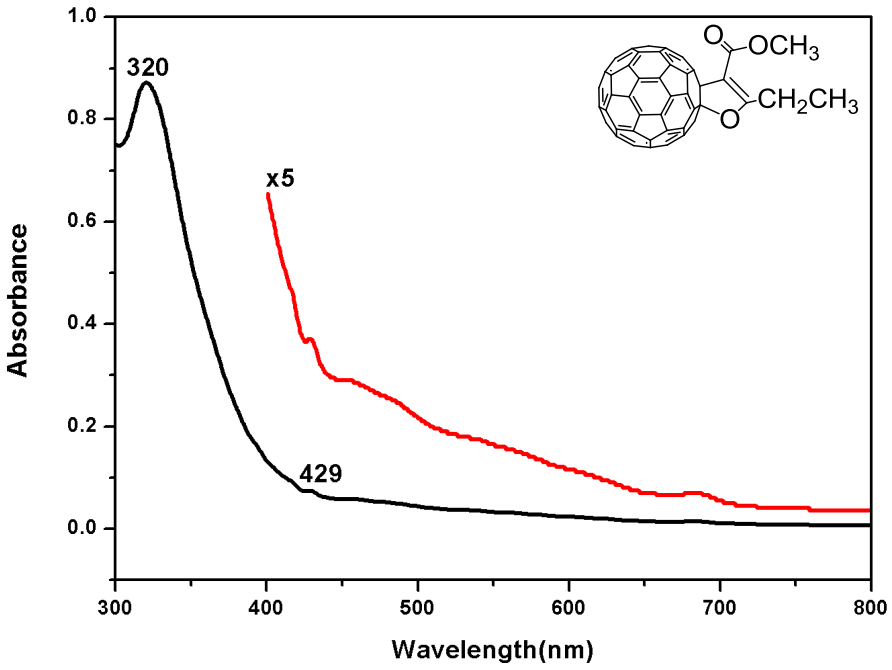

Figure S45. UV-visible spectrum of compound **3f** in toluene.

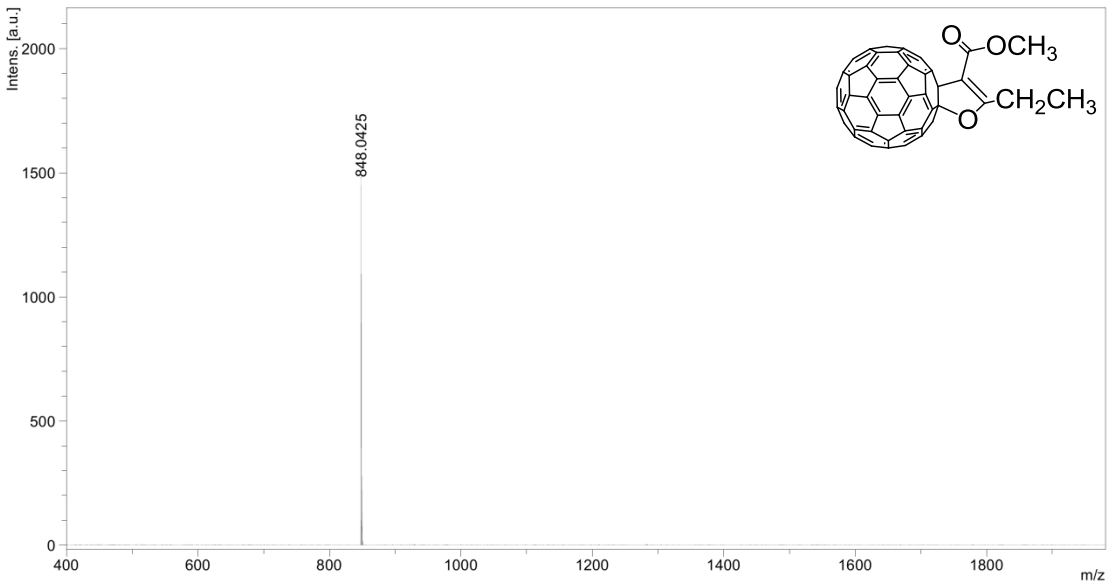

Figure S46. MALDI-TOF MS of compound **3f**

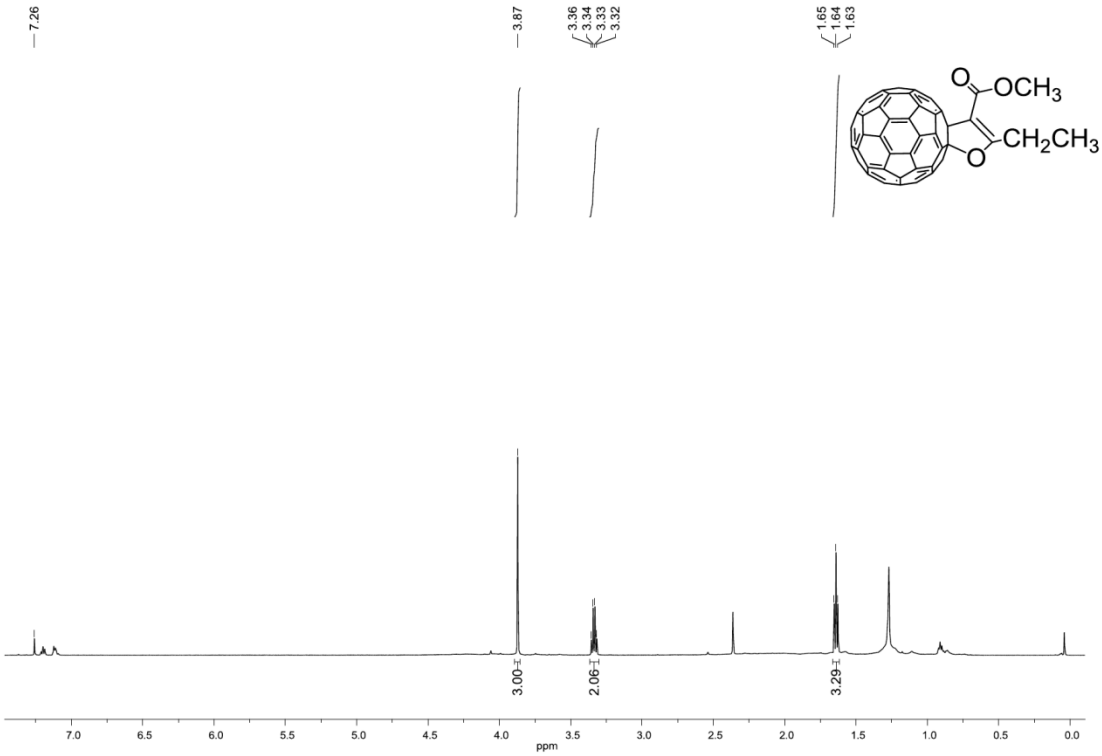

Figure S47. ^{1}H NMR spectrum (600 MHz) of compound **3f** recorded in CS_2-$CDCl_3$ (v/v=2:1). The resonance at 7.26 ppm is due to the $CHCl_3$ solvent.

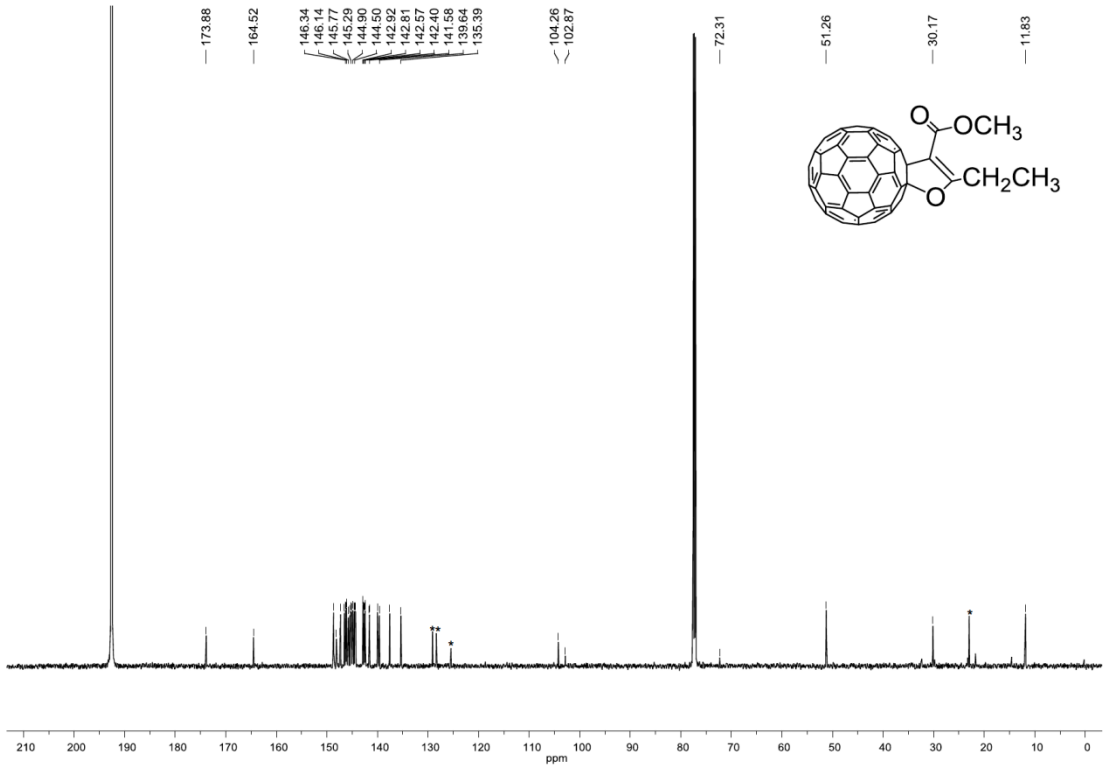

Figure S48. ^{13}C NMR spectrum (151 MHz) of compound **3f** recorded in CS_2-$CDCl_3$ (v/v=2:1). The peaks labeled with asterisks belong to toluene residue in the sample.