

A highly efficient and recyclable cobalt ferrite chitosan sulfonic acid magnetic nanoparticle for one-pot, four-component synthesis of 2*H*-indazolo[2,1-*b*]phthalazine-triones

Xiao-Na Zhao, Guo-Fei Hu, Meng Tang, Tai-Tai Shi, Xiao-Li Guo, Tao-Tao Li, Zhan-Hui Zhang*

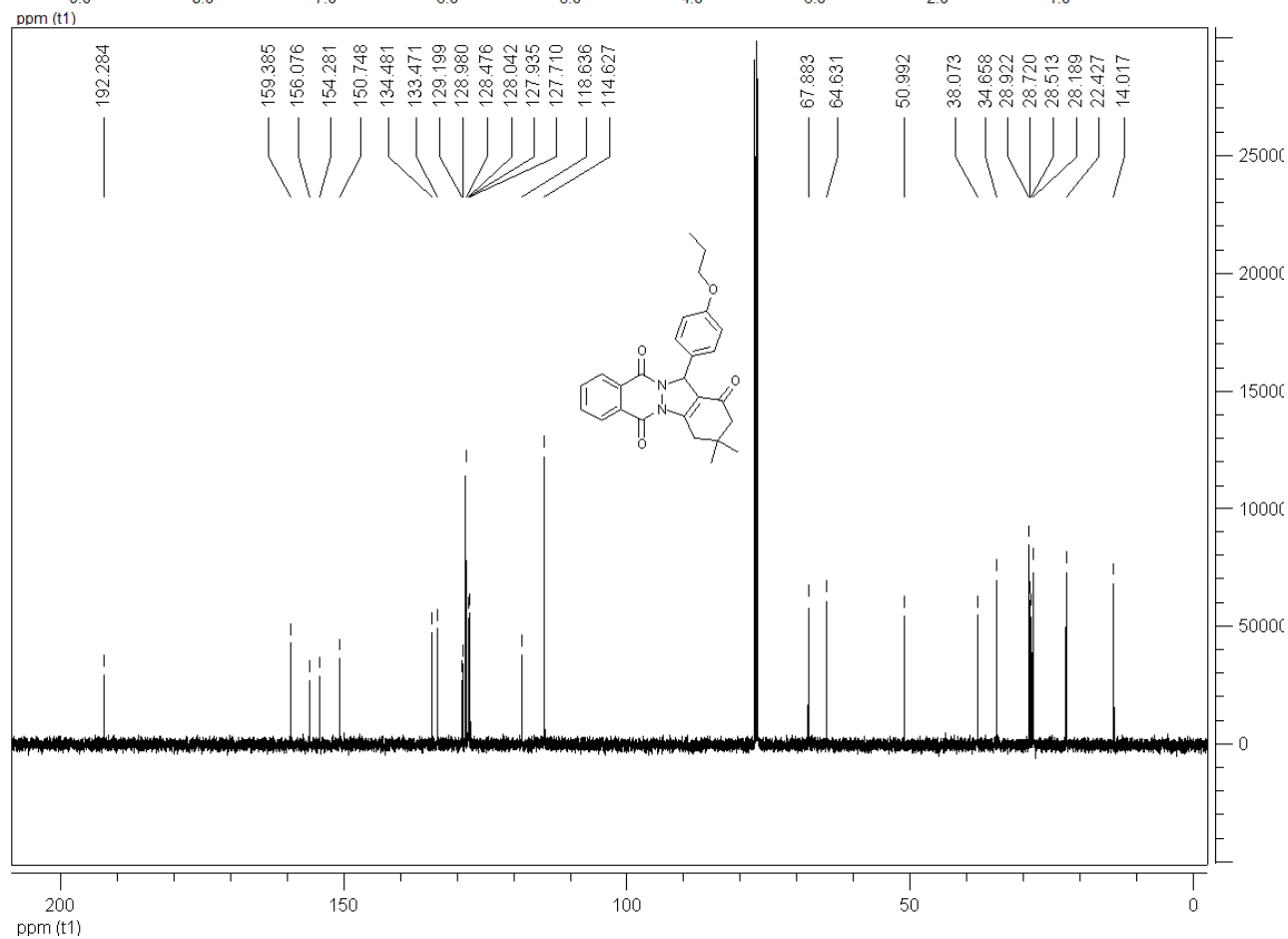
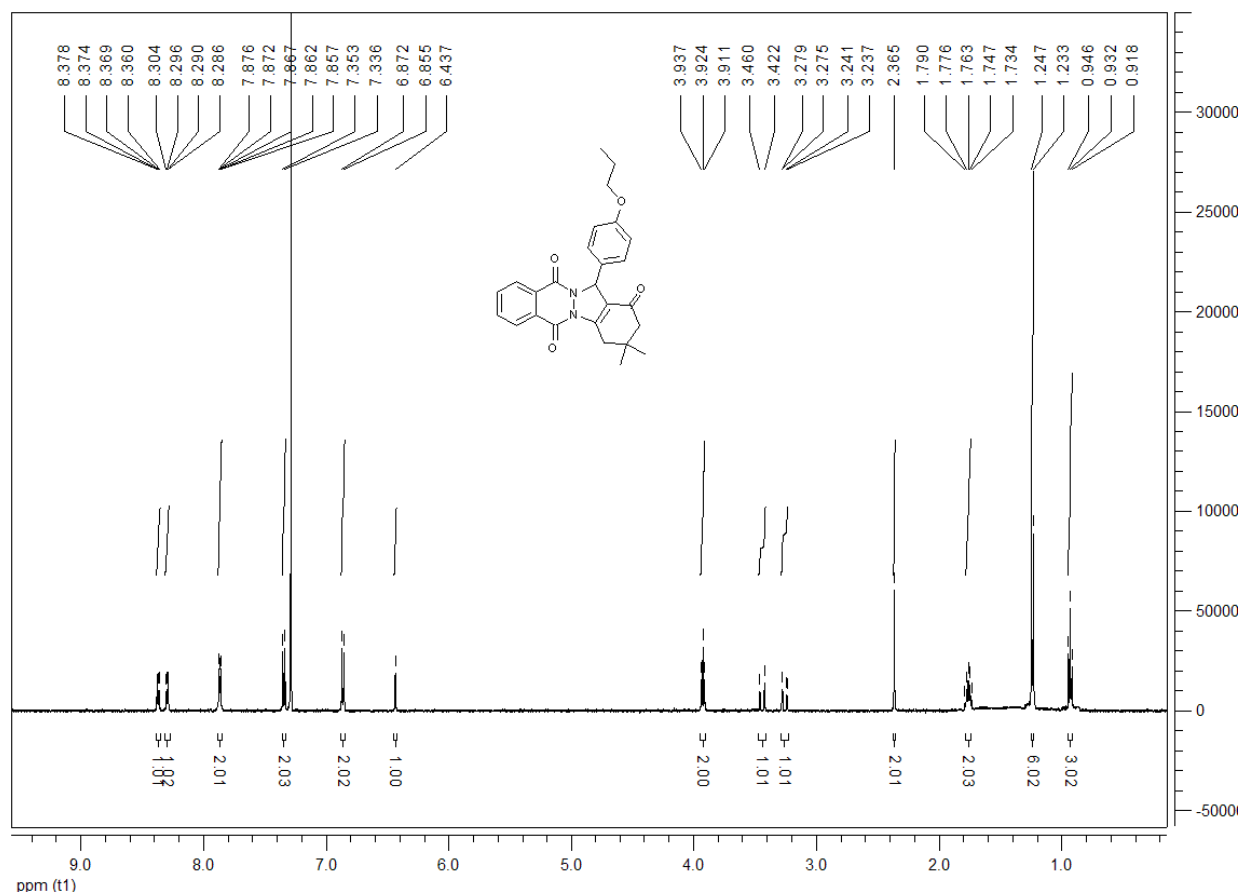
College of Chemistry and Material Science, Hebei Normal University, Shijiazhuang 050024, China

E-mail: zhanhui@126.com; Fax: +86 31180787431

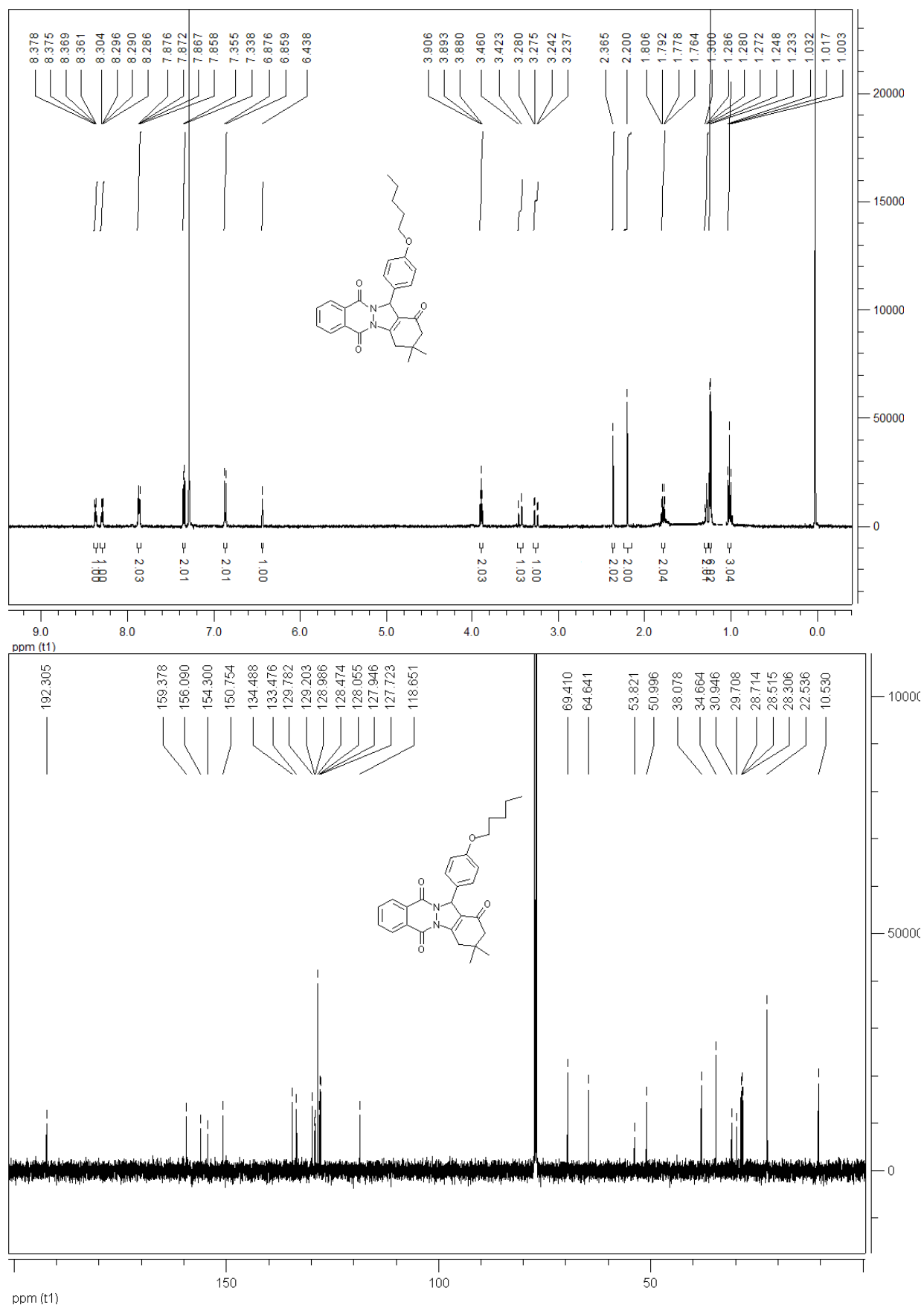
Table of Contents

Copies of ¹H and ¹³C NMR spectra for products **5c-5e**, **5g**, **5u** and **5v** S2 –S7

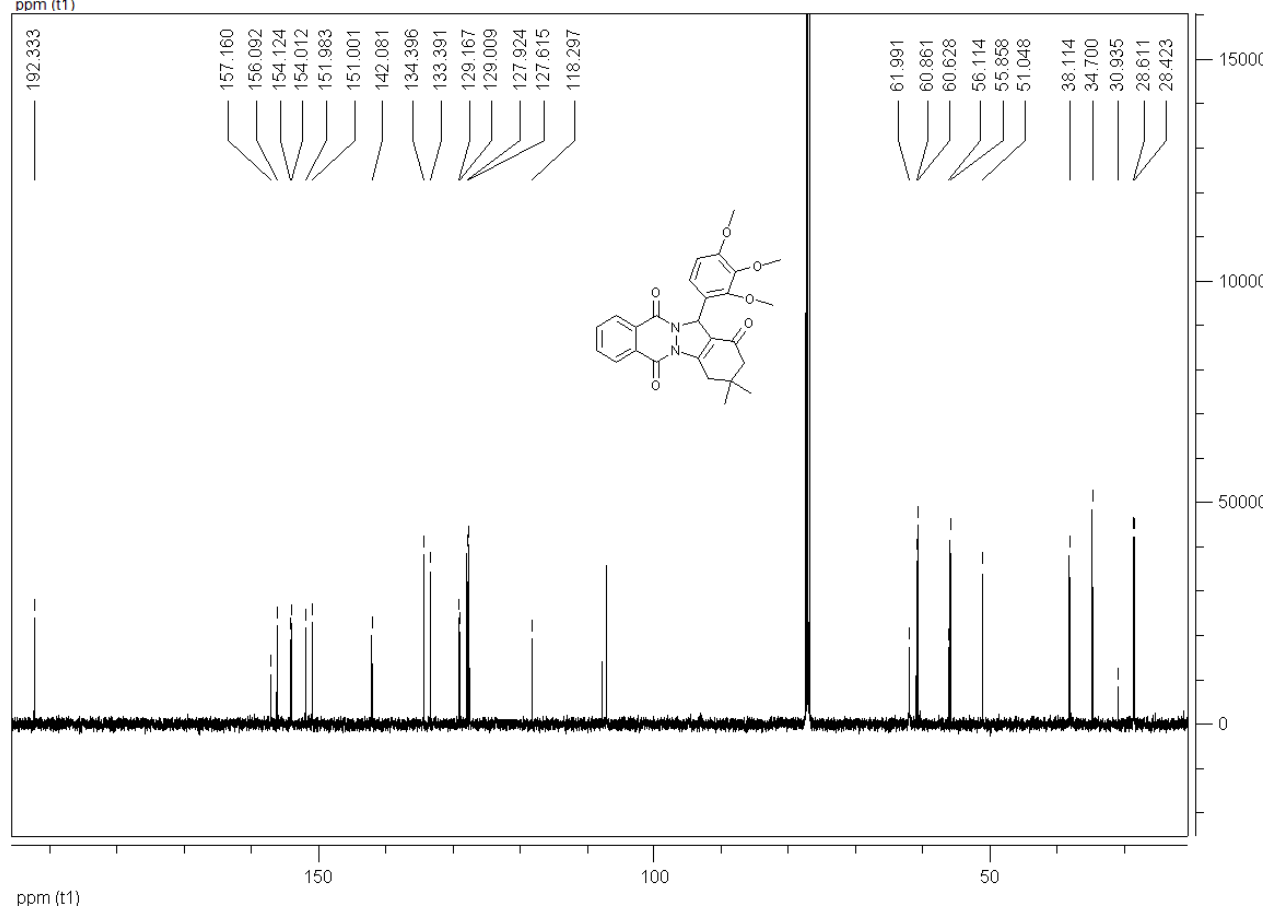
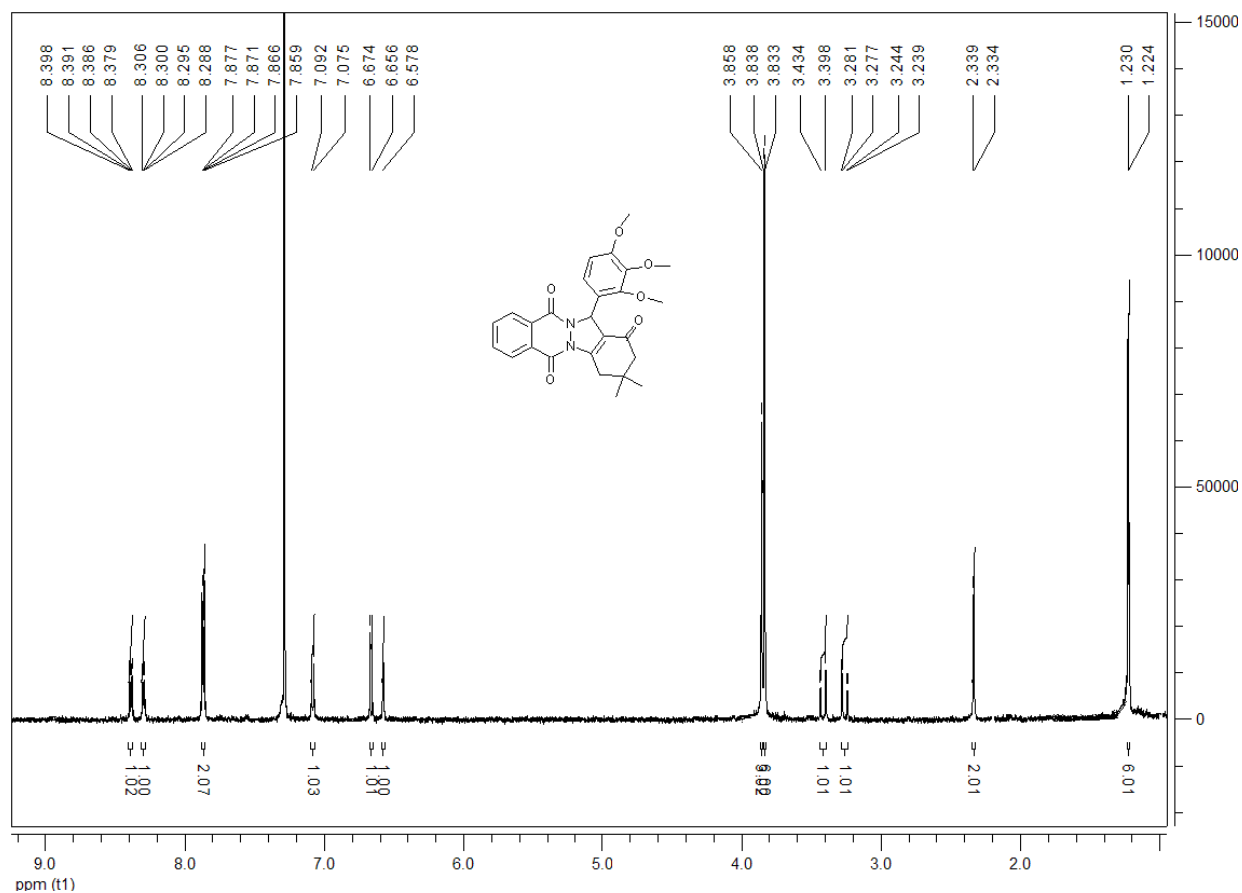
¹H NMR and ¹³C NMR of compound **5c**



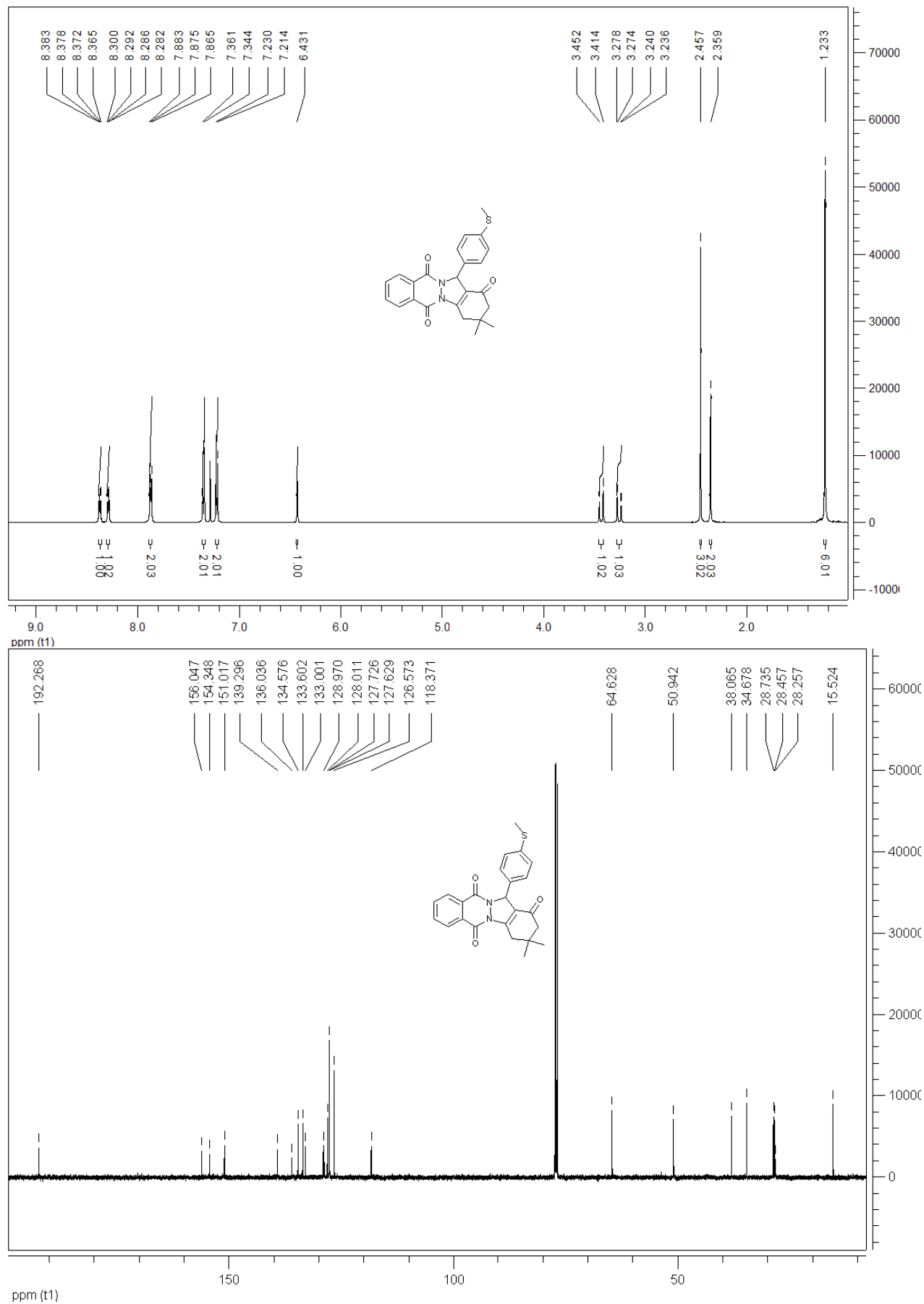
^1H NMR and ^{13}C NMR of compound **5d**



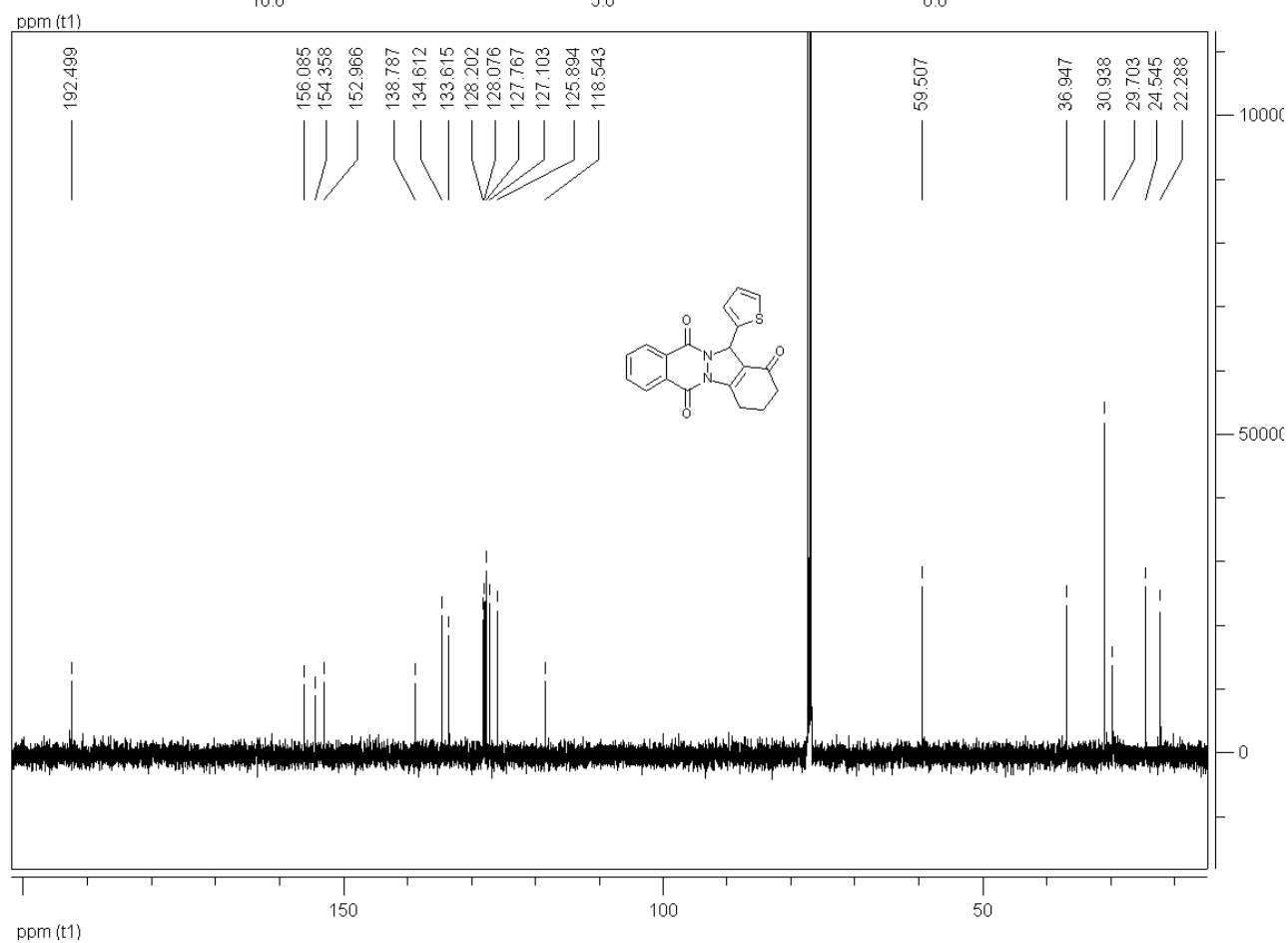
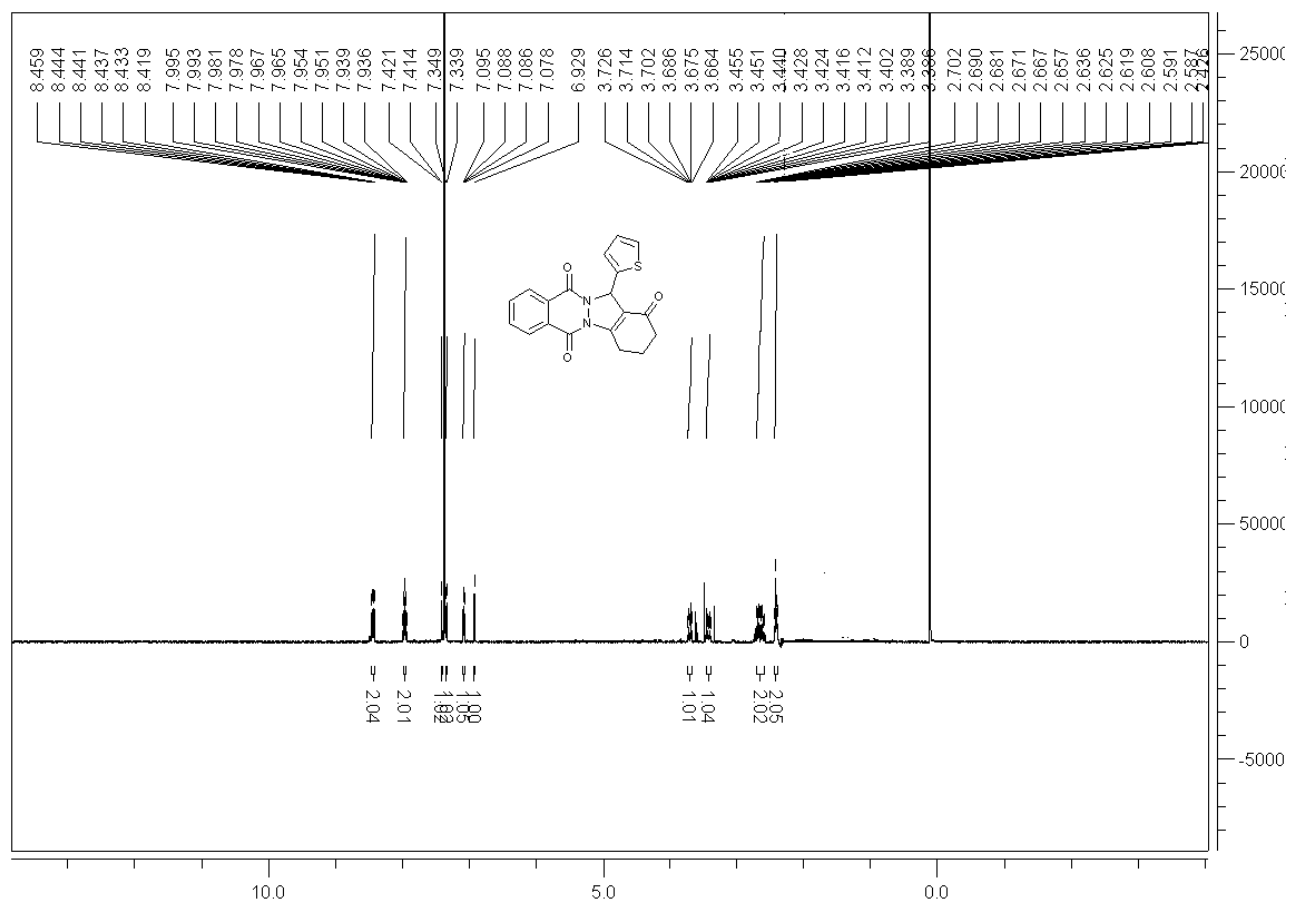
¹H NMR and ¹³C NMR of compound **5e**



^1H NMR and ^{13}C NMR of compound **5g**



¹H NMR and ¹³C NMR of compound **5u**



¹H NMR and ¹³C NMR of compound **5v**

