Synthesis of novel methyl 3-(hetero)arylthieno[3,2-*b*]pyridine-2-carboxylates and antitumor activity evaluation: studies *in vitro* and *in ovo grafts of* Chick Chorioallantoic Membrane (CAM) with a triple negative breast cancer cell line

Bruna R. Silva [1,2,3,#], Rita Rebelo [2,3,#], Juliana M. Rodrigues [1], Cristina P. R. Xavier [2,3*], M. Helena Vasconcelos [2,3,4], Maria-João R. P. Queiroz [1*]

[1] Centre of Chemistry, University of Minho, 4710-057, Braga, Portugal; mjrpq@quimica.uminho.pt (MJQ); brunadansilva1967@gmail.com (BS); id7018@alunos.uminho.pt (JMR)
[2] Cancer Drug Resistance Group, IPATIMUP - Institute of Molecular Pathology and Immunology, University of Porto, Portugal, 4200-135, Porto, Portugal; rrebelo@ipatimup.pt (RR); cristinax@ipatimup.pt (CPRX); hvasconcelos@ipatimup.pt (MHV)
[3] i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, 4200-135 Porto, Portugal,
[4] Department of Biological Sciences, FFUP - Faculty of Pharmacy of the University of Porto, Porto, Portugal;

* Correspondence: mjrpq@quimica.uminho.pt (MJRPQ); cristinax@ipatimup.pt (CPRX)
# These authors equally contributed to this work.

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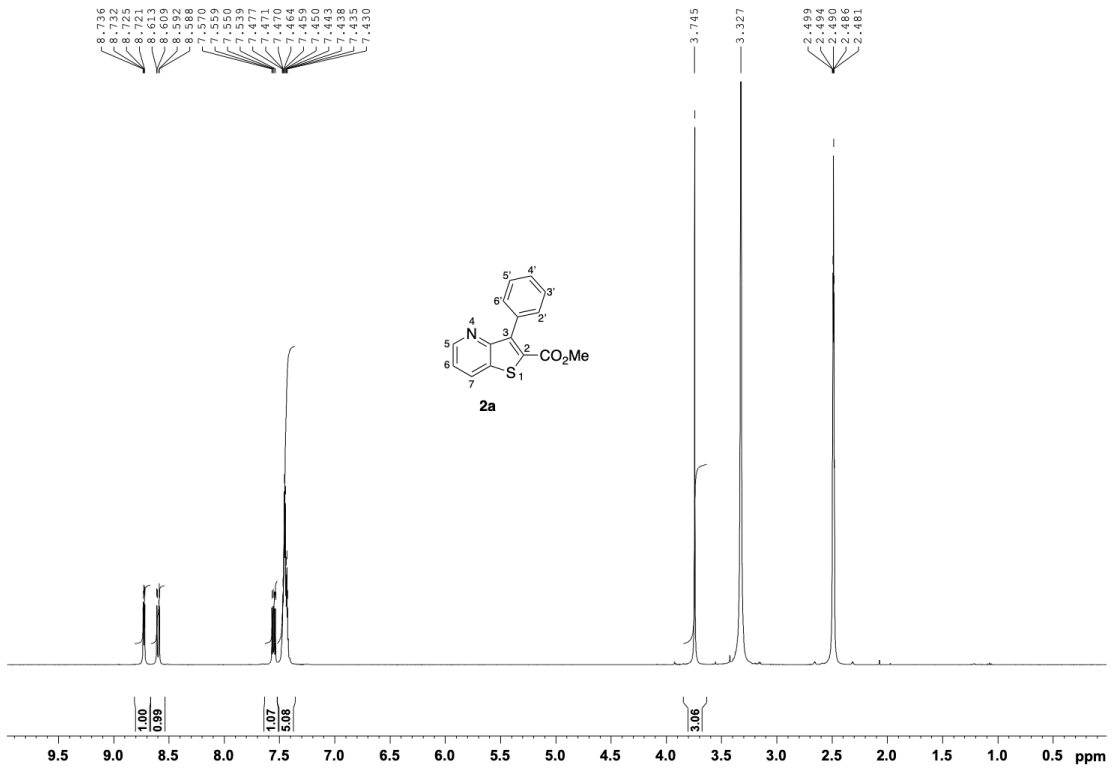
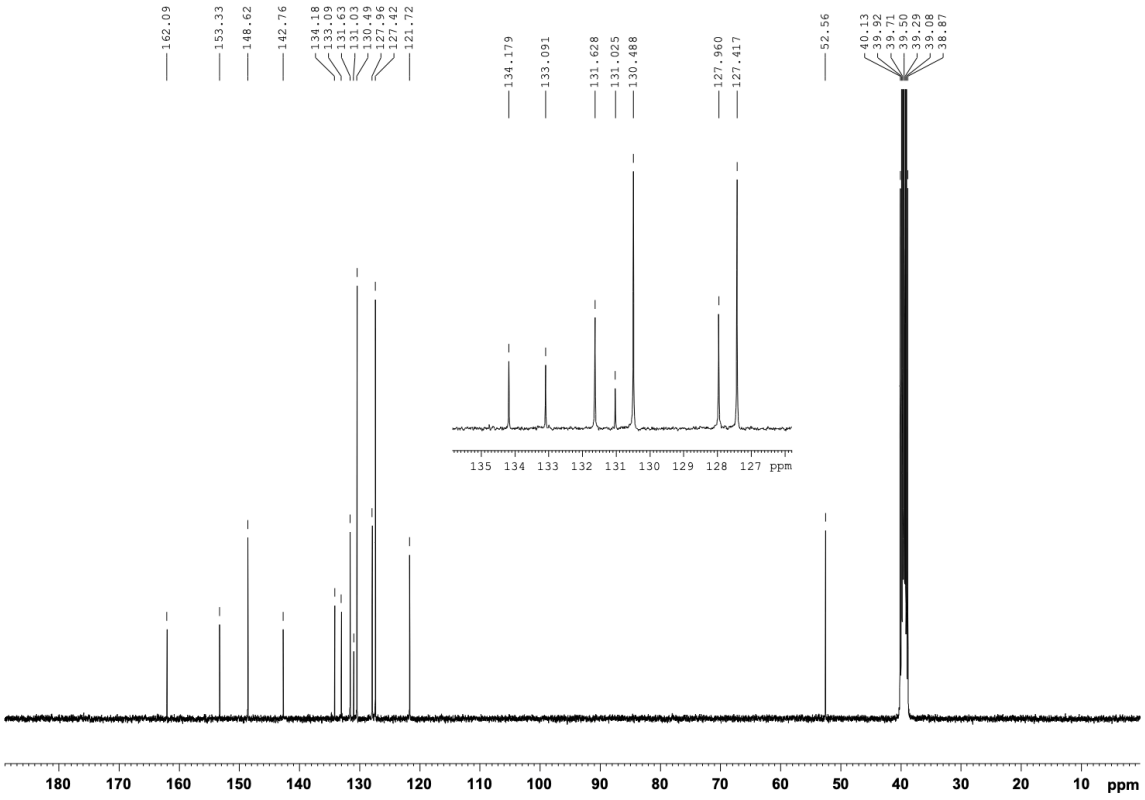
Methyl 3-phenylthieno[3,2-*b*]pyridine-2-carboxylate (2a)

^{1}H NMR (DMSO-d_6, 400 MHz) of compound **2a**

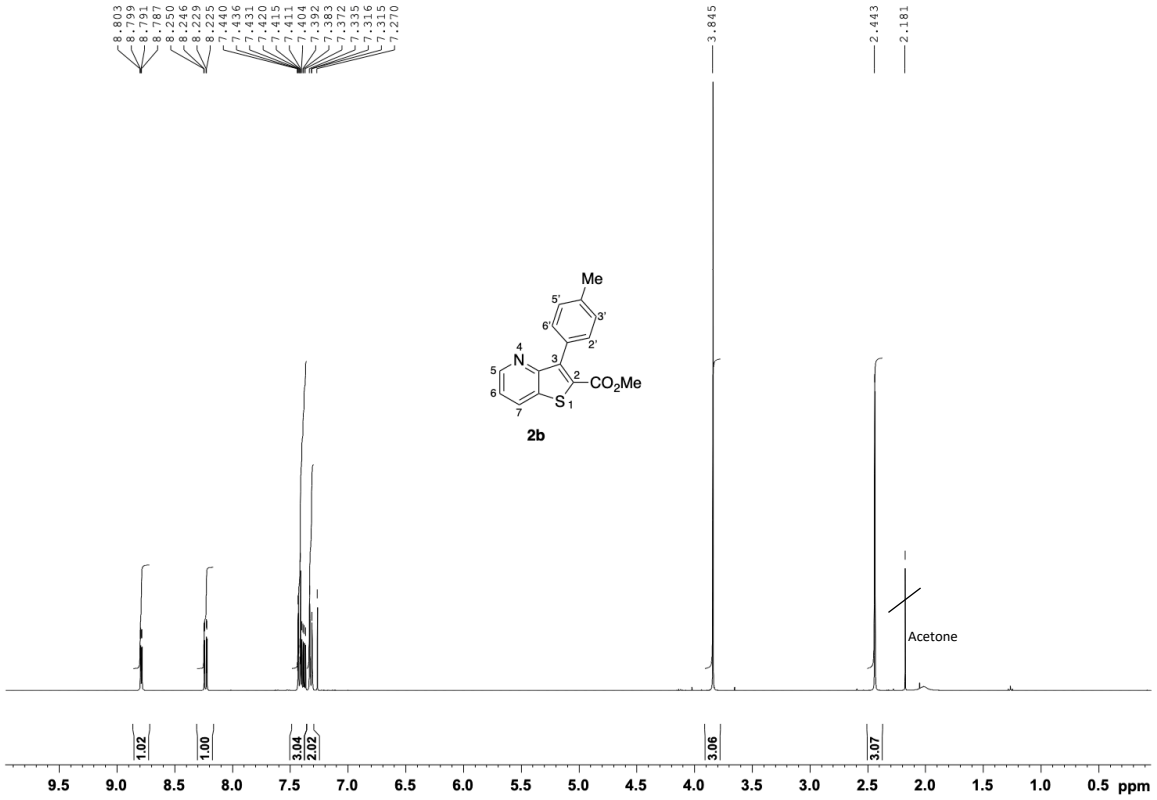


^{13}C NMR (DMSO-d_6, 100.6 MHz) of compound **2a**

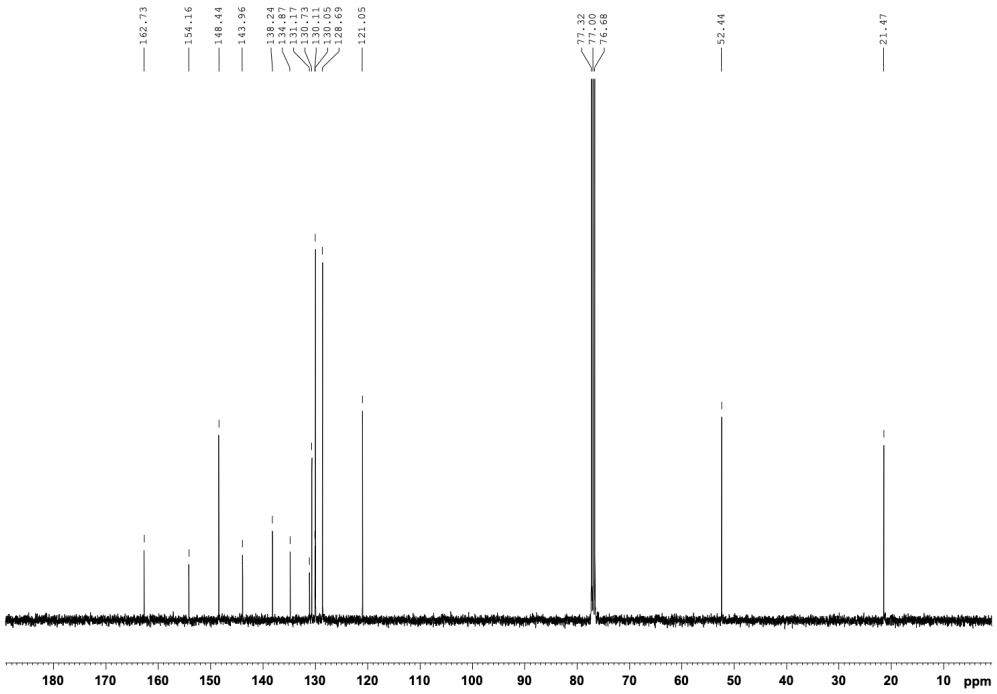


Methyl 3-(*p*-tolyl)thieno[3,2-*b*]pyridine-2-carboxylate (2b)

^{1}H NMR ($CDCl_3$, 400 MHz) of compound **2b**

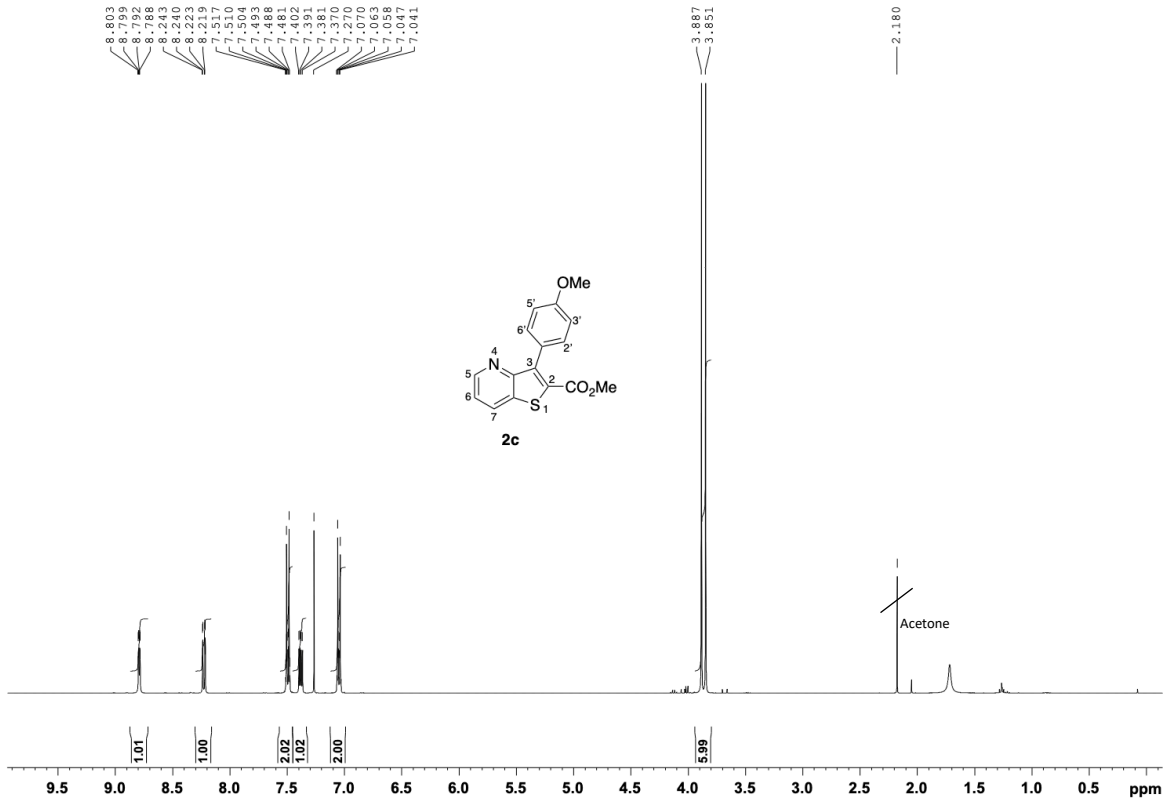


^{13}C NMR ($CDCl_3$, 100.6 MHz) of compound **2b**

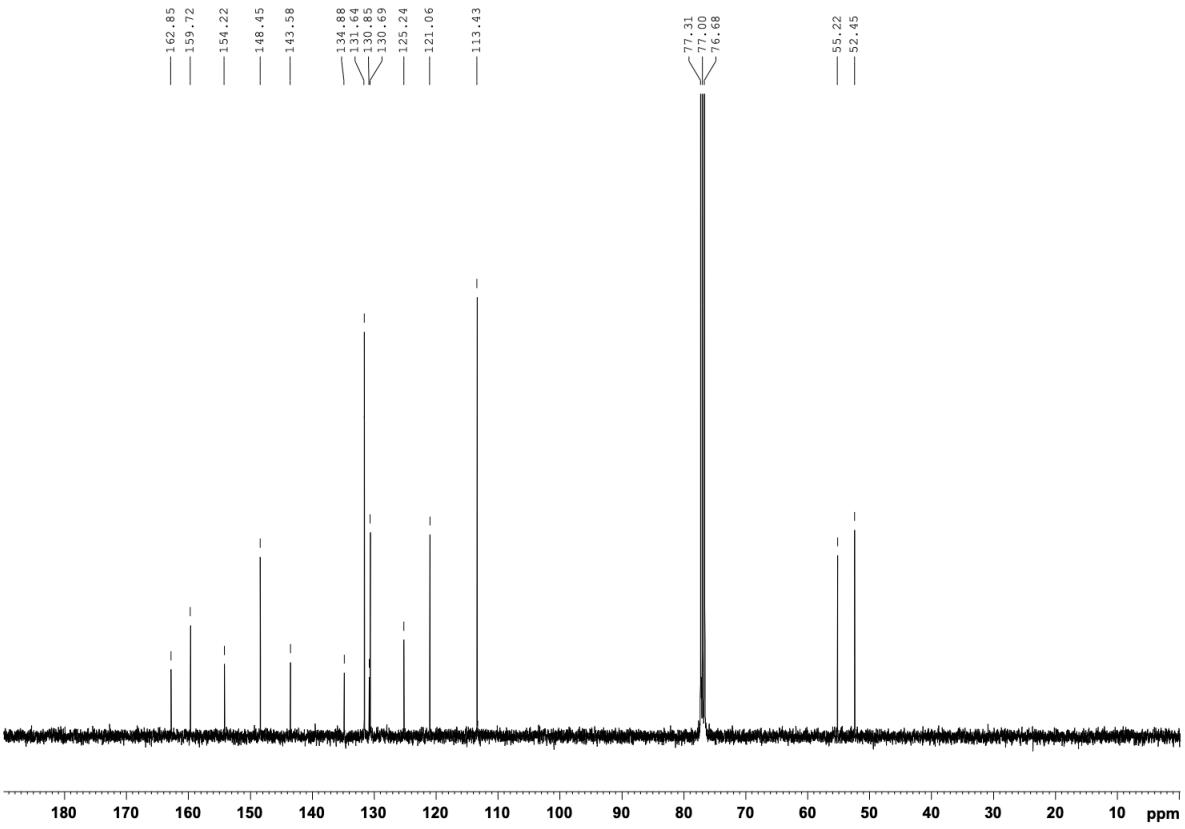


Methyl 3-(4-methoxyphenyl)thieno[3,2-*b*]pyridine-2-carboxylate (2c)

^{1}H NMR ($CDCl_3$, 400 MHz) of compound **2c**

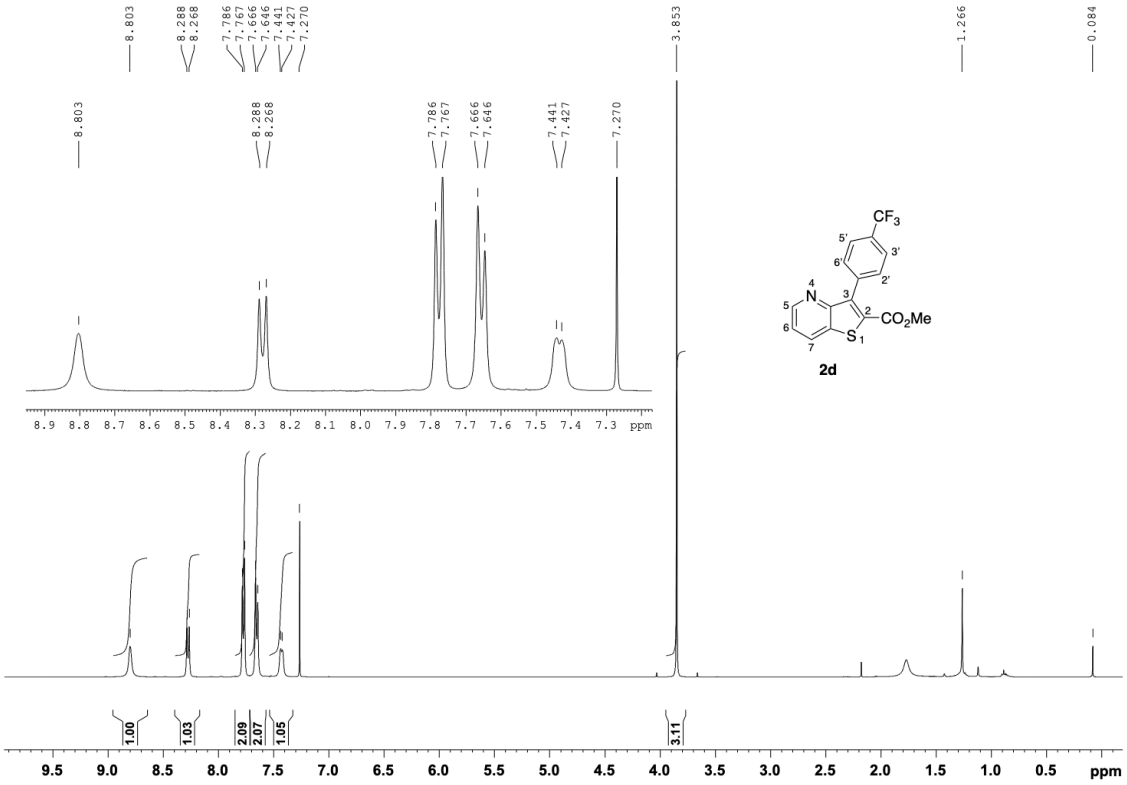


^{13}C NMR ($CDCl_3$, 100.6 MHz) of compound **2c**

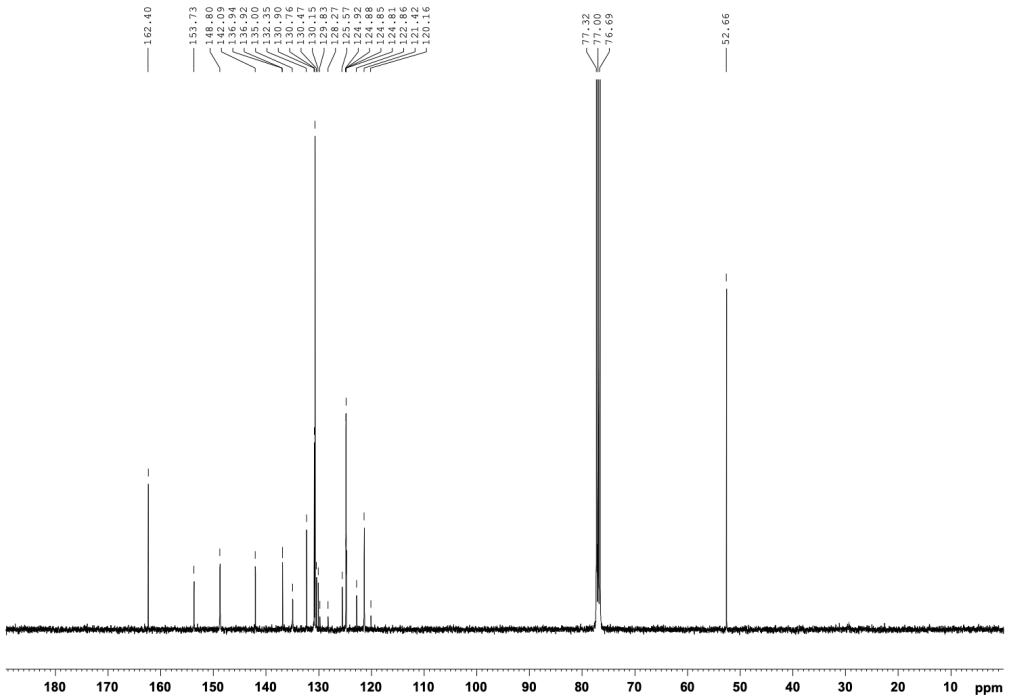


Methyl 3-[4-(trifluoromethyl)phenyl]thieno[3,2-*b*]pyridine-2-carboxylate (2d)

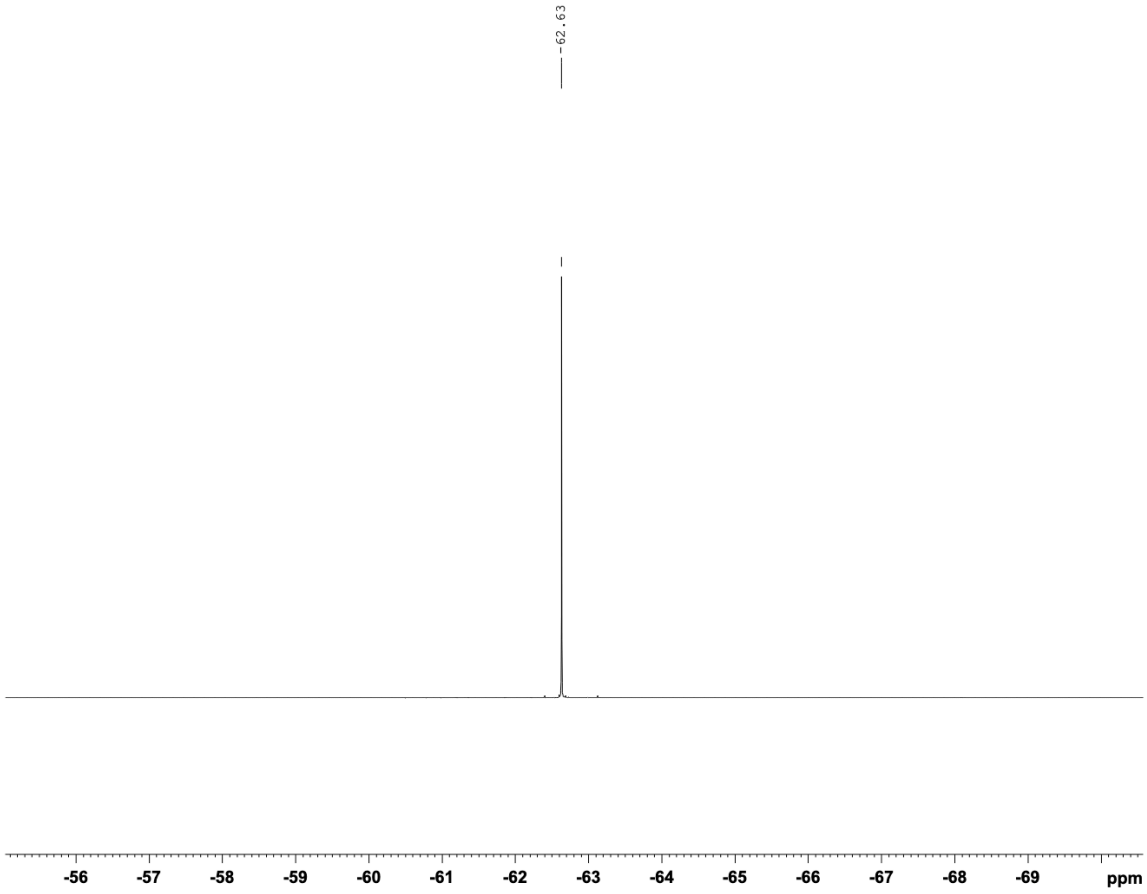
^{1}H NMR ($CDCl_3$, 400 MHz) of compound **2d**



^{13}C NMR ($CDCl_3$, 100.6 MHz) of compound **2d**

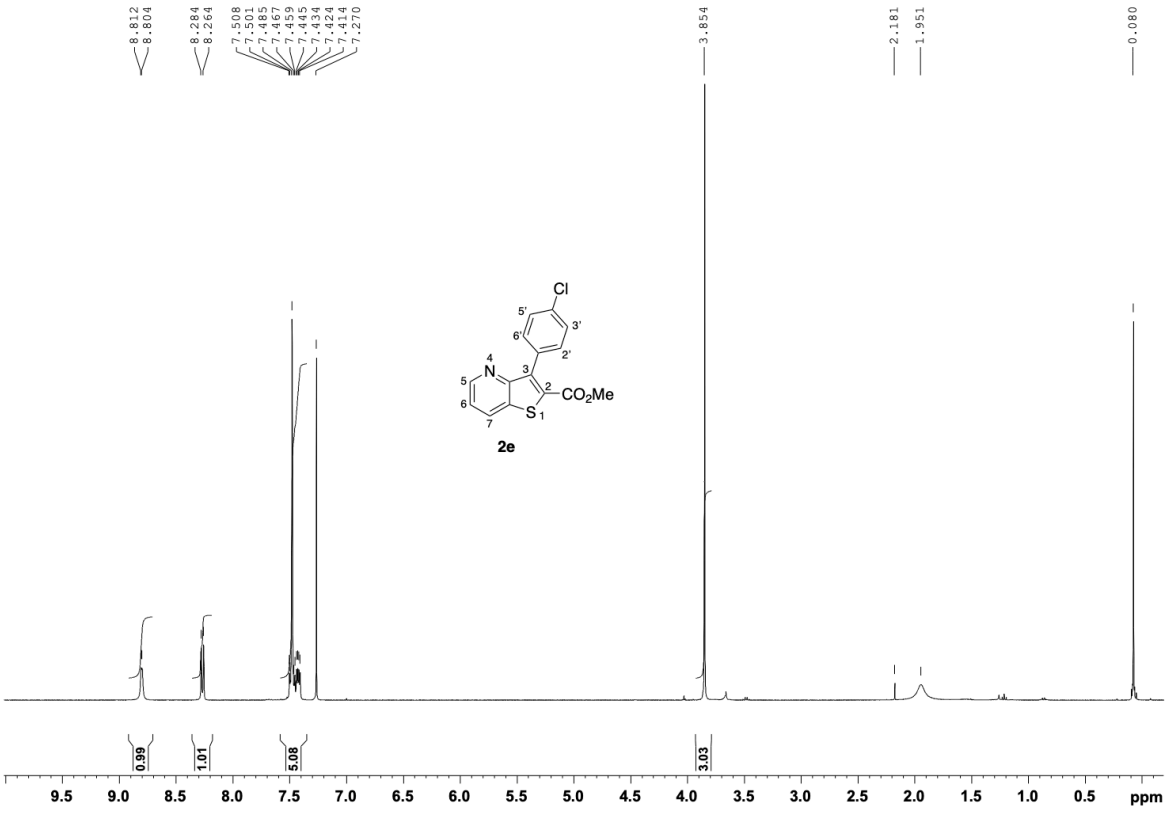


^{19}F NMR ($CDCl_3$, 376.48 MHz) of compound **2d**

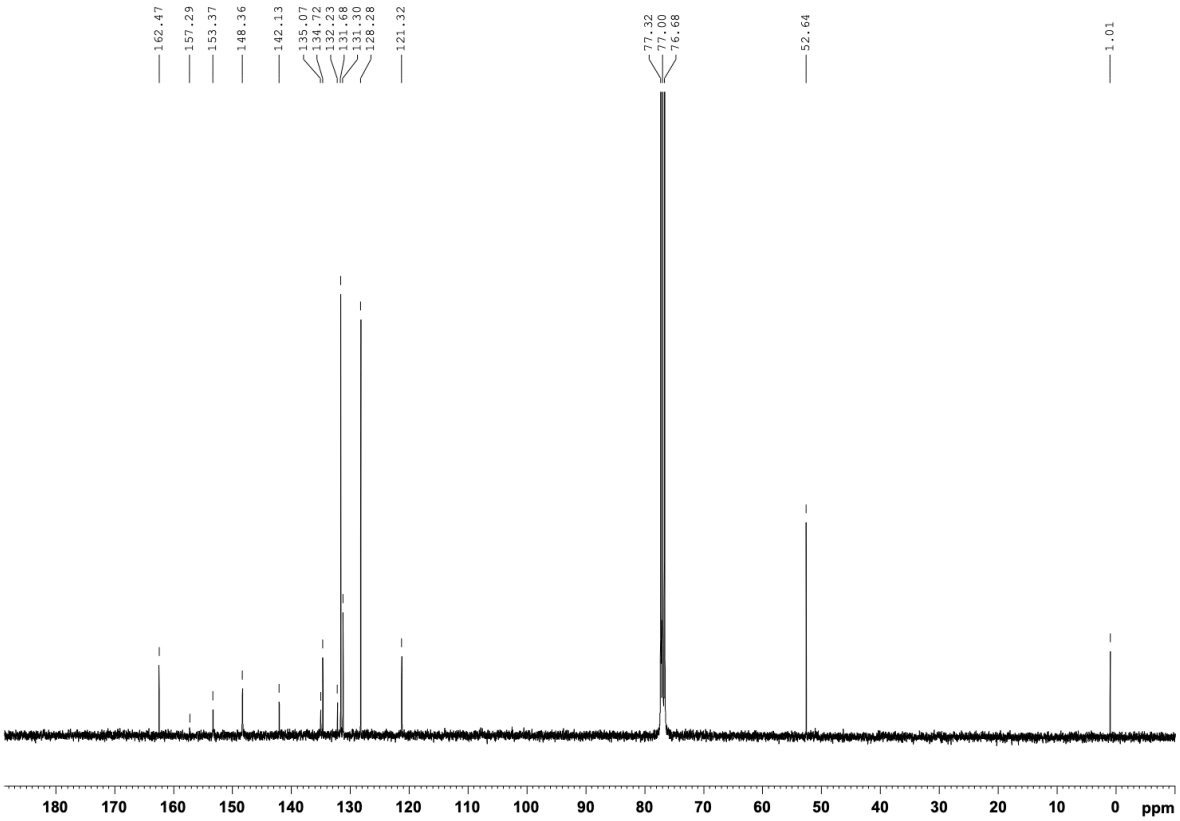


Methyl 3-(4-chlorophenyl)thieno[3,2-*b*]pyridine-2-carboxylate (2e)

^{1}H NMR ($CDCl_3$, 400 MHz) of compound **2e**

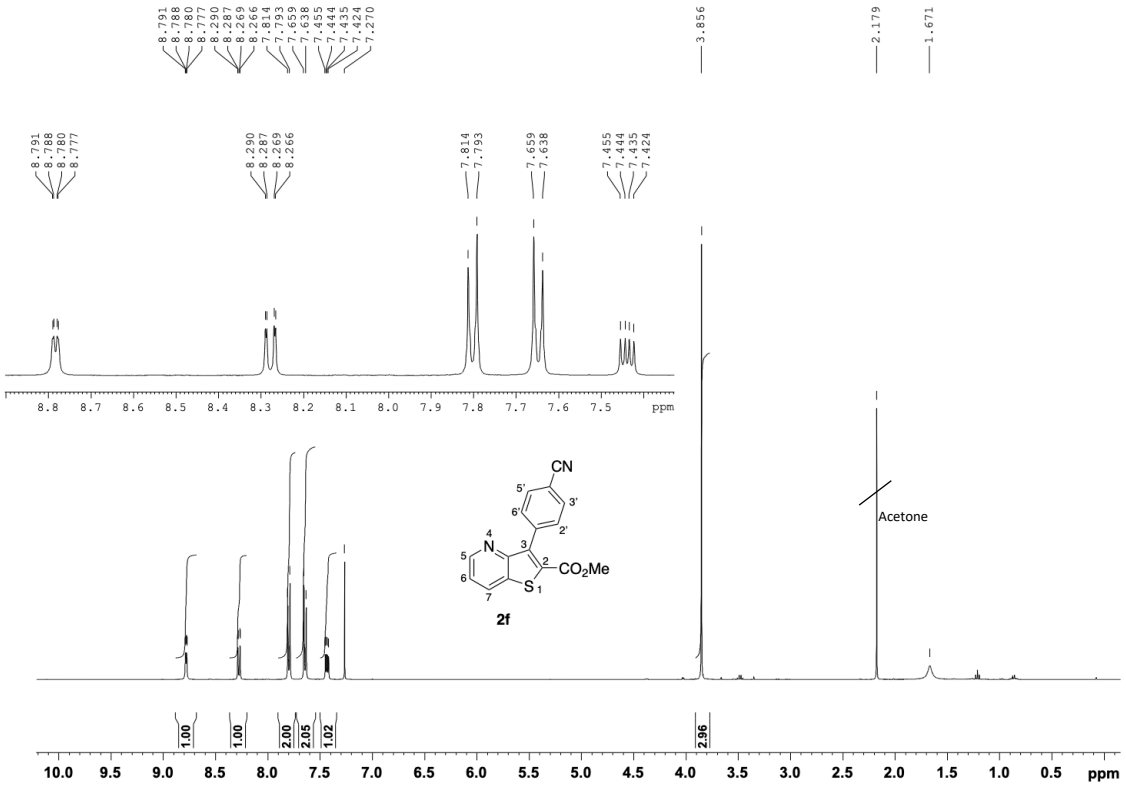


^{13}C NMR ($CDCl_3$, 100.6 MHz) of compound **2e**

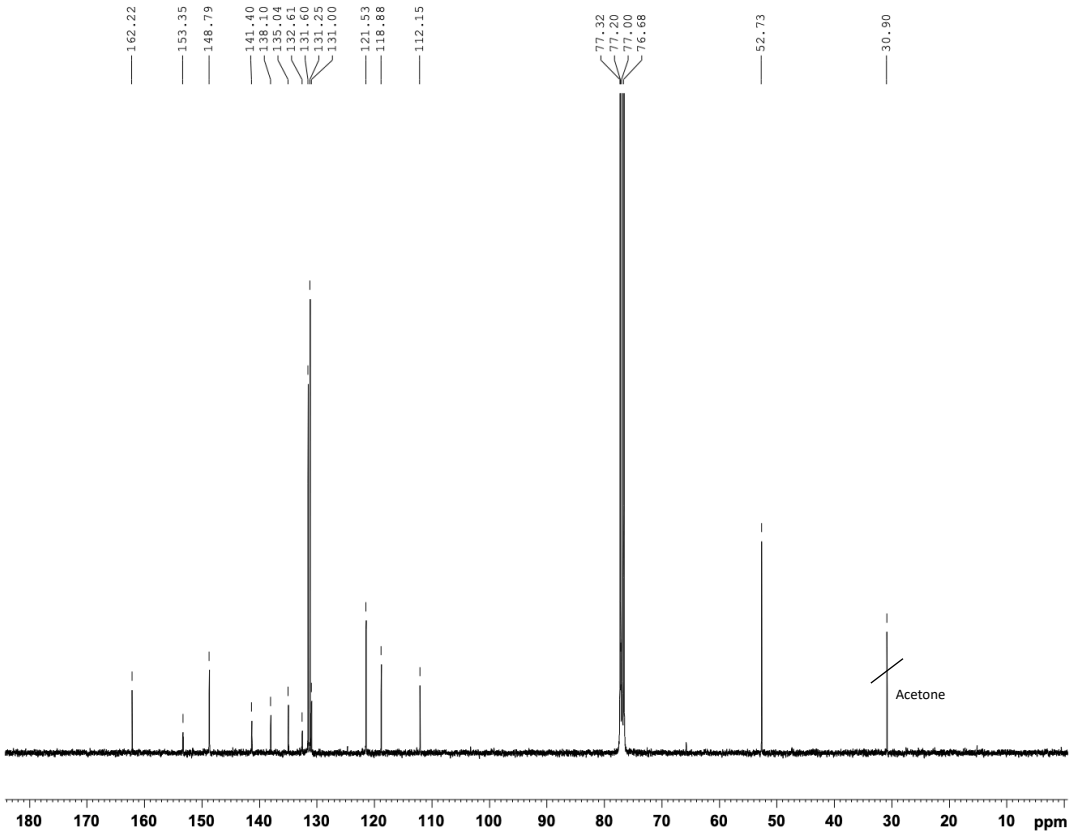


Methyl 3-(4-cyanophenyl)thieno[3,2-*b*]pyridine-2-carboxylate (2f)

^{1}H NMR ($CDCl_3$, 400 MHz) of compound **2f**

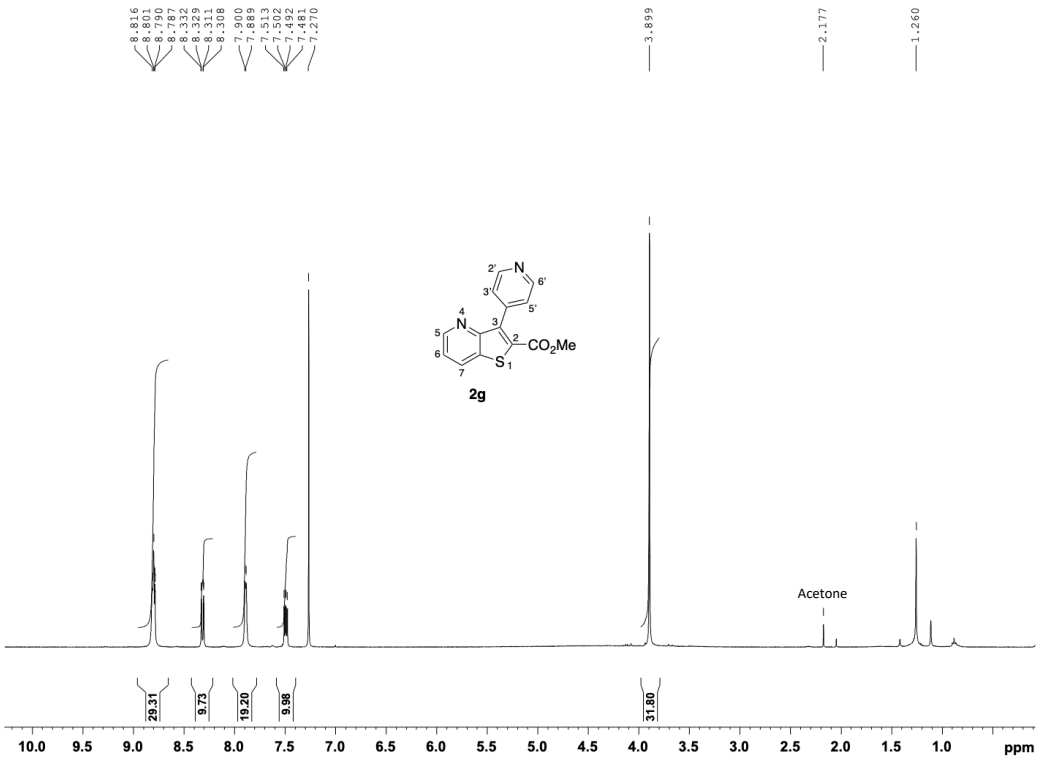


^{13}C NMR ($CDCl_3$, 100.6 MHz) of compound **2f**

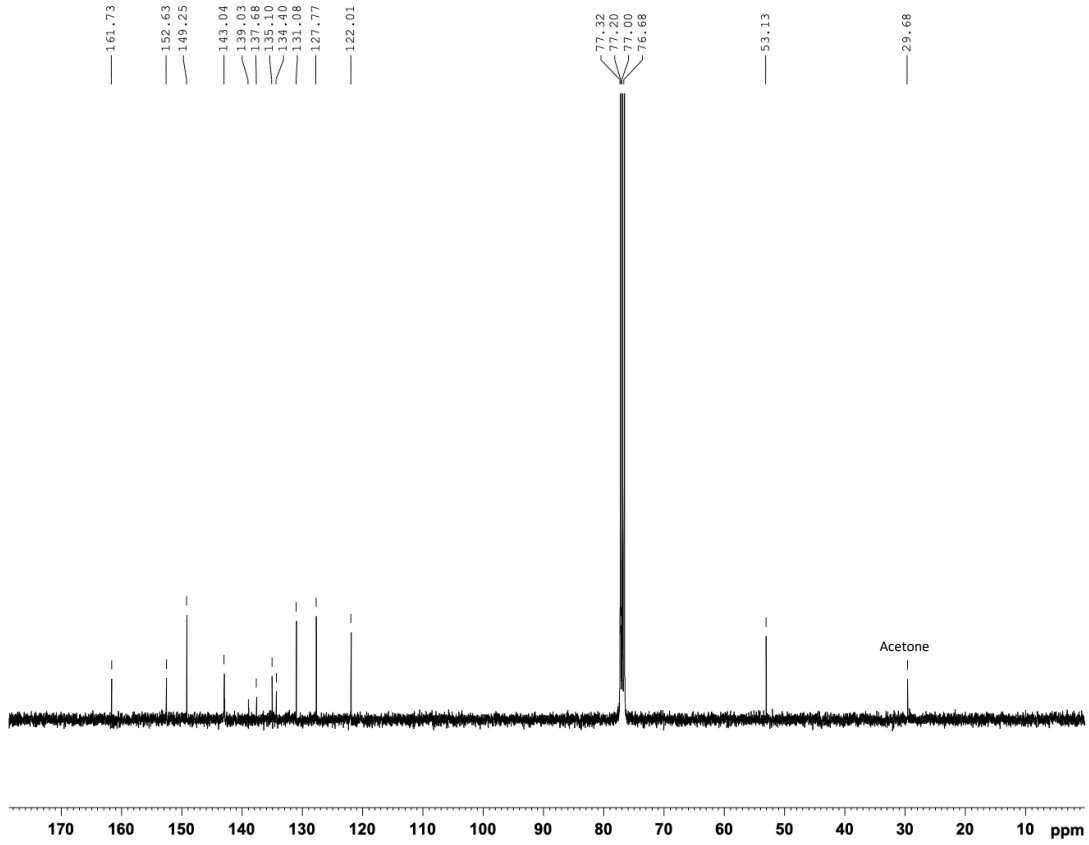


Methyl 3-(pyridin-4-yl)thieno[3,2-*b*]pyridine-2-carboxylate (2g)

^{1}H NMR ($CDCl_3$, 400 MHz) of compound **2g**

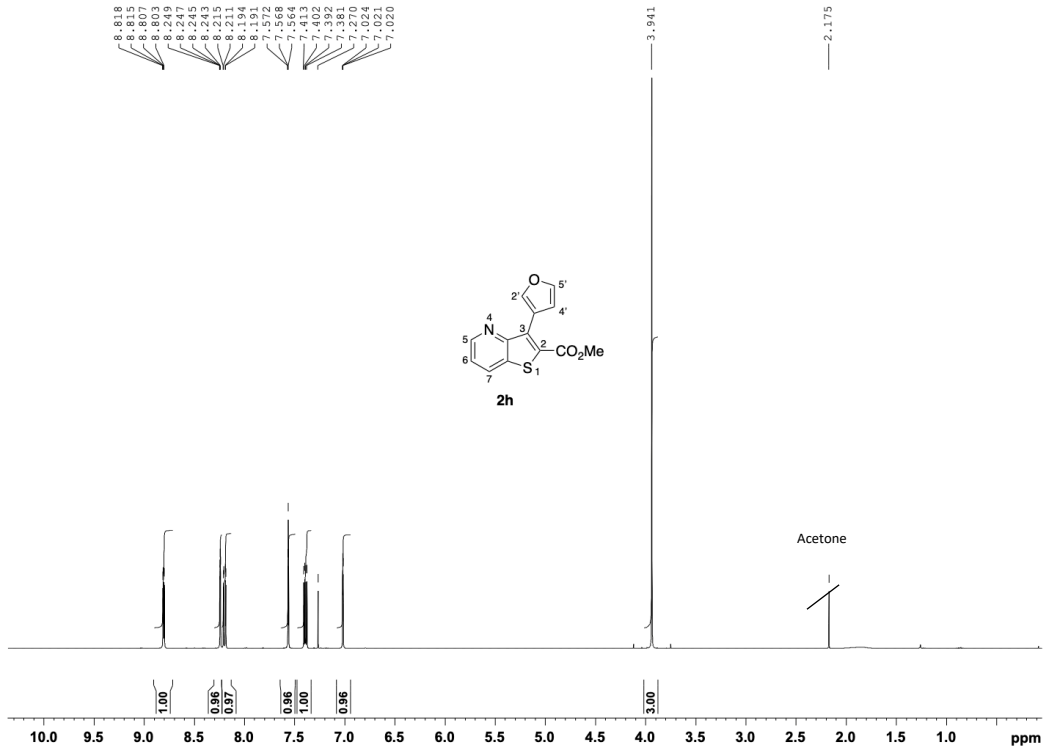


^{13}C NMR ($CDCl_3$, 100.6 MHz) of compound **2g**



Methyl 3-(furan-3-yl)thieno[3,2-*b*]pyridine-2-carboxylate (2h)

^{1}H NMR ($CDCl_3$, 400 MHz) of compound **2h**



2h

^{13}C NMR ($CDCl_3$, 100.6 MHz) of compound **2h**