

Supporting Information

for

Ring-tension Adjusted Ethylene Polymerization by Aryliminocyclo- heptapyridylnickel Complexes

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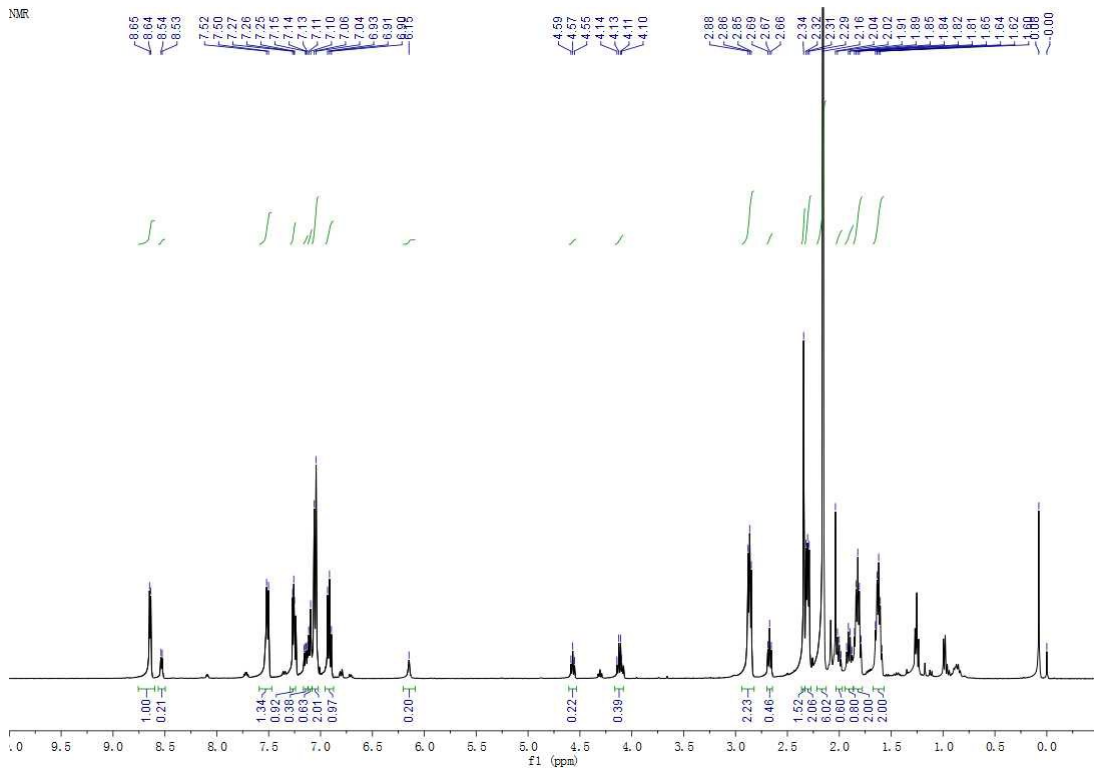
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NMR



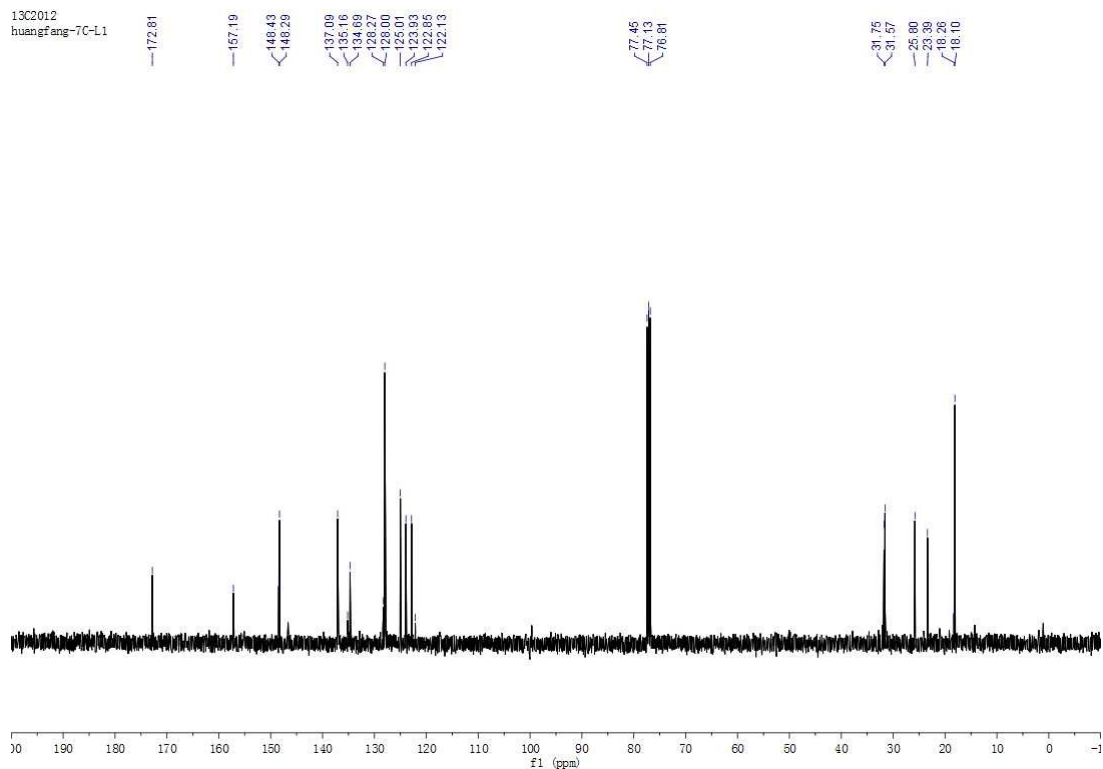
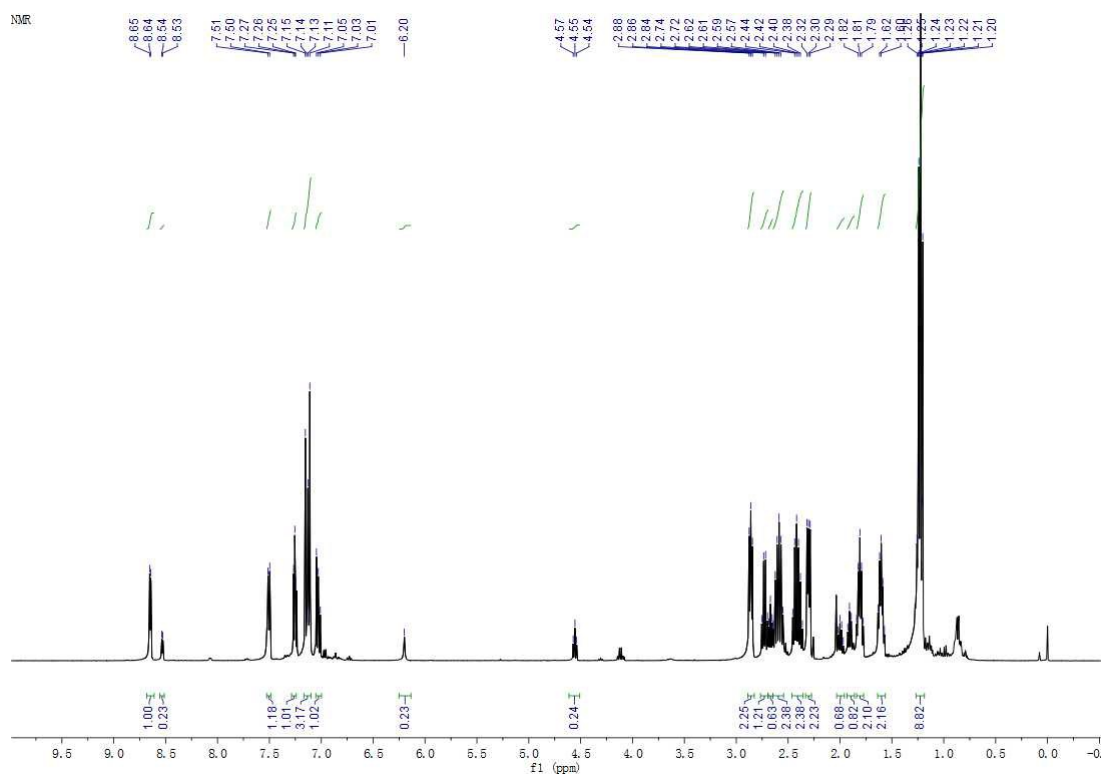


Figure S1. ¹H-NMR (top) and ¹³C-NMR (bottom) spectra of compound L1 (in CDCl₃)



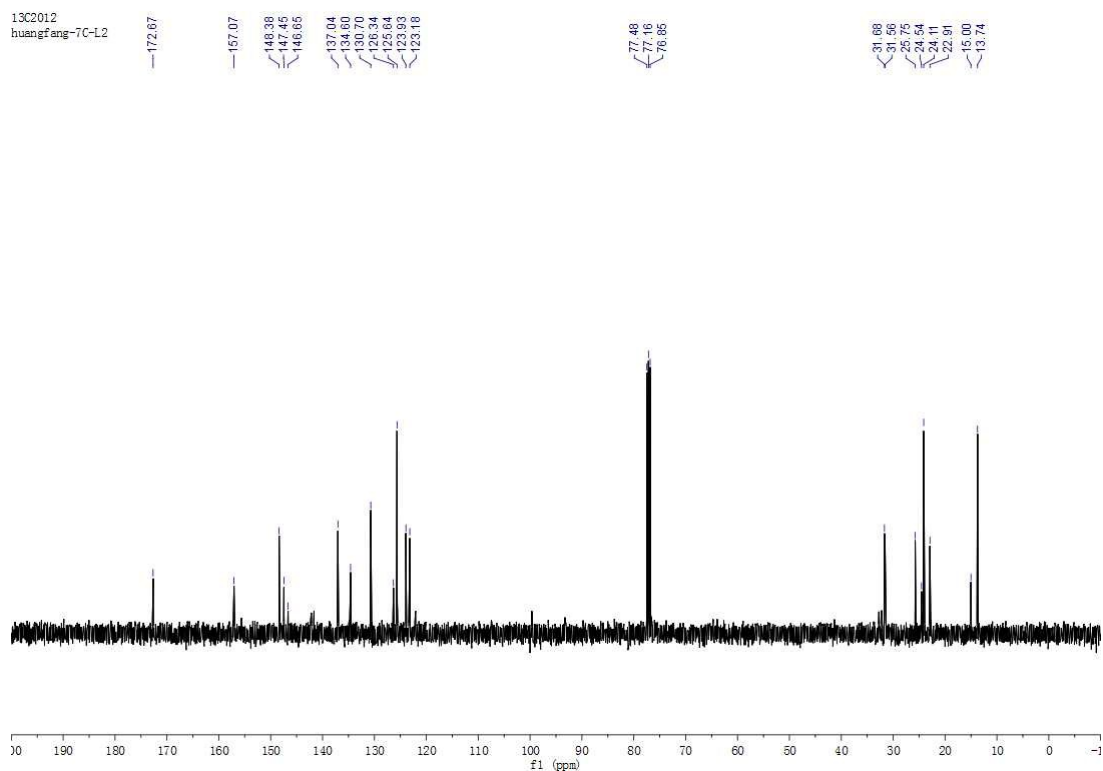
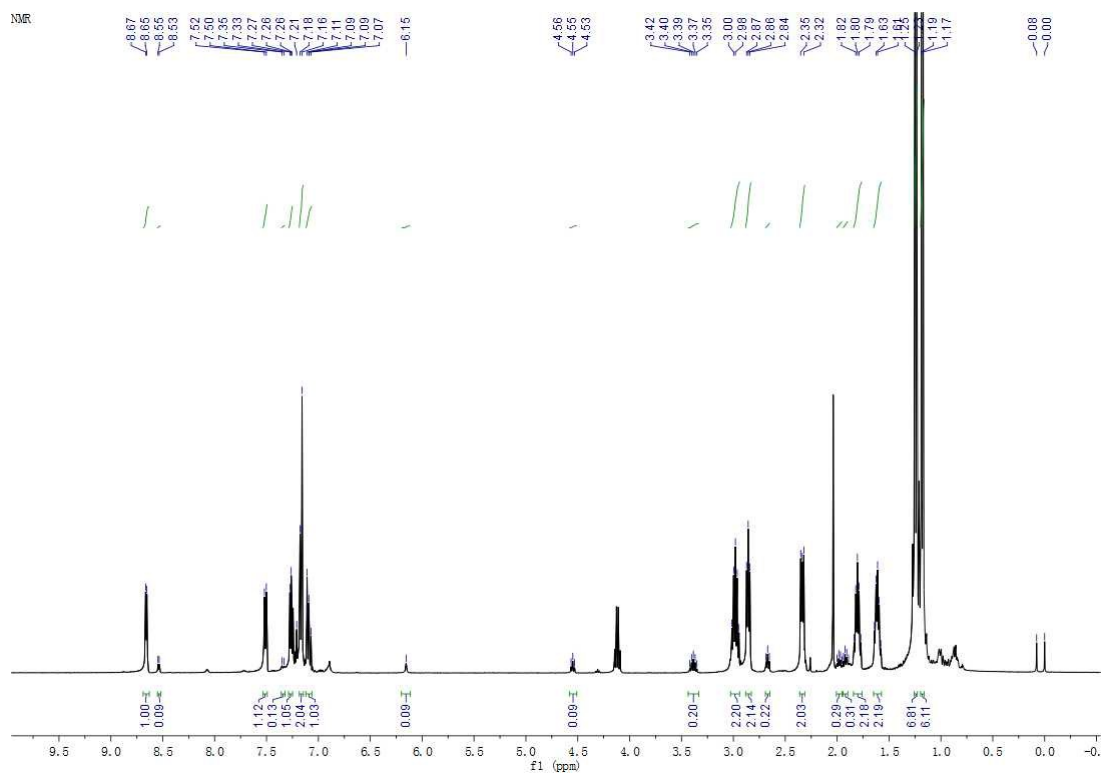


Figure S2. $^1\text{H-NMR}$ (top) and $^{13}\text{C-NMR}$ (bottom) spectra of compound **L2** (in CDCl_3)



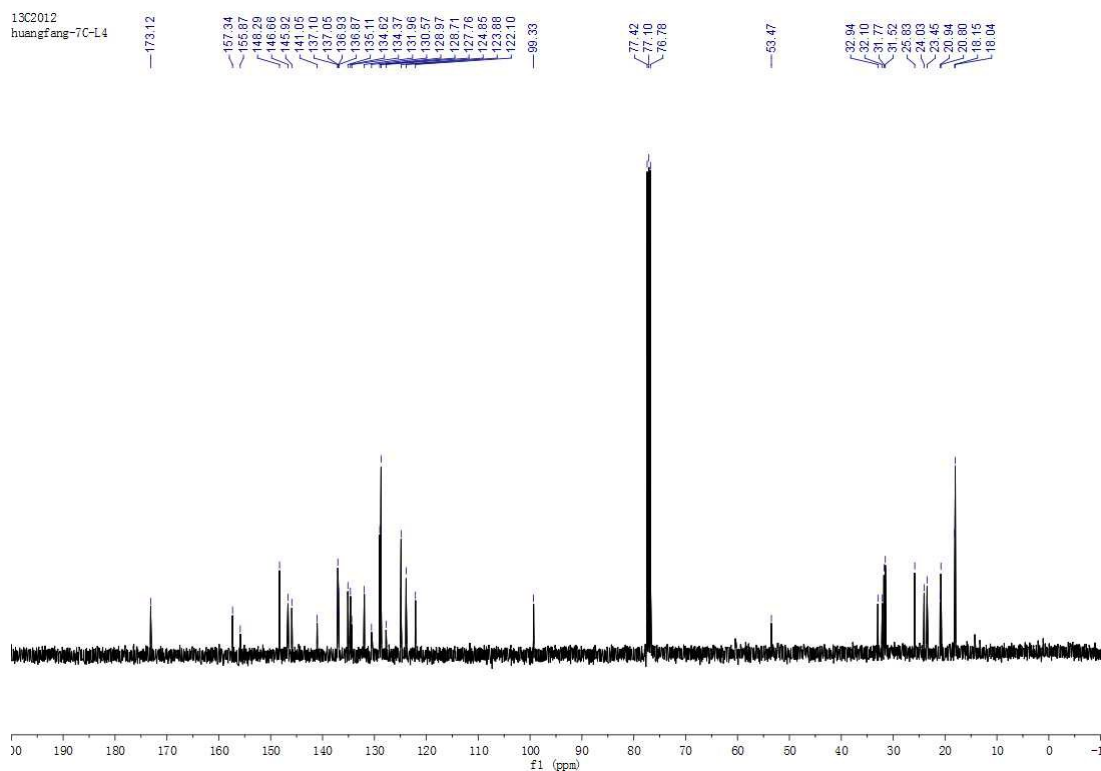
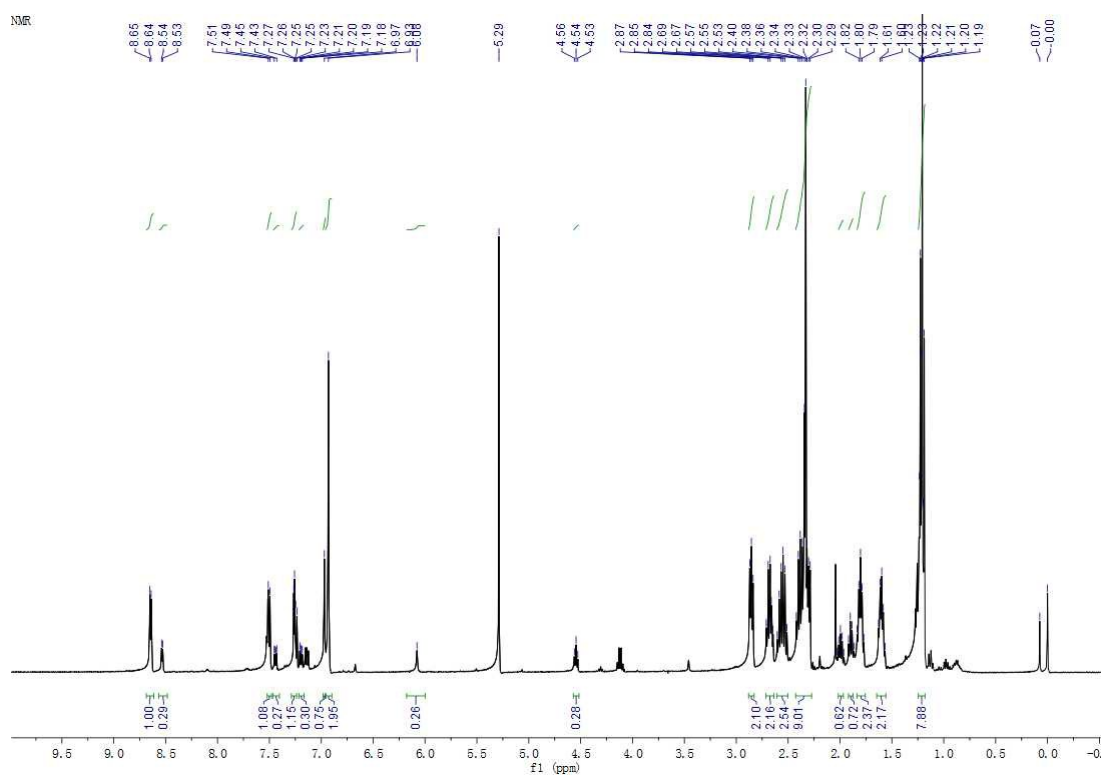


Figure S4. $^1\text{H-NMR}$ (top) and $^{13}\text{C-NMR}$ (bottom) spectra of compound L4 (in CDCl_3)



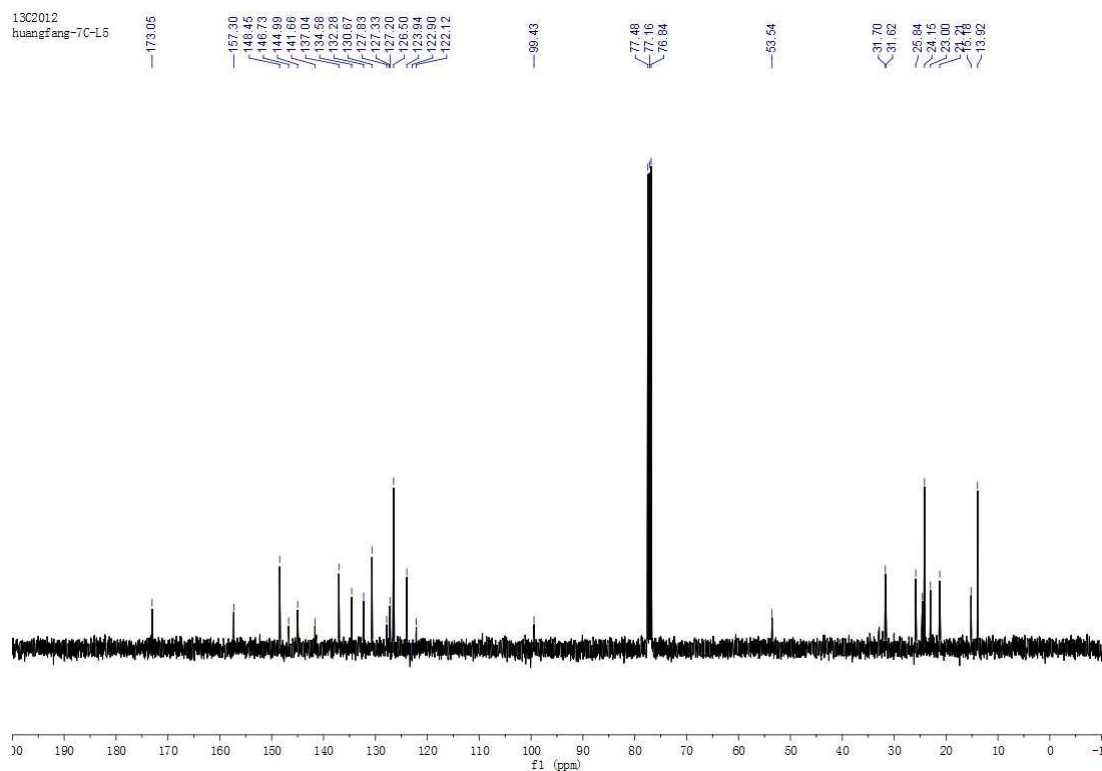


Figure S5. $^1\text{H-NMR}$ (top) and $^{13}\text{C-NMR}$ (bottom) spectra of compound **L5** (in CDCl_3)

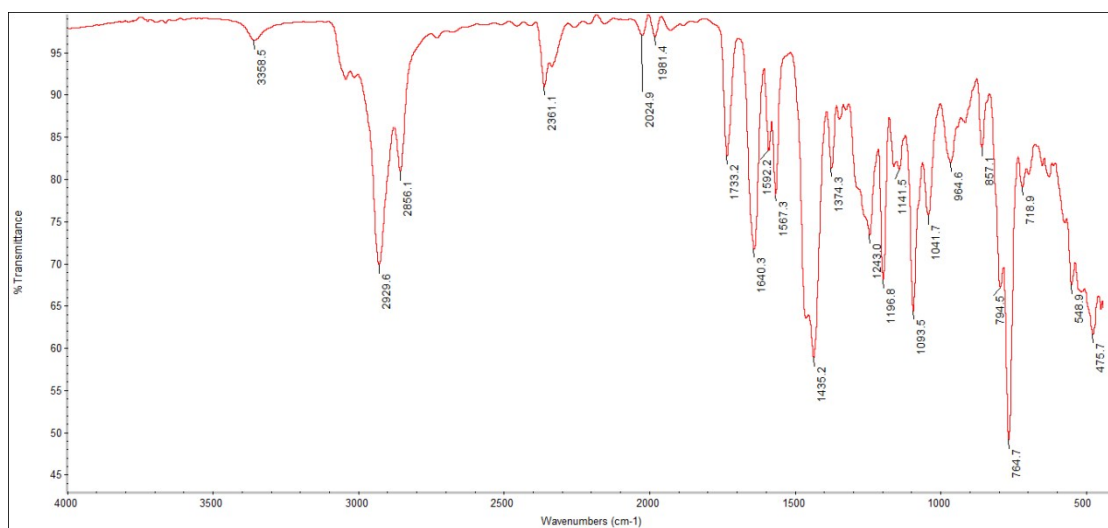


Figure S6. FT-IR spectroscopy of compound **L1**.

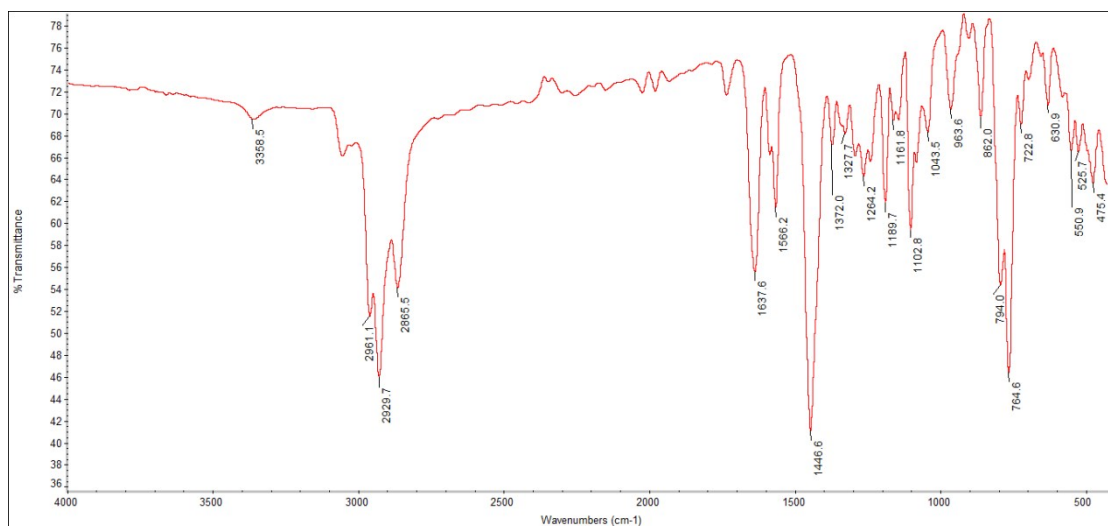


Figure S7. FT-IR spectroscopy of compound L2.

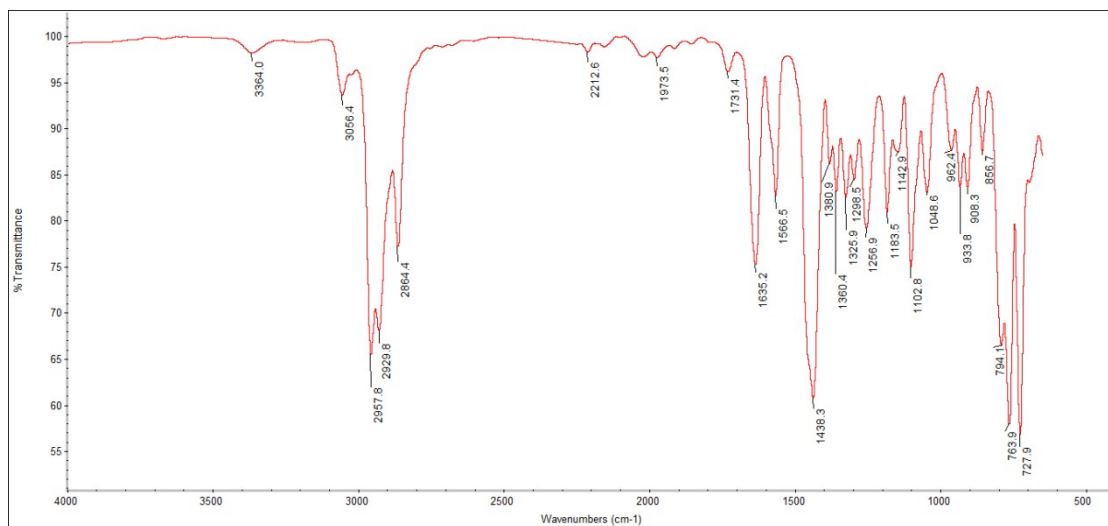


Figure S8. FT-IR spectroscopy of compound L3.

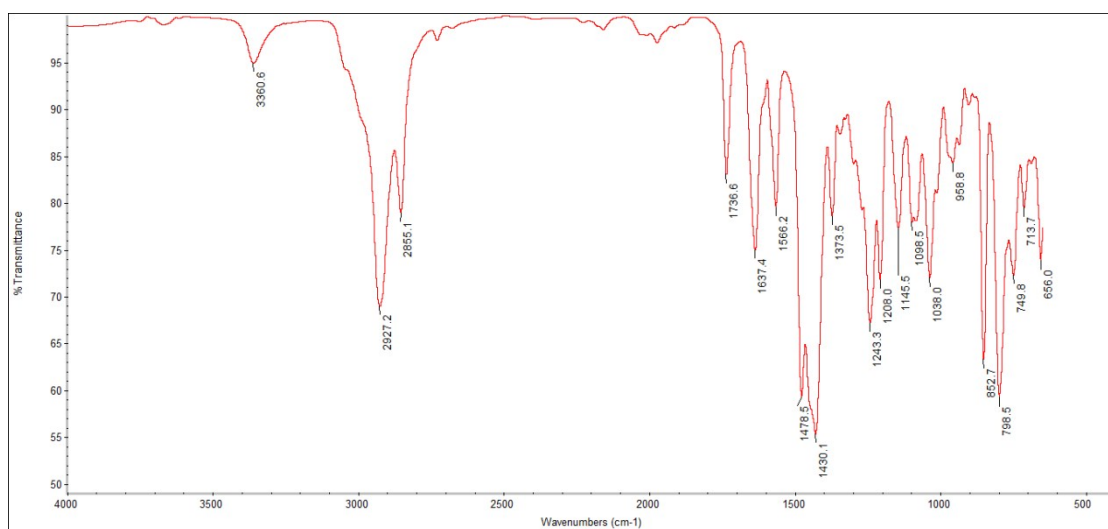


Figure S9. FT-IR spectroscopy of compound L4.

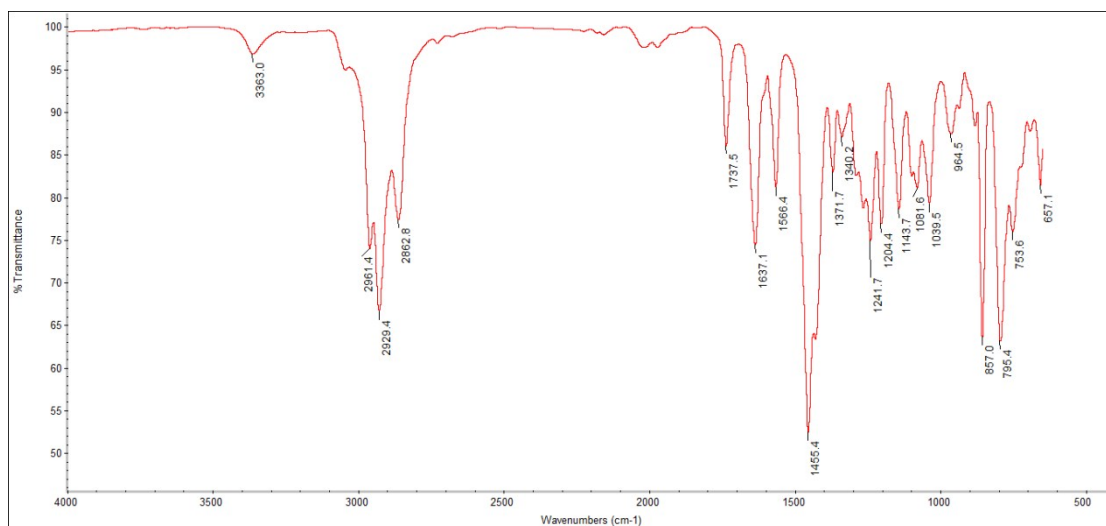


Figure S10. FT-IR spectroscopy of compound L5.

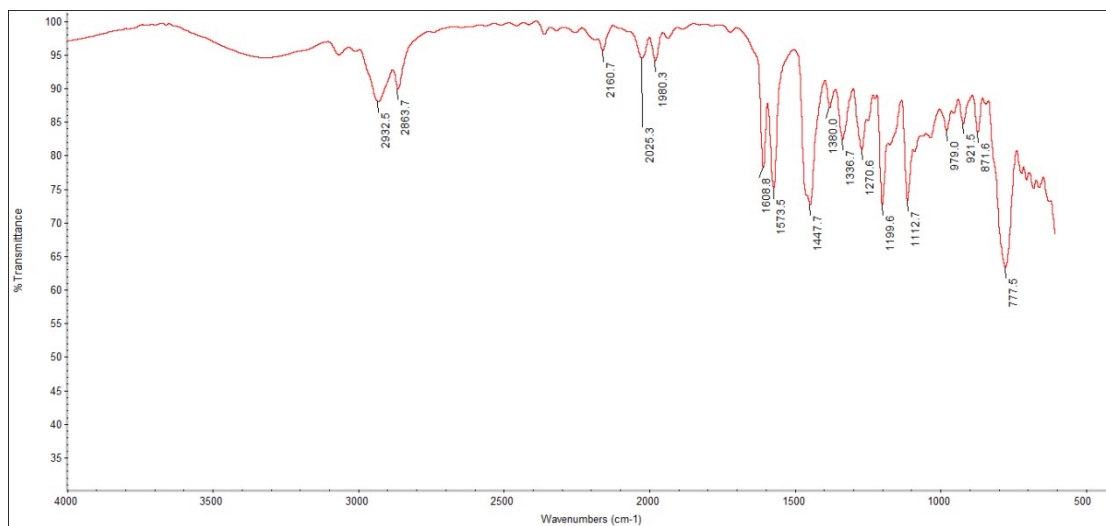


Figure S11. FT-IR spectroscopy of complex Ni1.

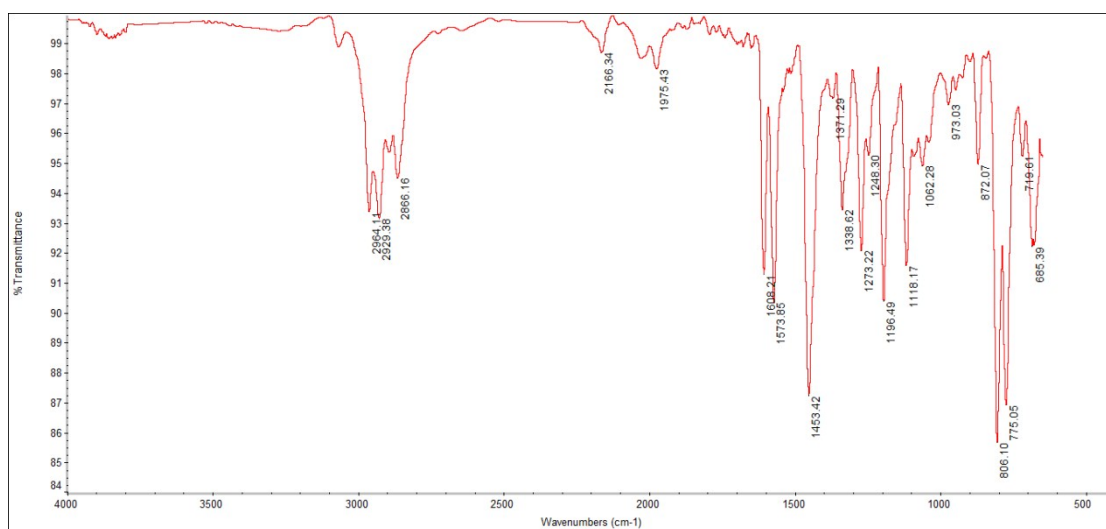


Figure S12. FT-IR spectroscopy of complex Ni2.

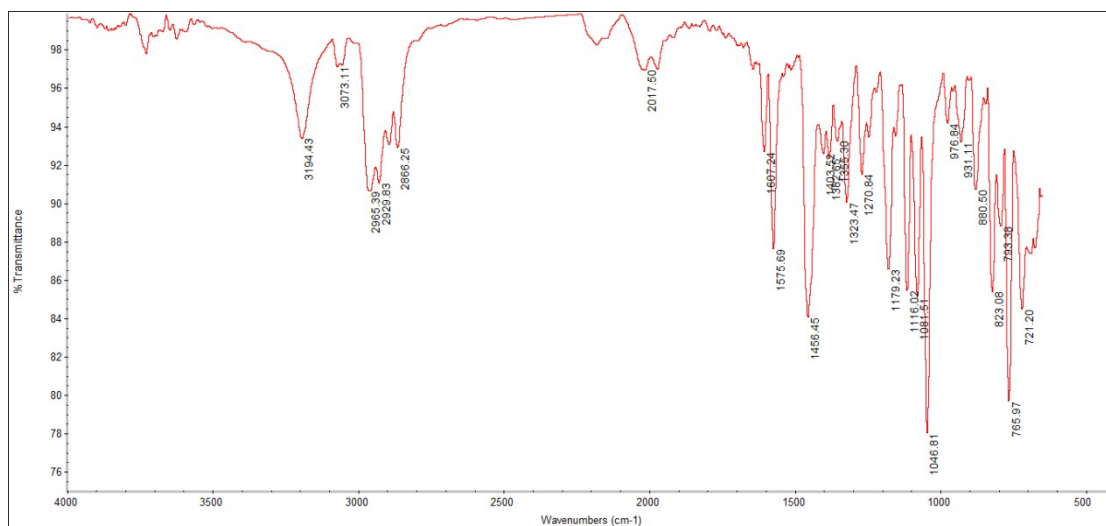


Figure S13. FT-IR spectroscopy of complex Ni3.

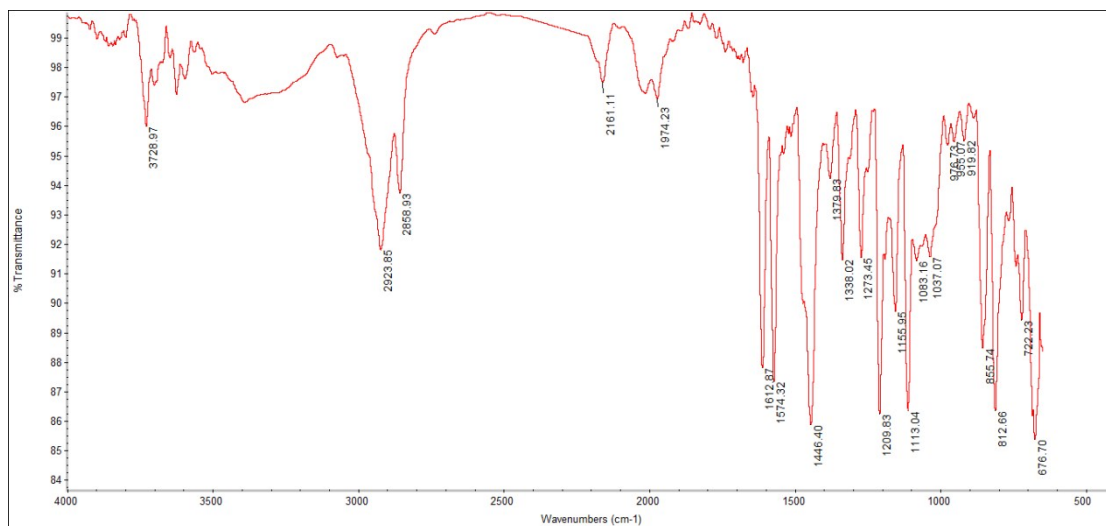


Figure S14. FT-IR spectroscopy of complex Ni4.

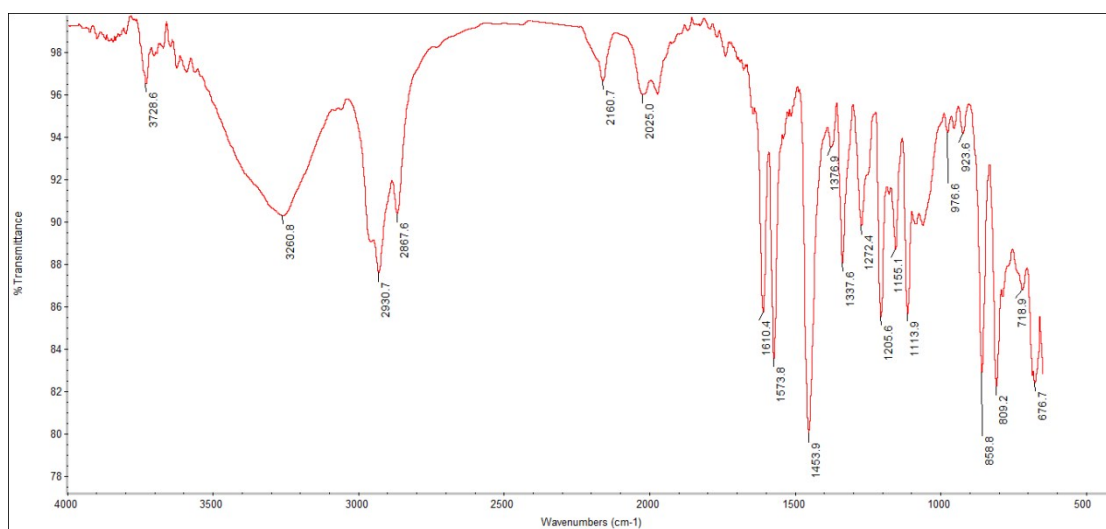


Figure S15. FT-IR spectroscopy of complex Ni5.

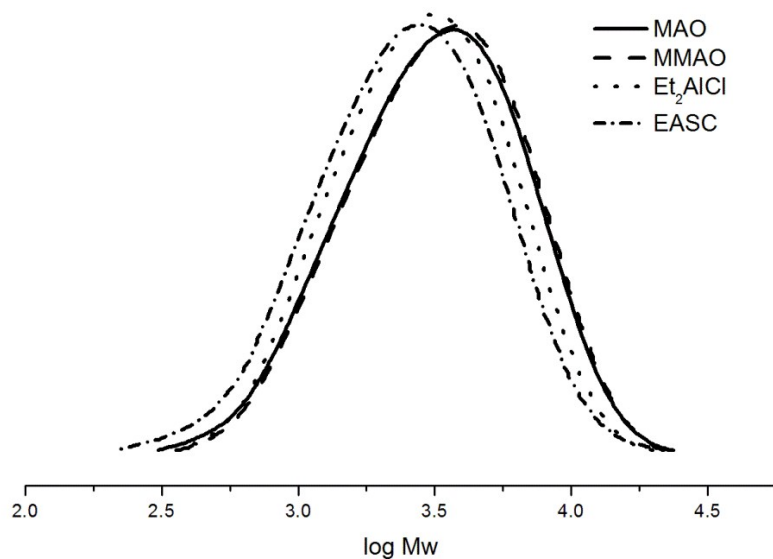


Figure S16. The GPC curves of polyethylenes activated by different co-catalysts (Table 2).

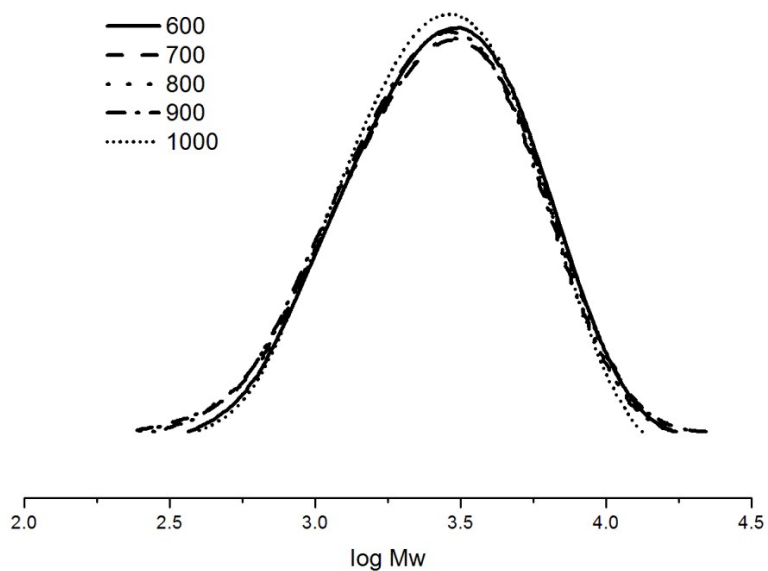


Figure S17. The GPC curves of polyethylenes obtained at different ratios of EASC (Entries 1-5, Table 3).

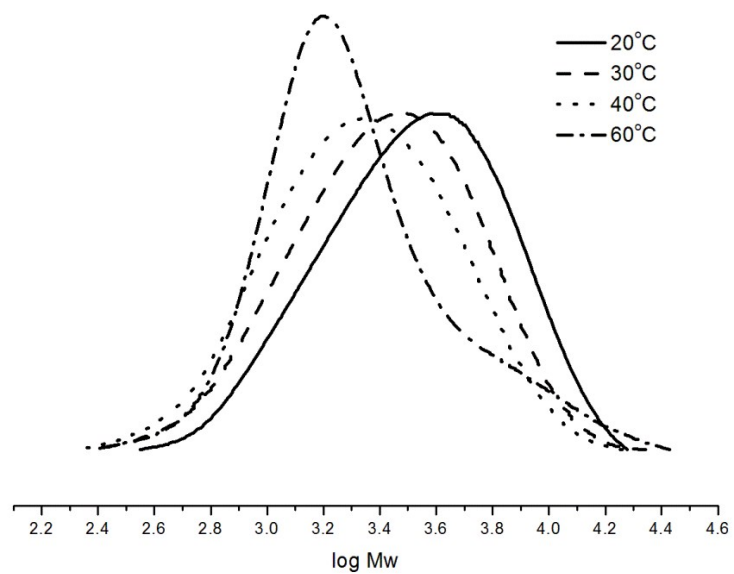


Figure S18. The GPC curves of polyethylenes reacted at different temperatures (Entries 3, 6-8, Table 3).

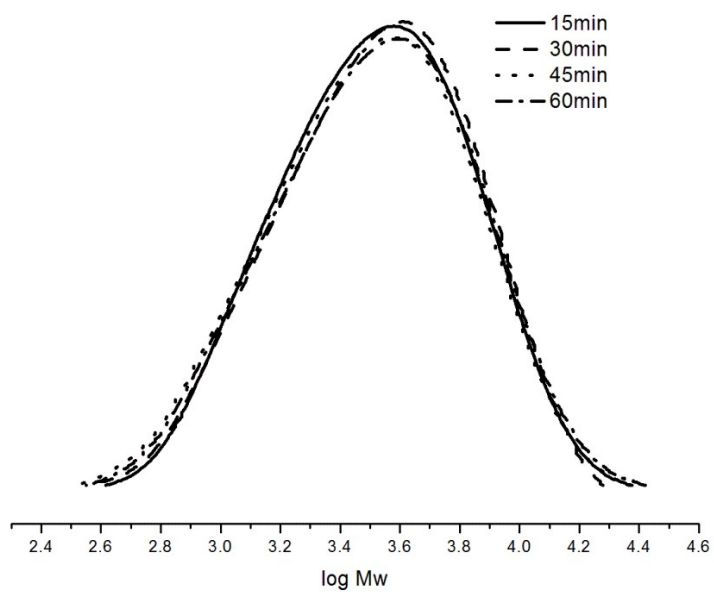


Figure S19. The GPC curves of polyethylenes quenched at different times (Entries 6, 10-12, Table 3).

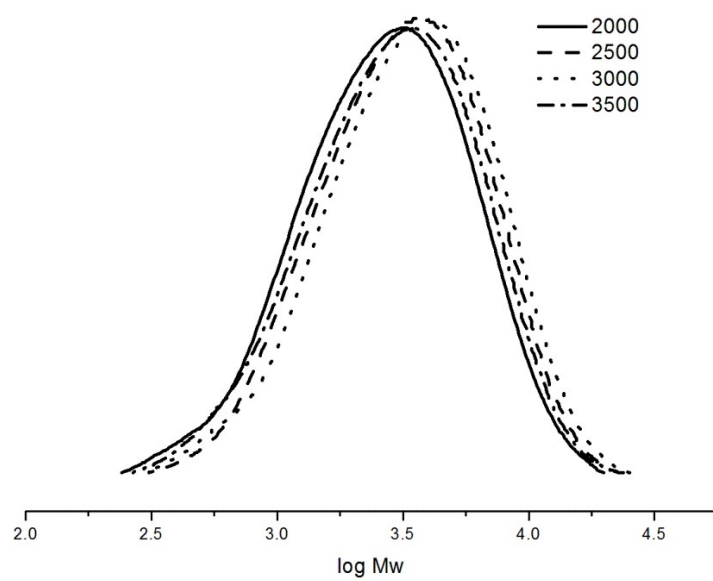


Figure S20. The GPC curves of polyethylenes obtained by different ratios of MAO (Entries 1-4, Table 5).