

Supporting information

A one-pot synthetic approach for construction of thiazolo[3,2-*a*]benzimidazole-linked quinazoline scaffold via palladium-catalyzed reactions

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- ¹H and ¹³C spectra for compounds

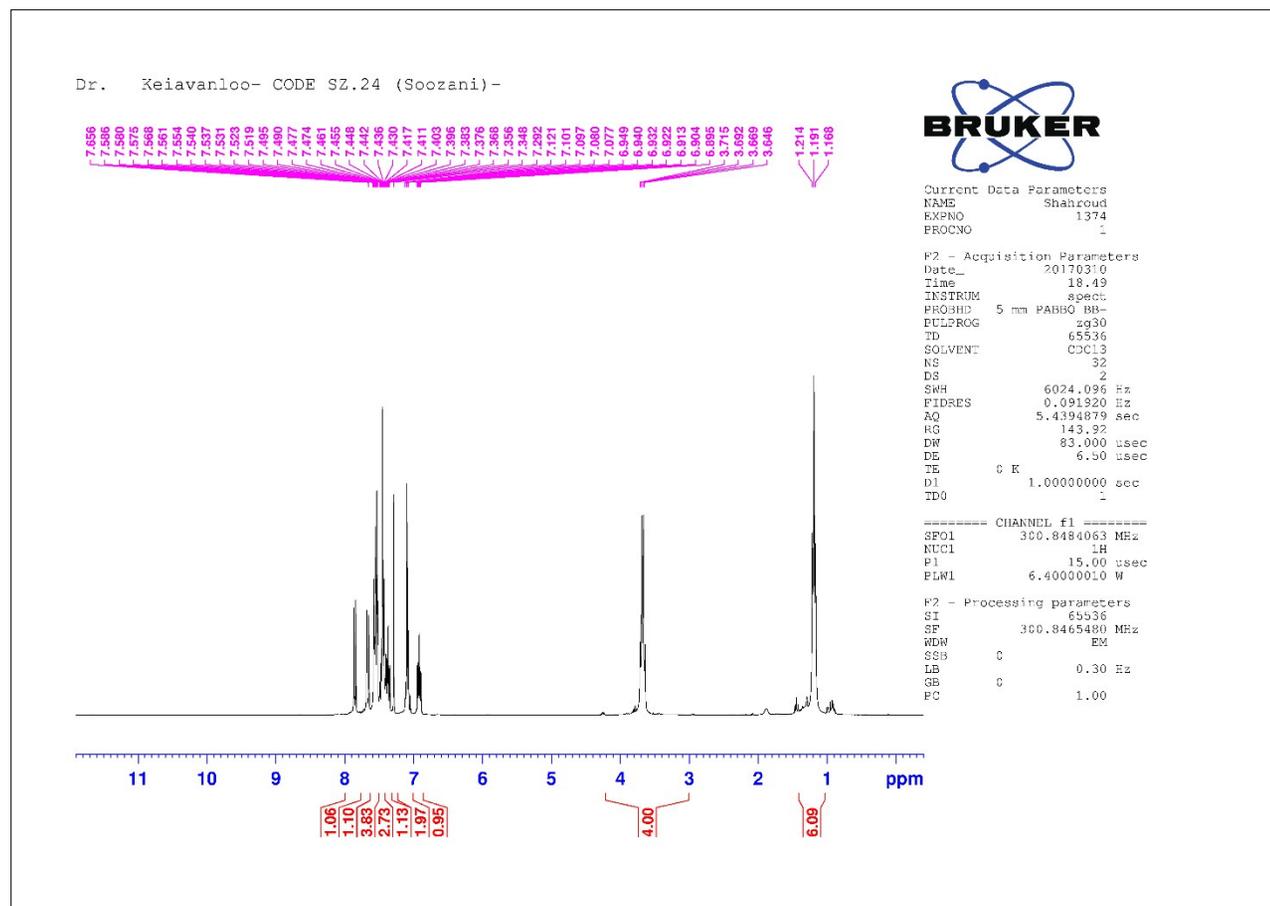
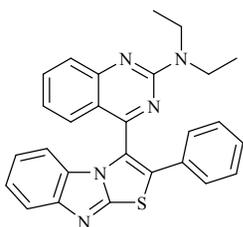


Figure 1 300 MHz ^1H NMR spectrum of compound 5a in CDCl_3

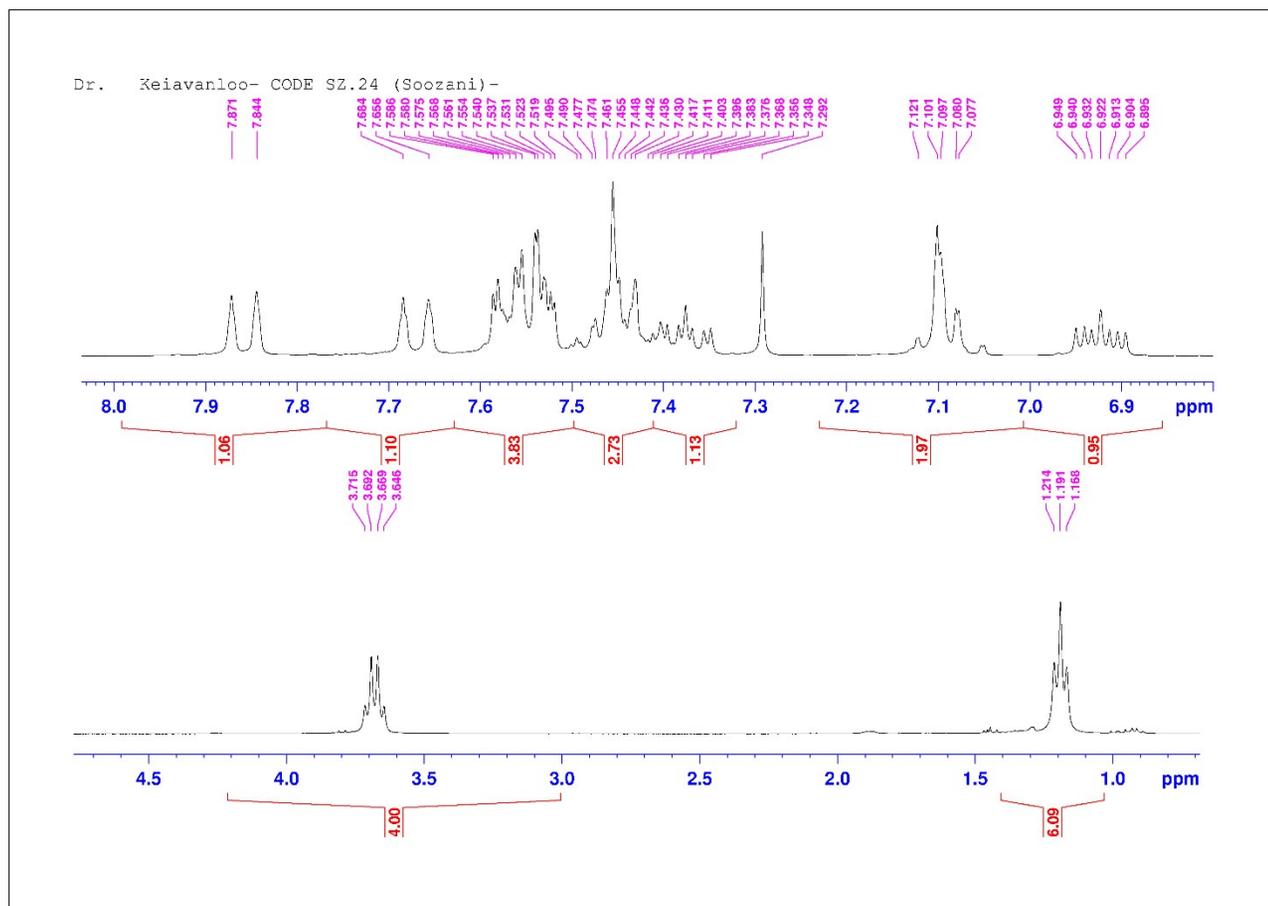
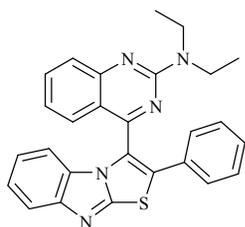


Figure 2 300 MHz ¹H NMR expand spectrum of compound 5a in CDCl₃

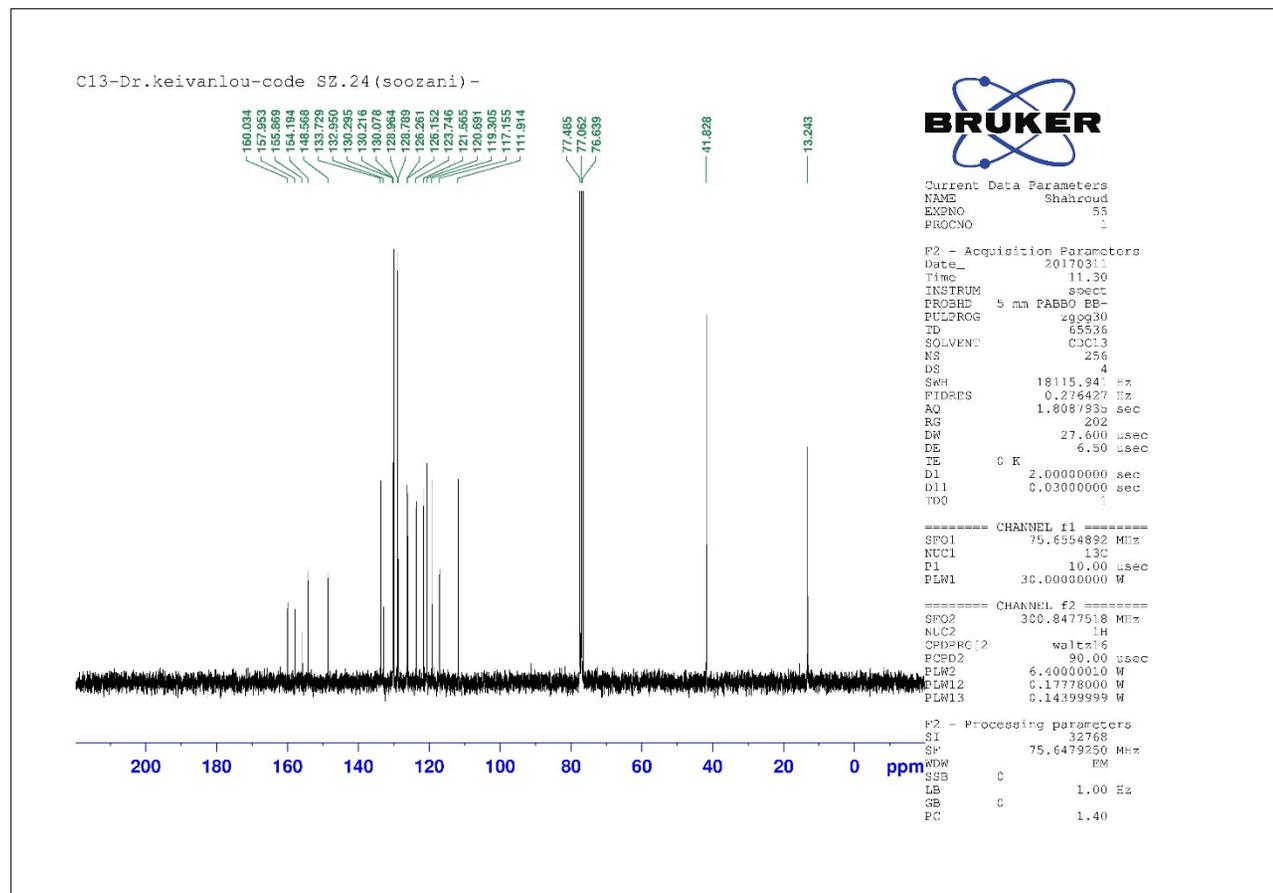
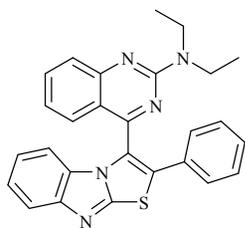


Figure 3 75 MHz ¹³C NMR spectrum of compound 5a in CDCl₃

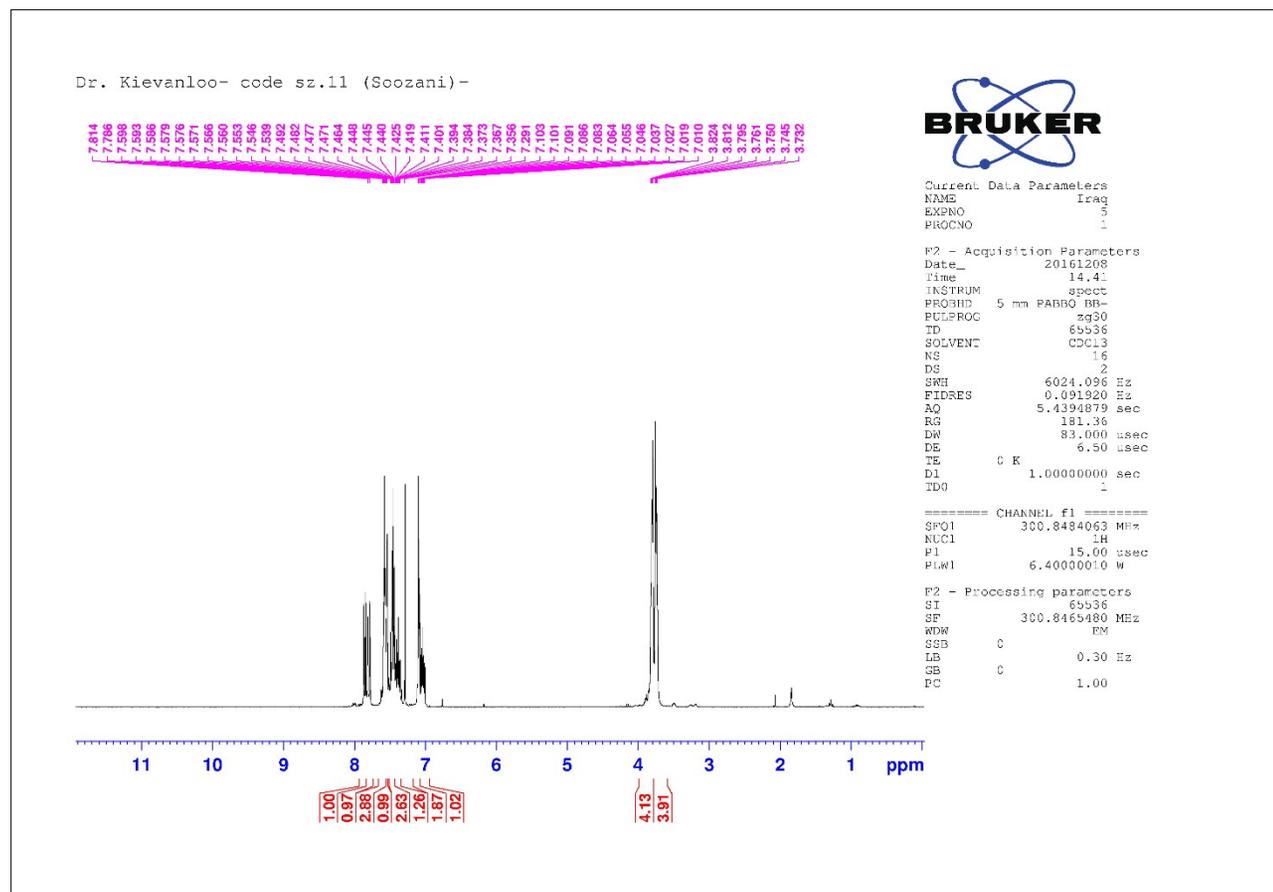
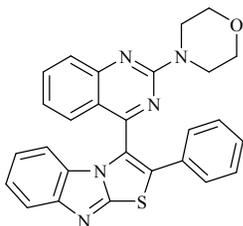


Figure 4 300 MHz ^1H NMR spectrum of compound **5b** in CDCl_3

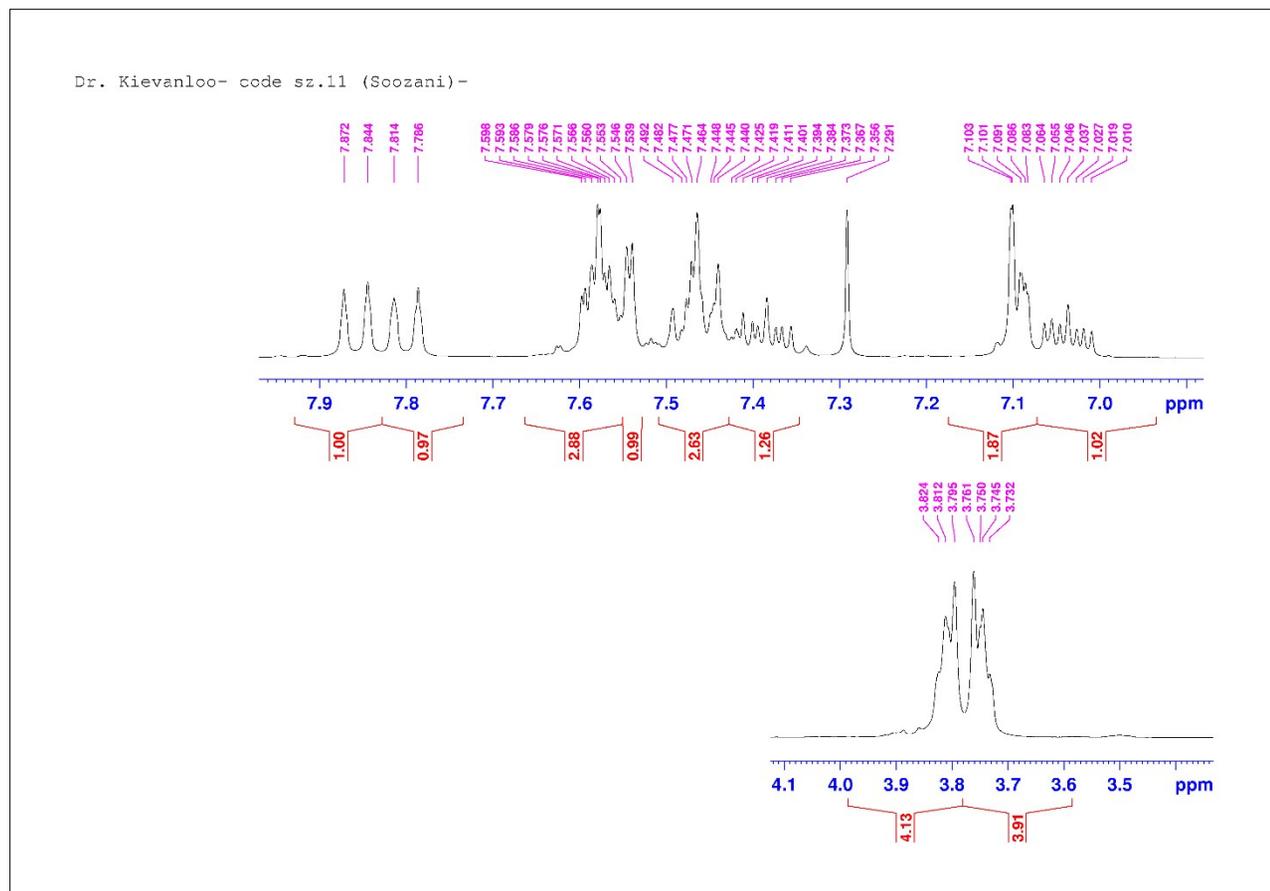
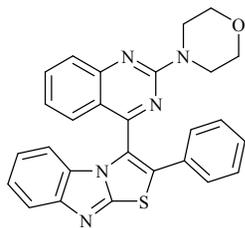


Figure 5 300 MHz ^1H NMR expand spectrum of compound **5b** in CDCl_3

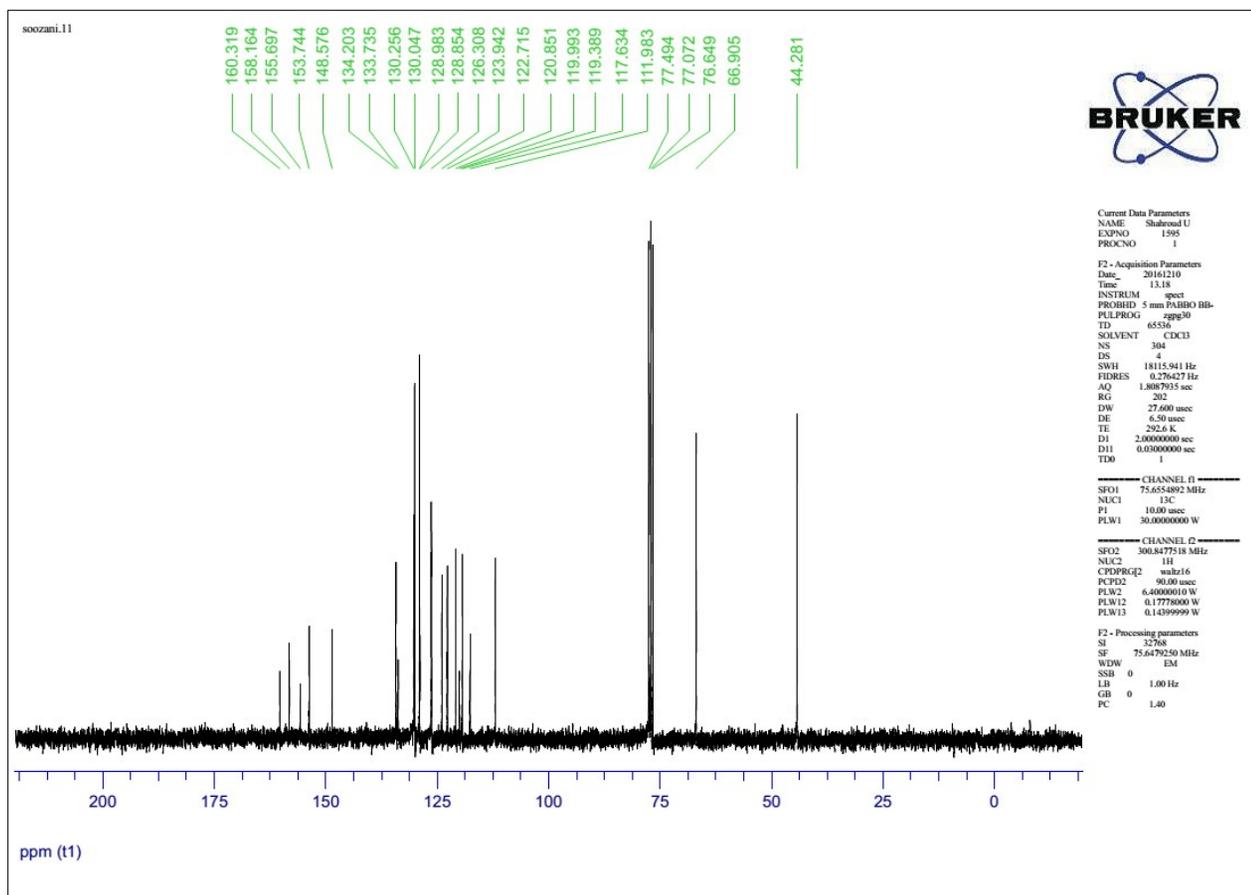
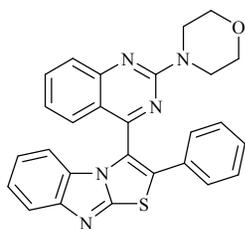


Figure 6 75 MHz ^{13}C NMR expand spectrum of compound 5b in CDCl_3

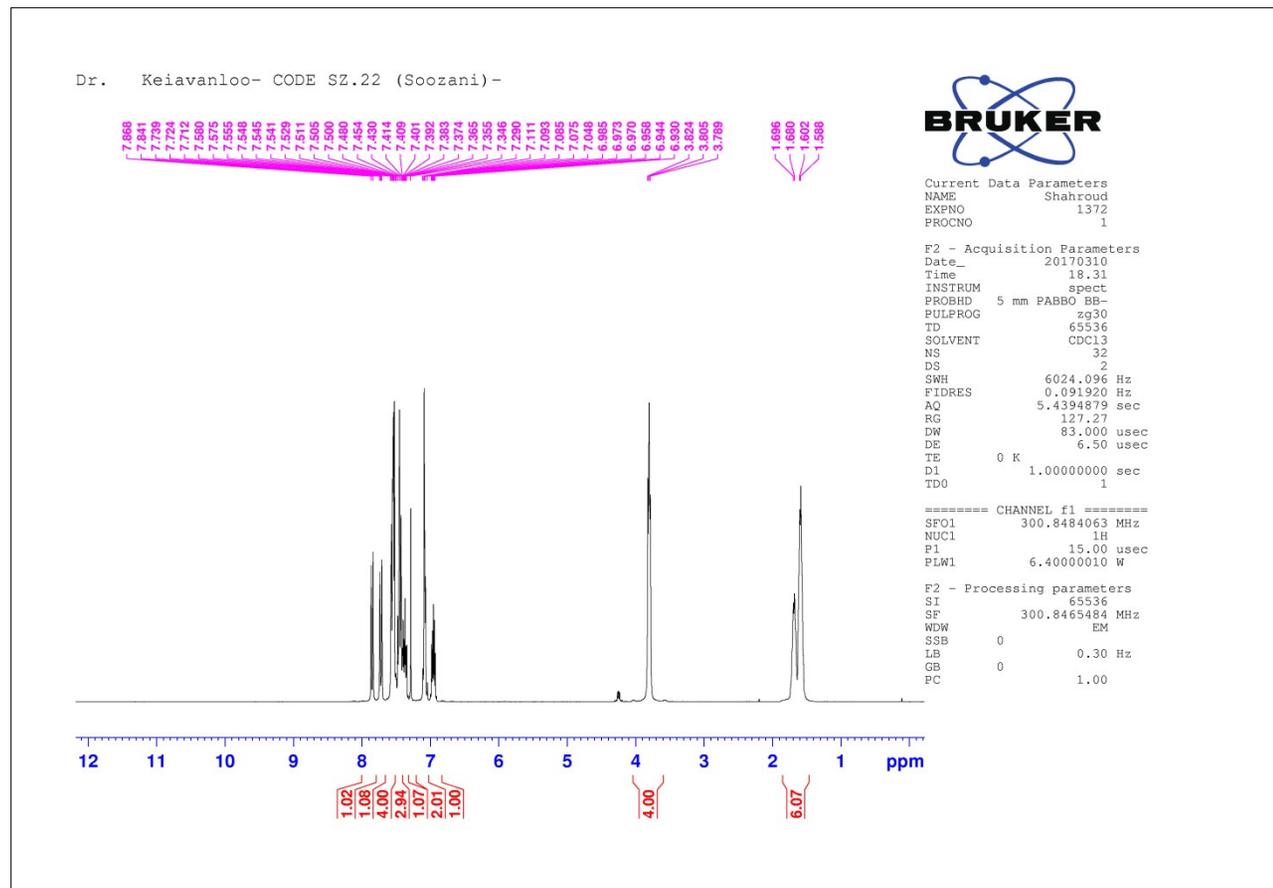
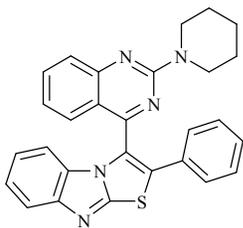


Figure 7 300 MHz ^1H NMR spectrum of compound **5c** in CDCl_3

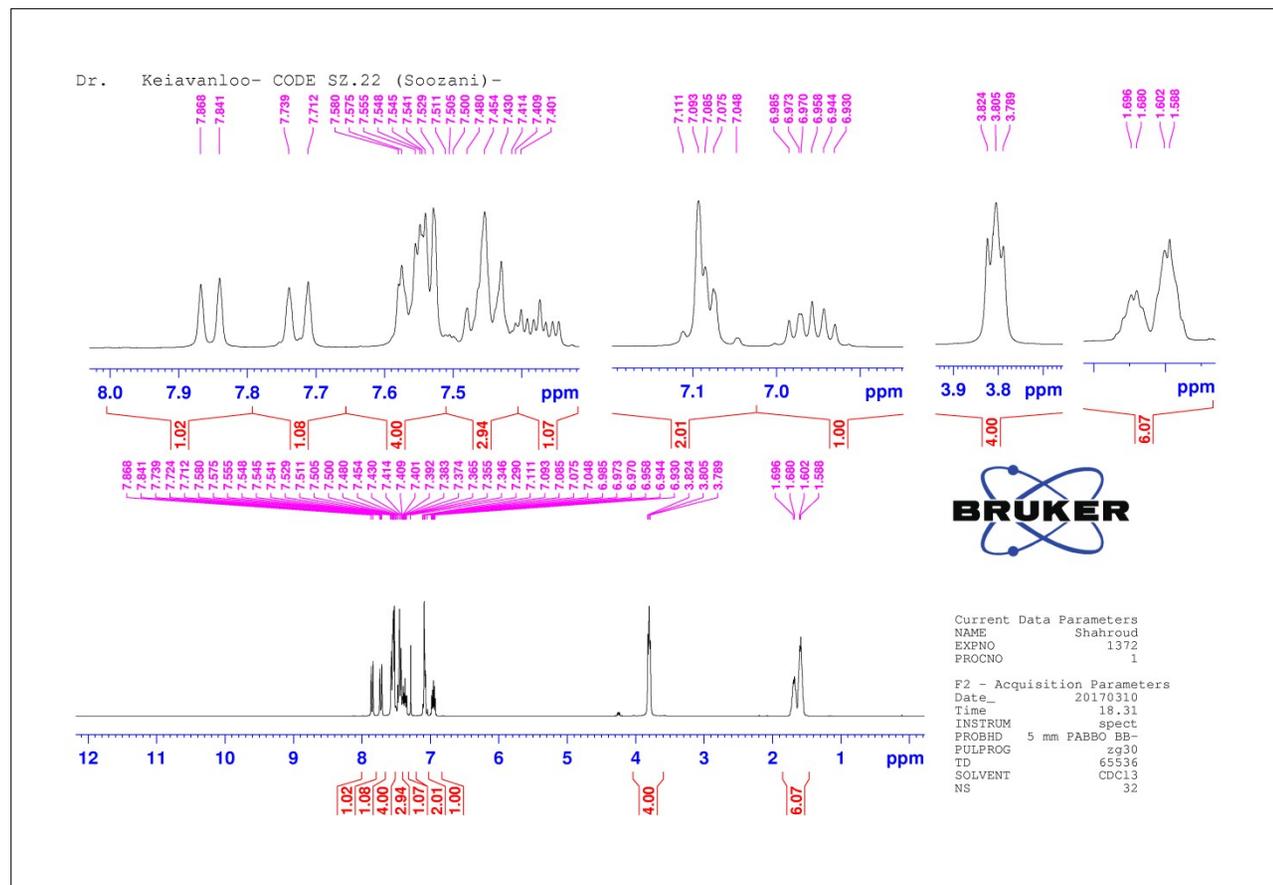
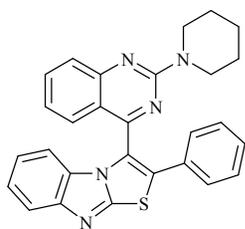


Figure 8 300 MHz ^1H NMR spectrum of compound **5c** in CDCl_3

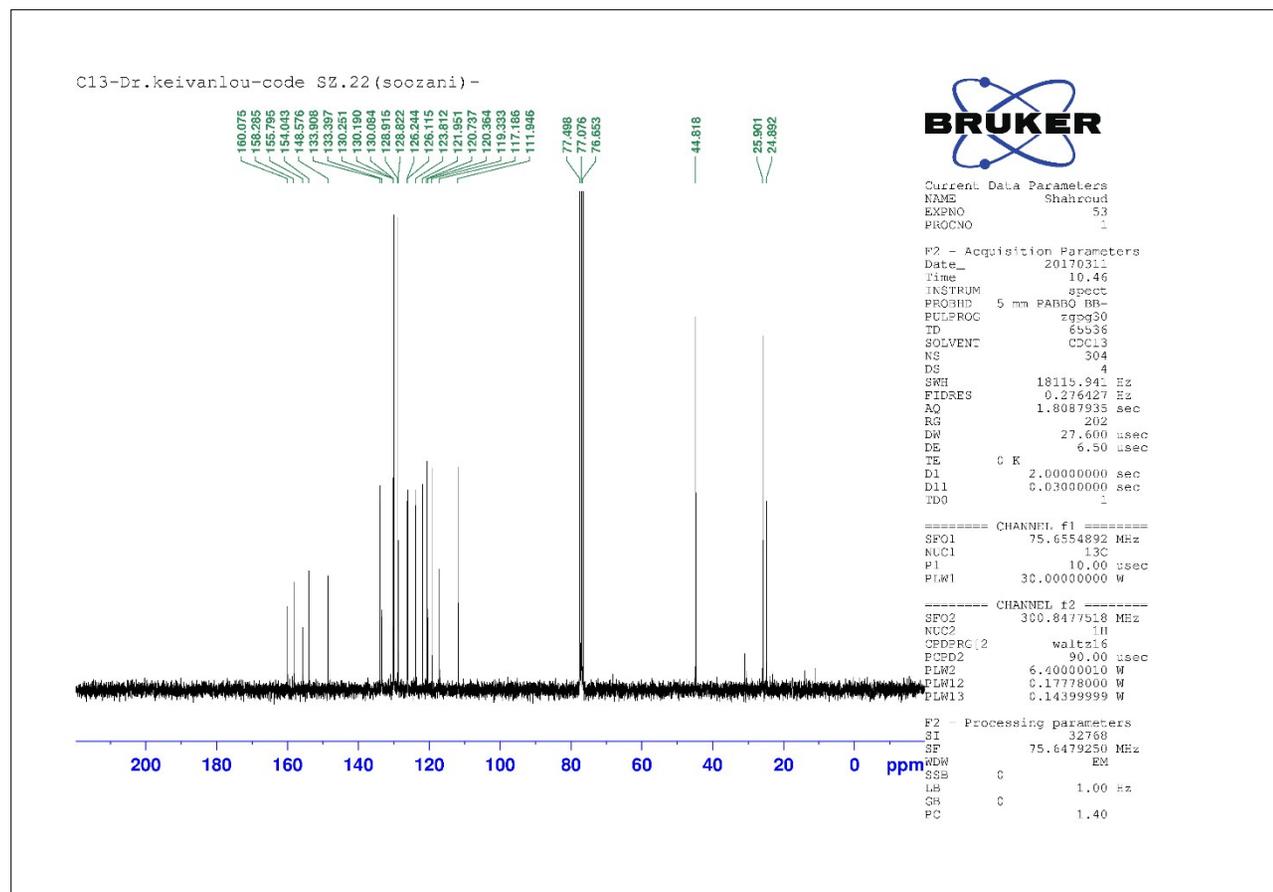
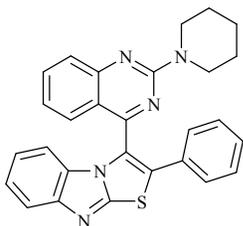


Figure 9 75 MHz ^{13}C NMR spectrum of compound **5c** in CDCl_3

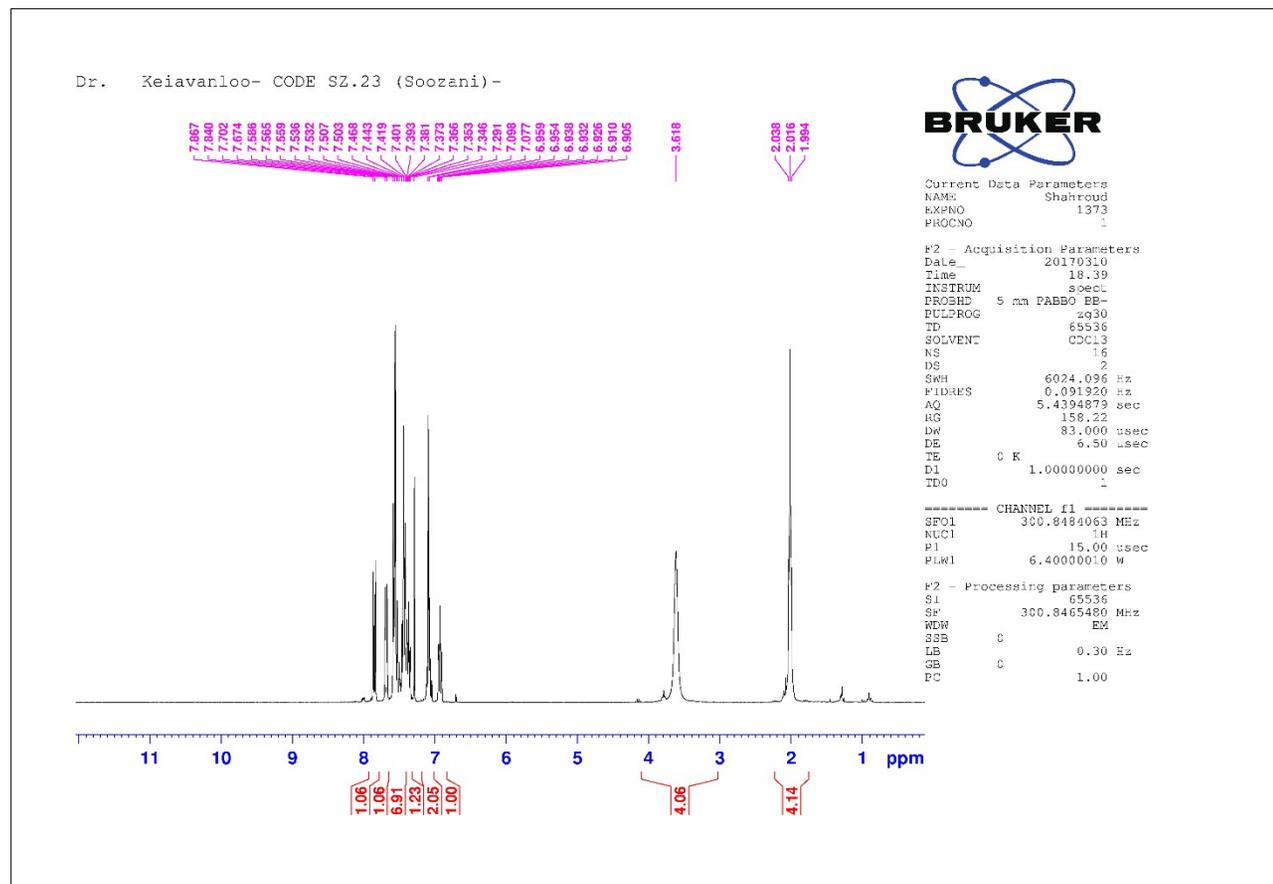
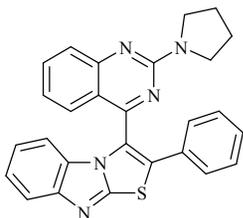


Figure 10 300 MHz ¹H NMR spectrum of compound **5d** in CDCl₃

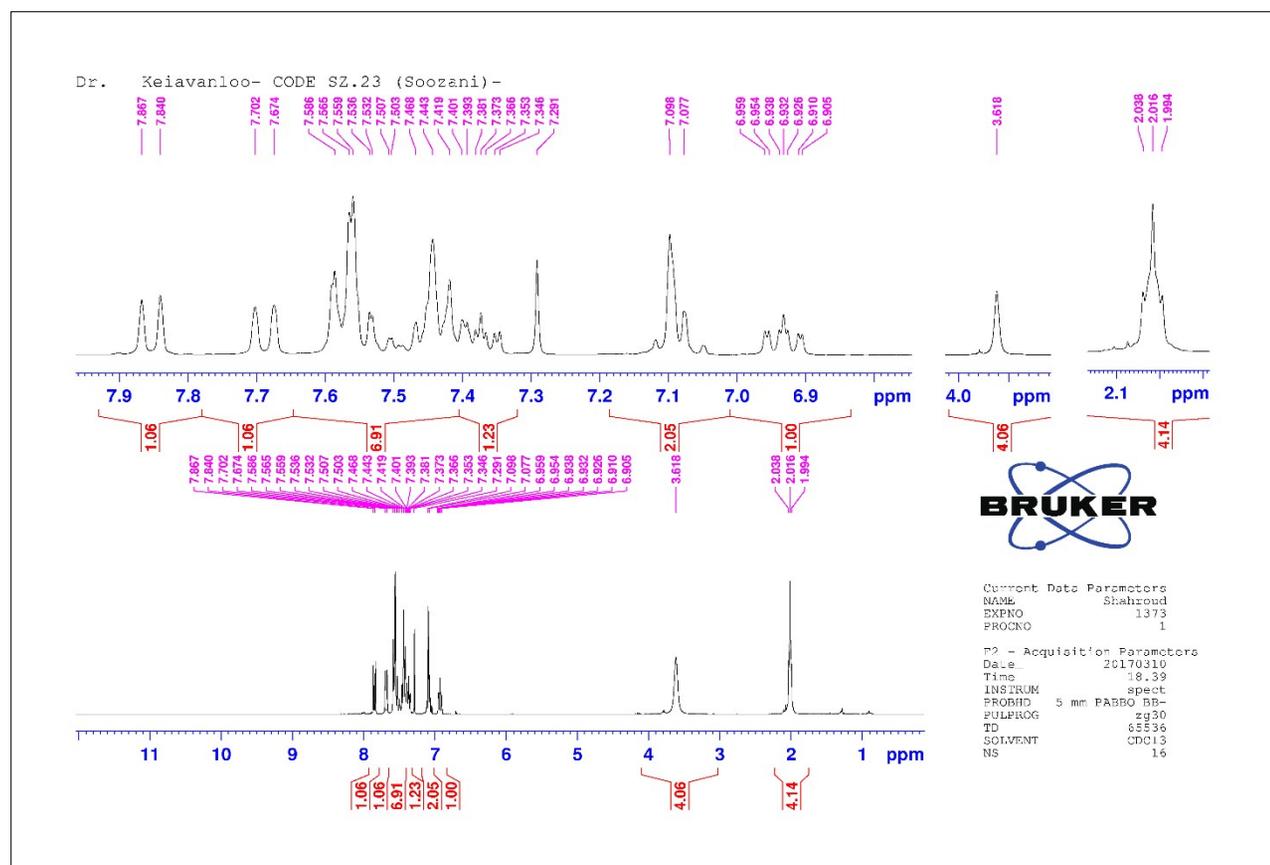
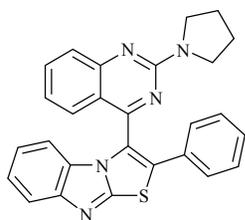


Figure 11 300 MHz ^1H NMR expand spectrum of compound **5d** in CDCl_3

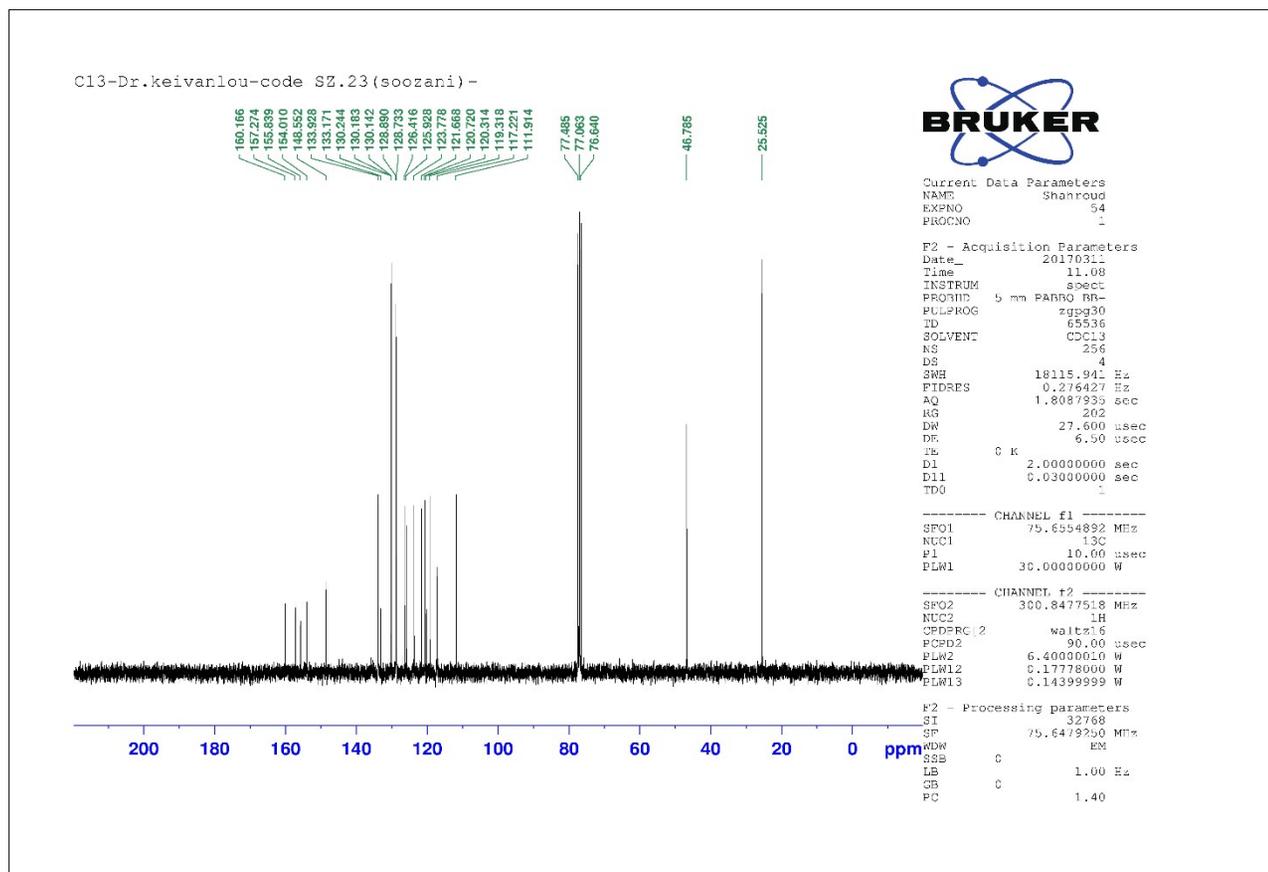
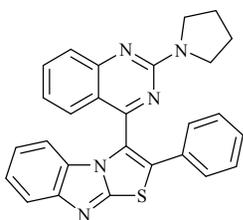


Figure 12 75 MHz ^{13}C NMR spectrum of compound **5d** in CDCl_3

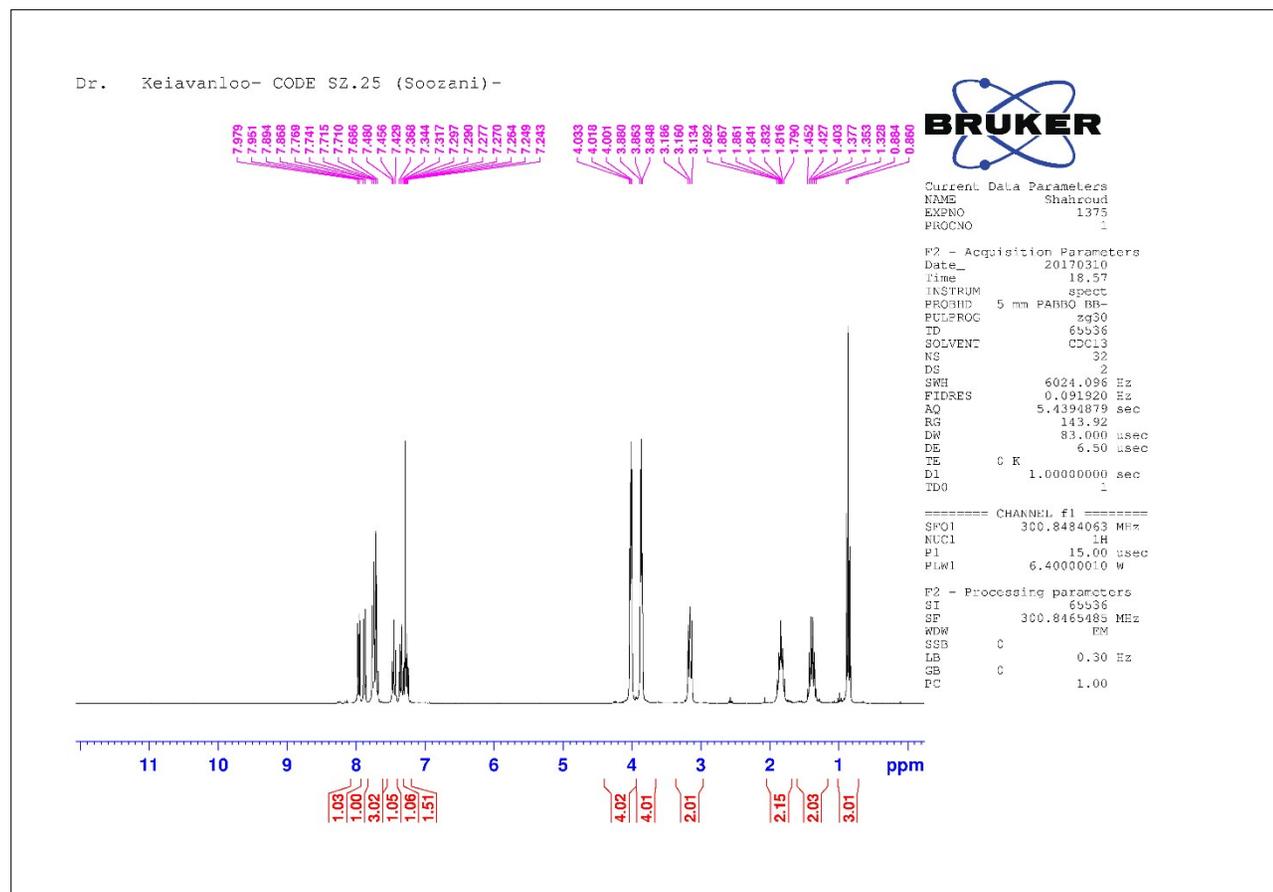
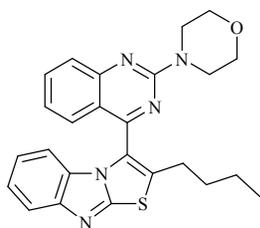


Figure 13 300 MHz ^1H NMR spectrum of compound **5e** in CDCl_3

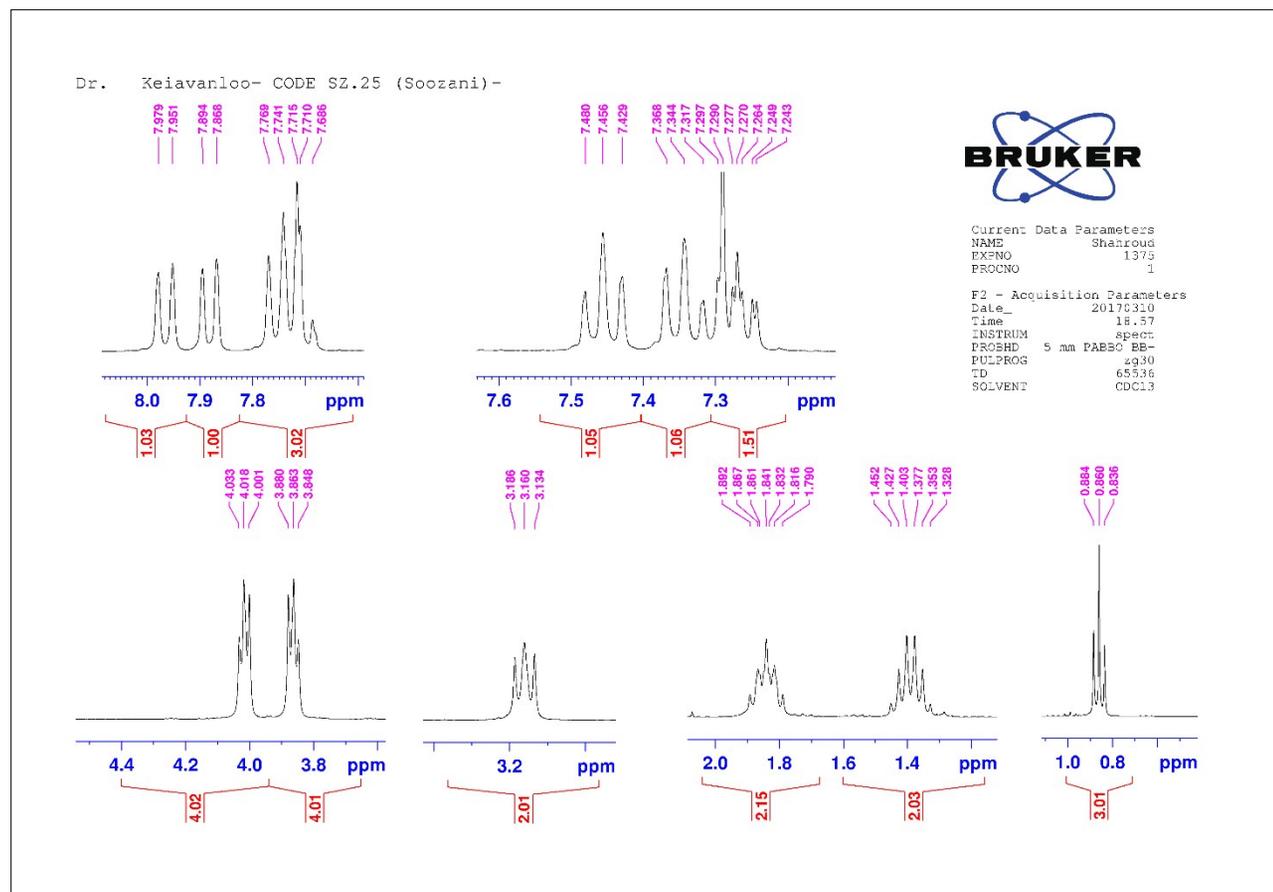
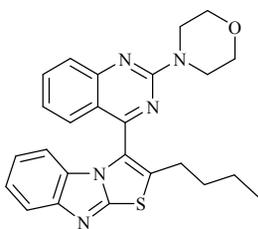


Figure 14 300 MHz ^1H NMR expand spectrum of compound **5e** in CDCl_3

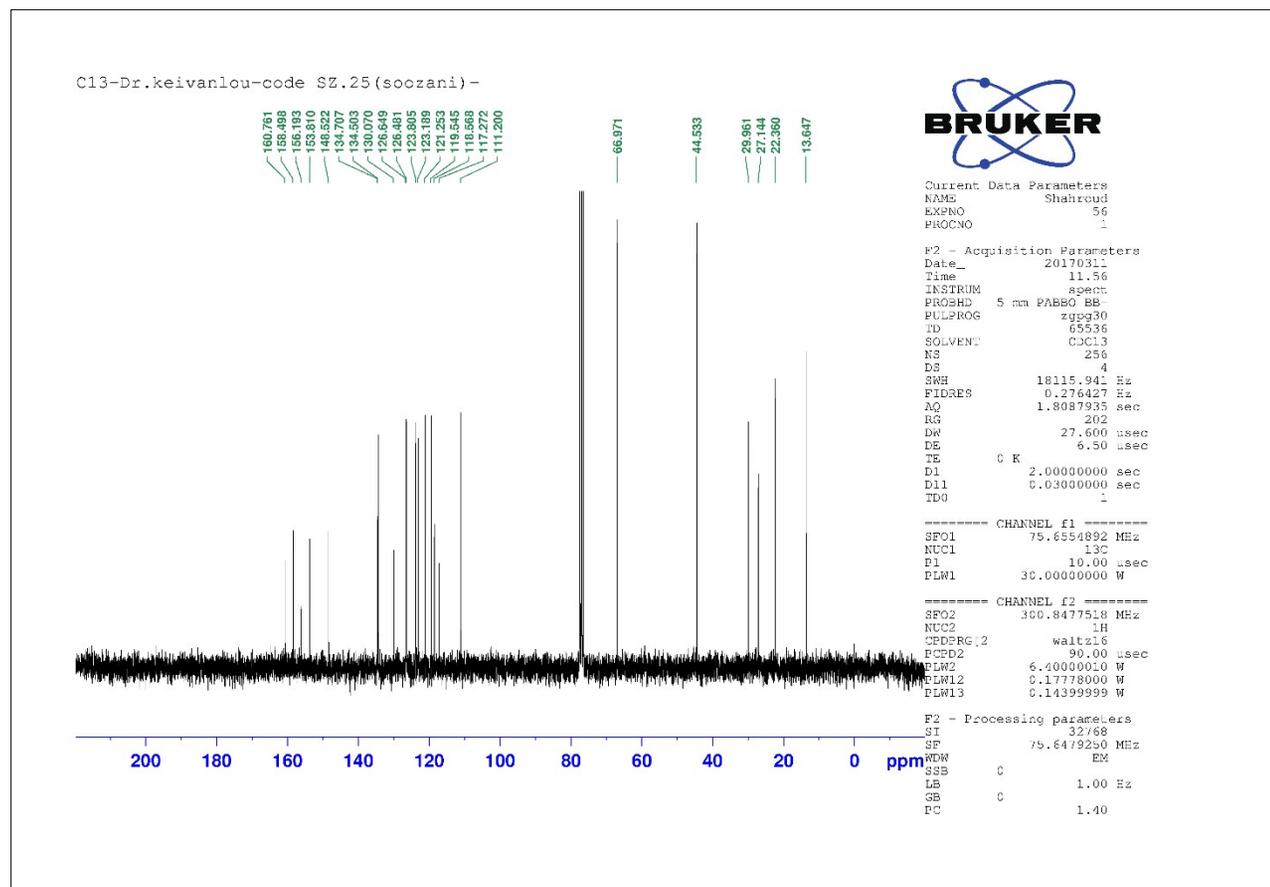
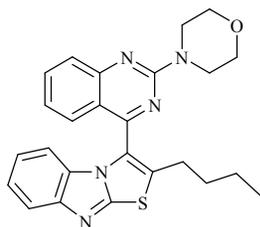


Figure 15 75 MHz ^{13}C NMR spectrum of compound 5e in CDCl_3

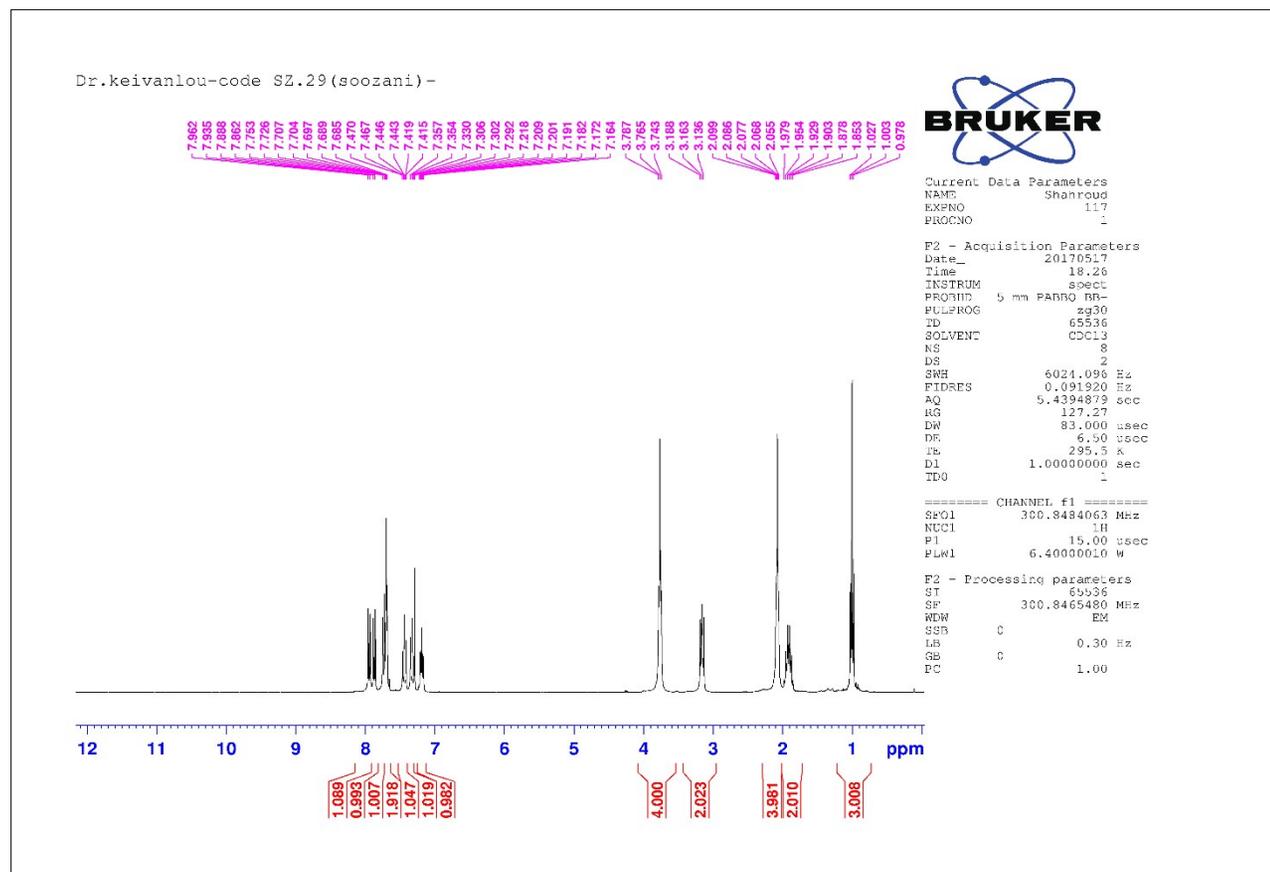
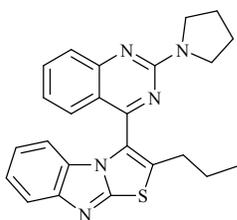


Figure 16 300 MHz ^1H NMR spectrum of compound **5f** in CDCl_3

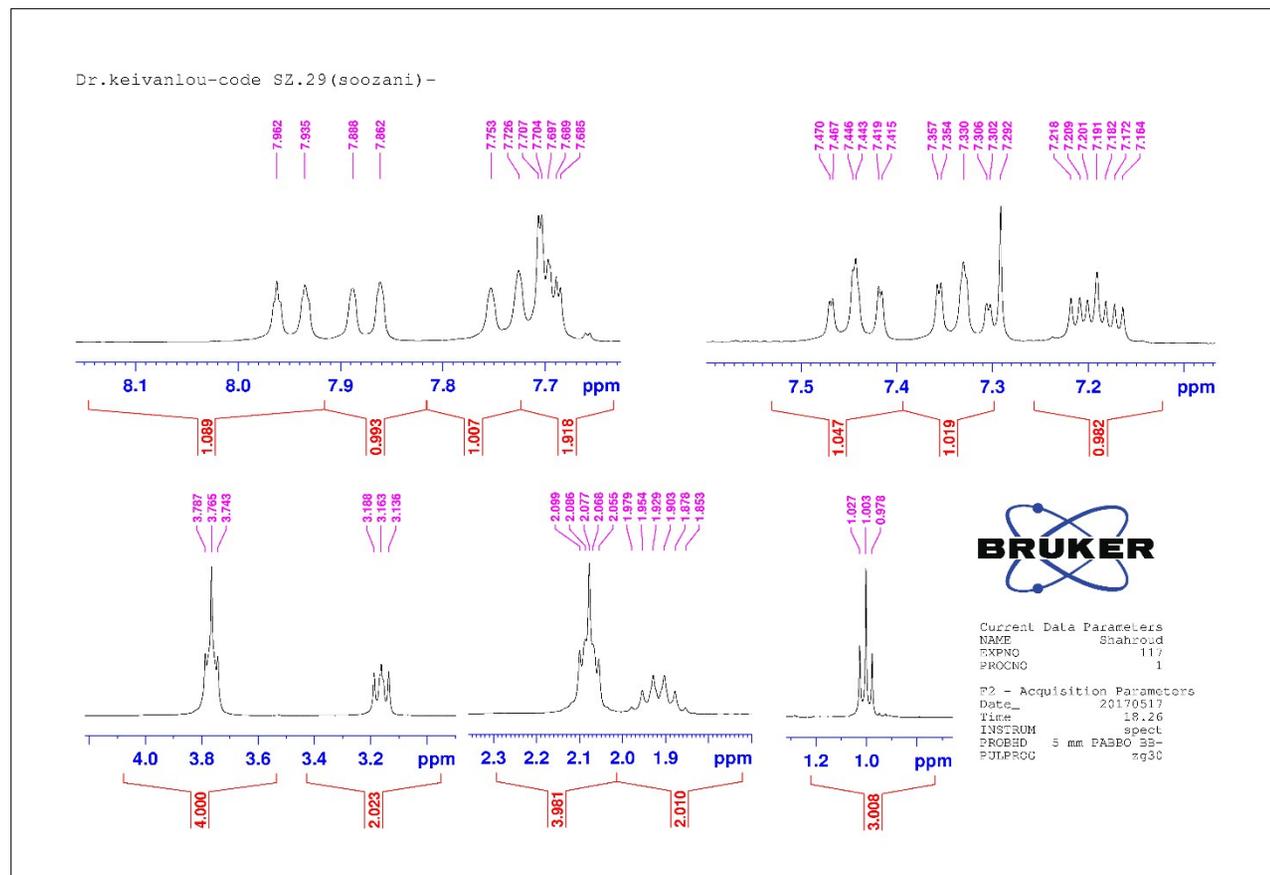
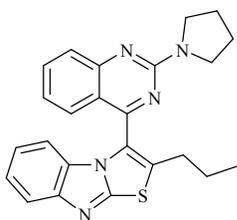


Figure 17 300 MHz ^1H NMR expand spectrum of compound **5f** in CDCl_3

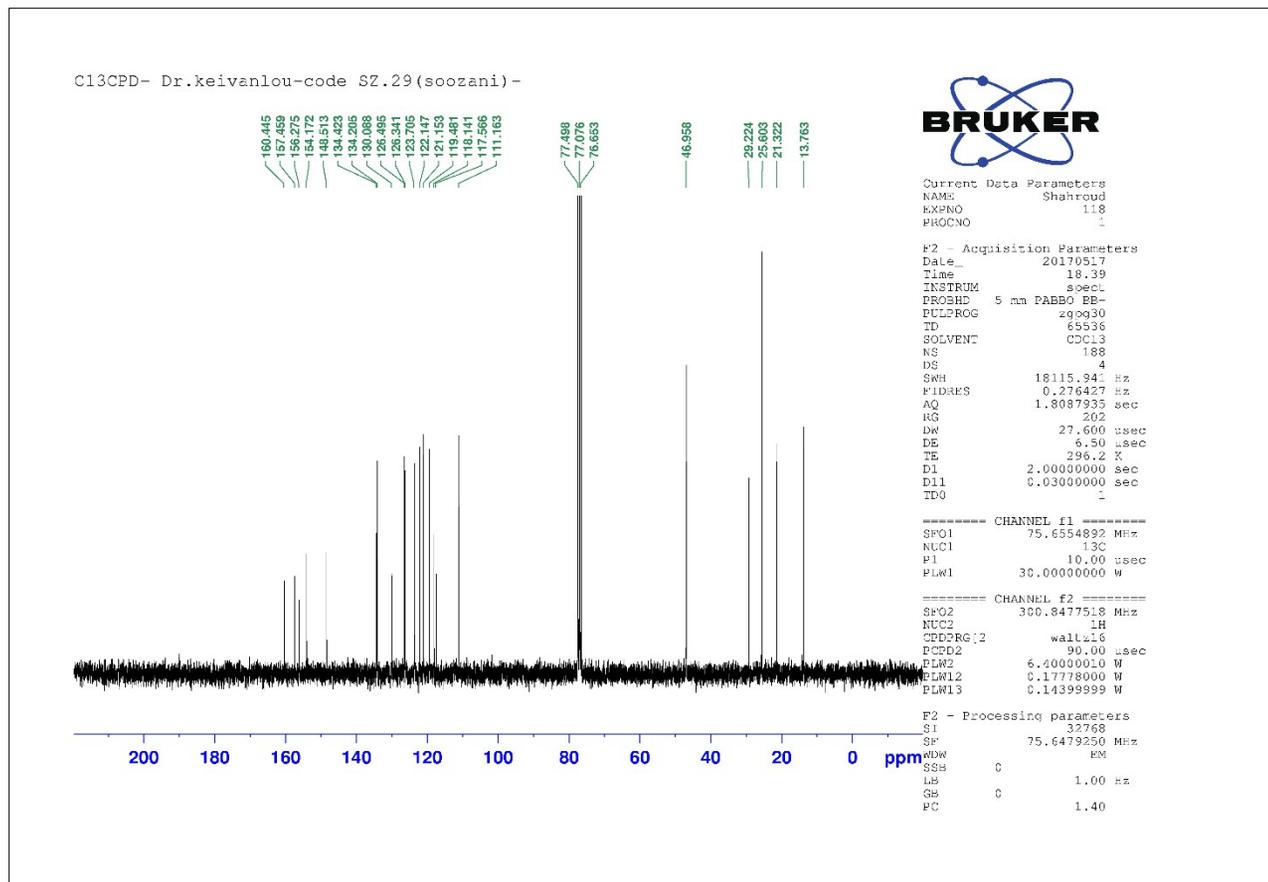
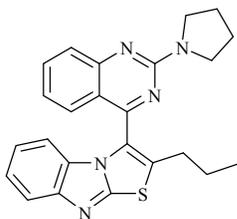


Figure 18 75 MHz ^{13}C NMR spectrum of compound 5f in CDCl_3

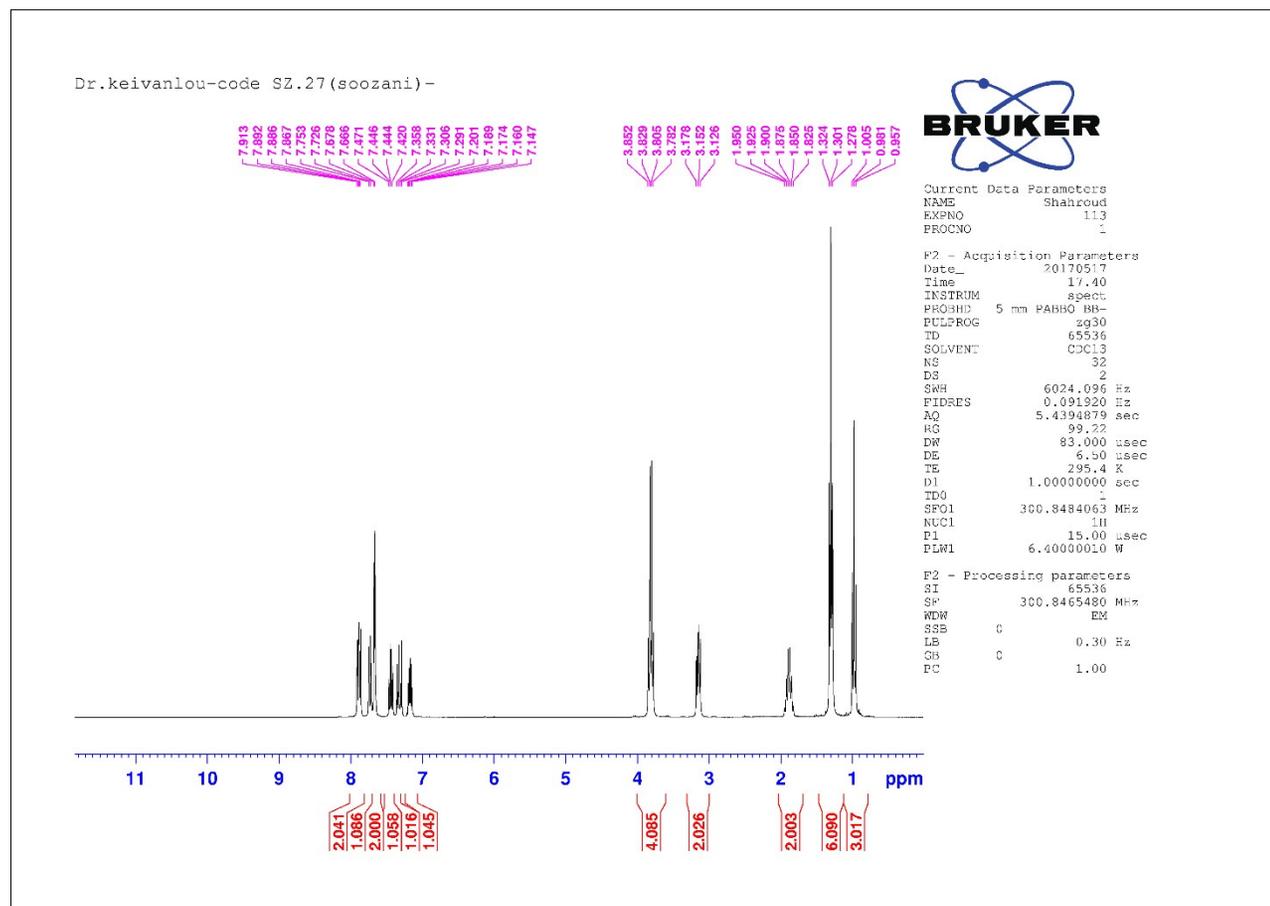
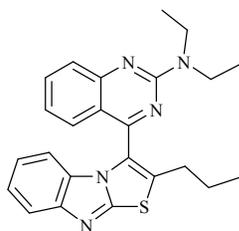


Figure 19 300 MHz ^1H NMR spectrum of compound **5g** in CDCl_3

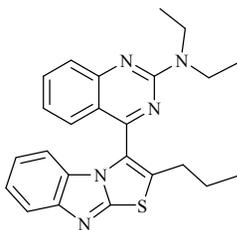


Figure 20 300 MHz ^1H NMR expand spectrum of compound **5g** in CDCl_3

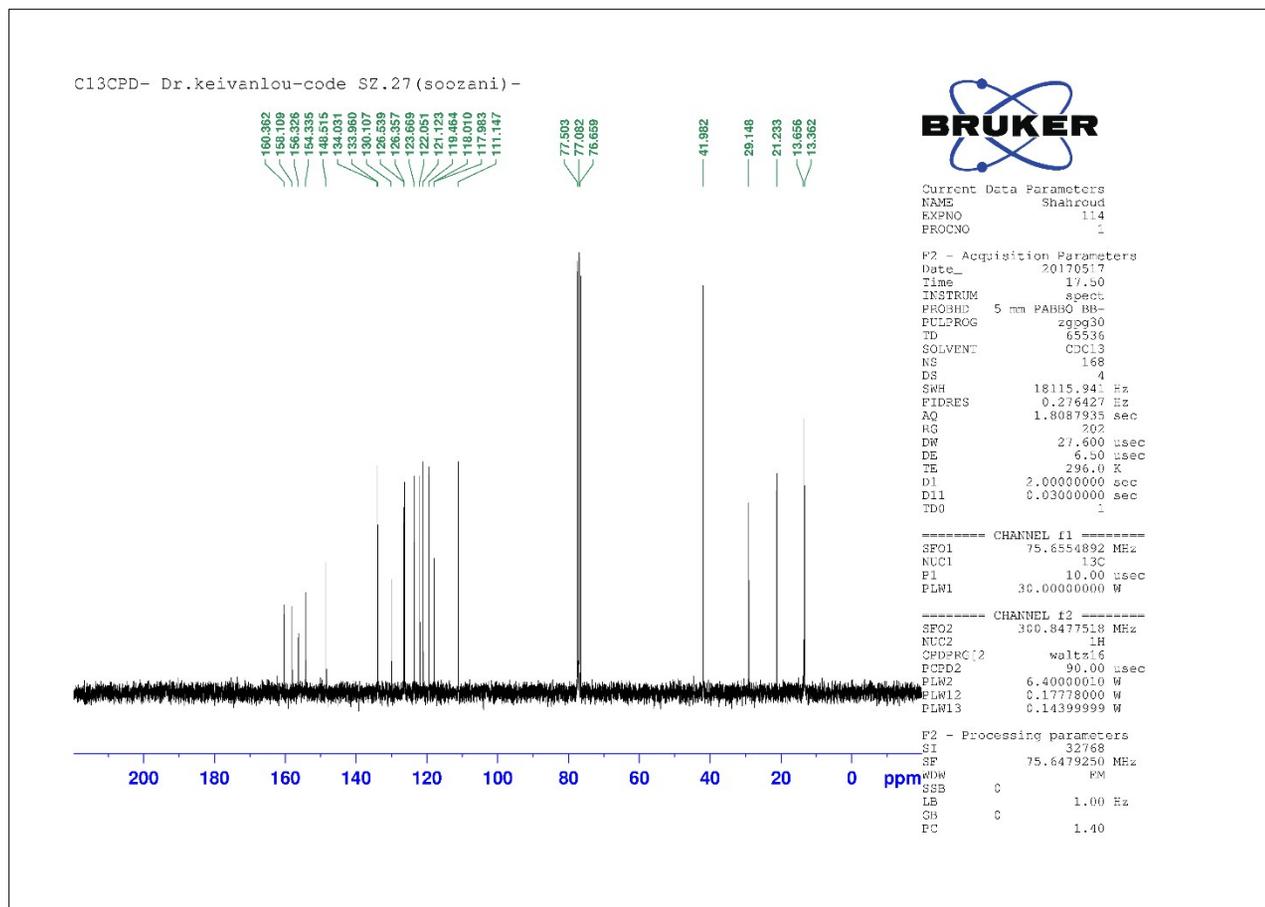
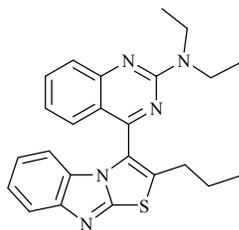


Figure 21 75 MHz ^{13}C NMR spectrum of compound **5g** in CDCl_3

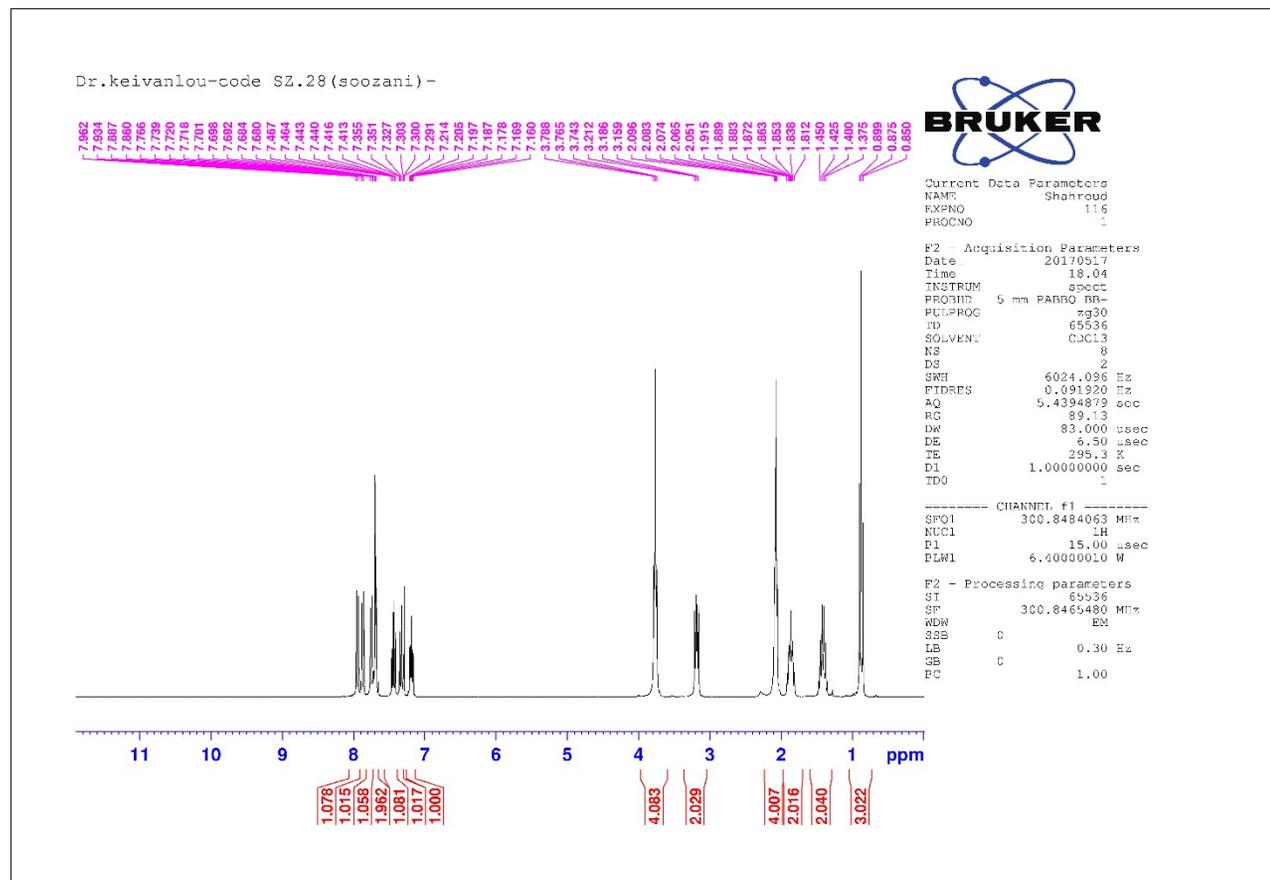
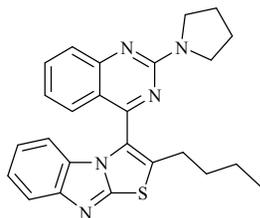


Figure 22 300 MHz ^1H NMR spectrum of compound **5h** in CDCl_3

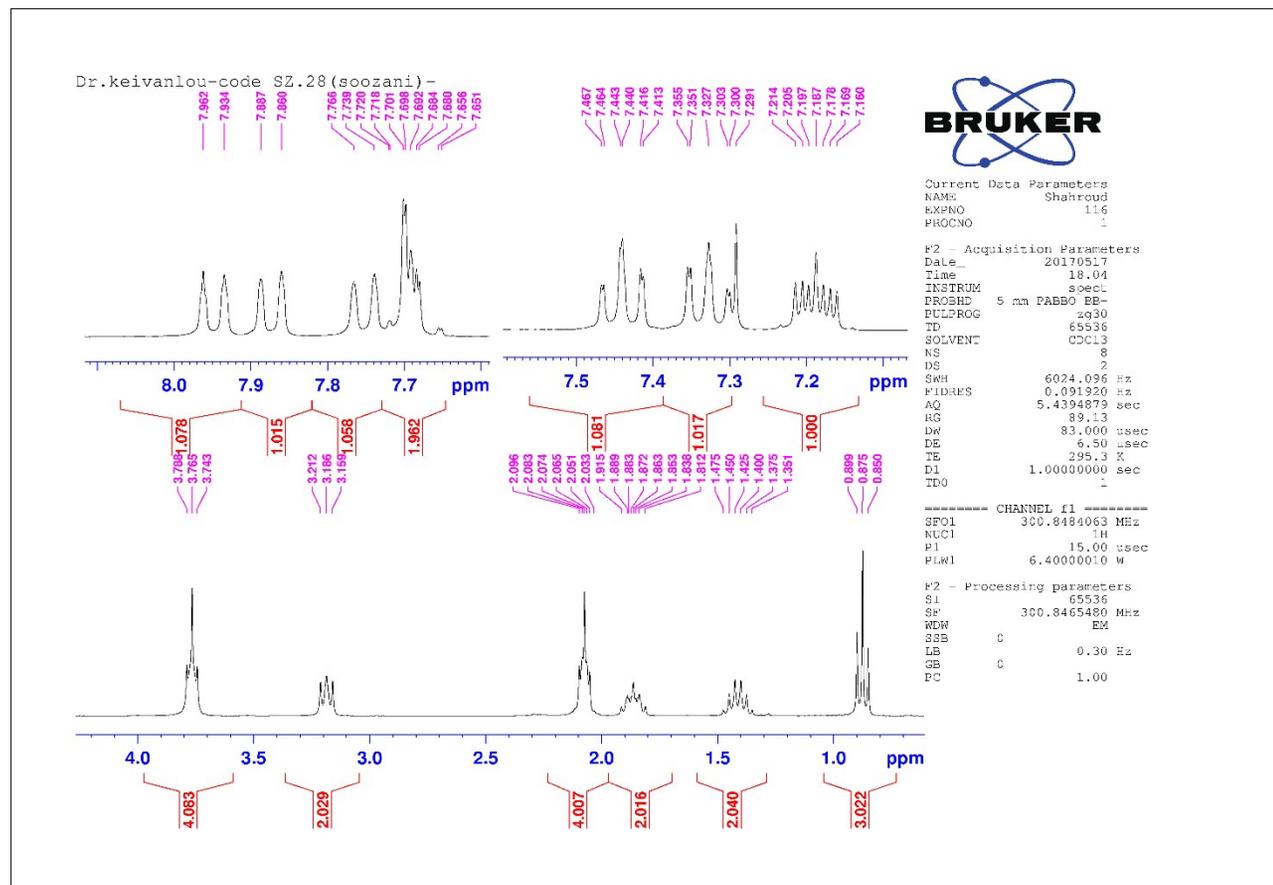
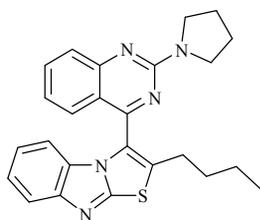


Figure 23 300 MHz ¹H NMR expand spectrum of compound **5h** in CDCl₃

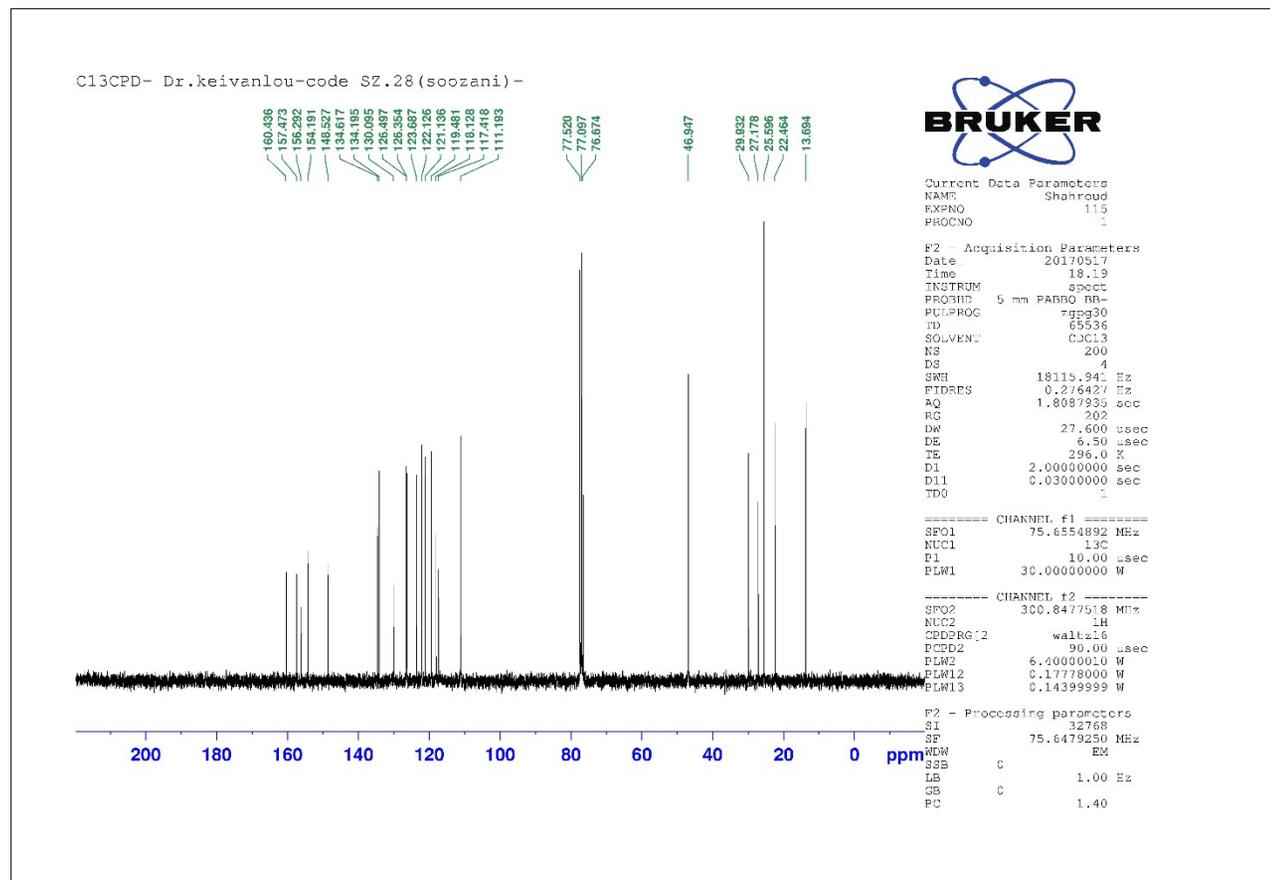
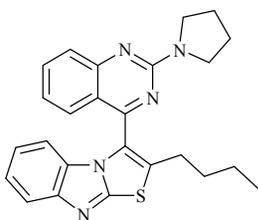


Figure 24 75 MHz ^{13}C NMR spectrum of compound **5h** in CDCl_3

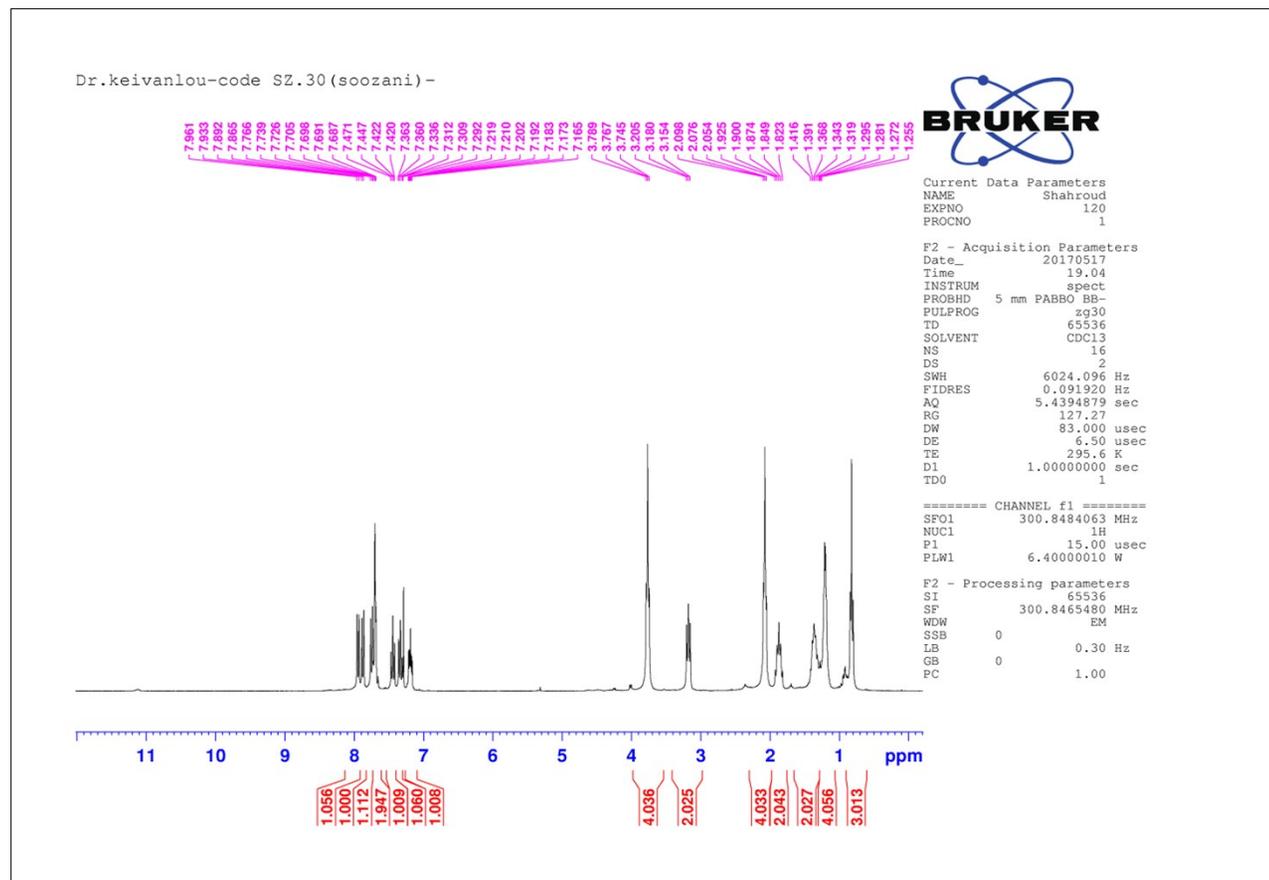
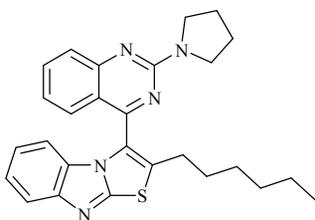


Figure 25 300 MHz ^1H NMR spectrum of compound **5i** in CDCl_3

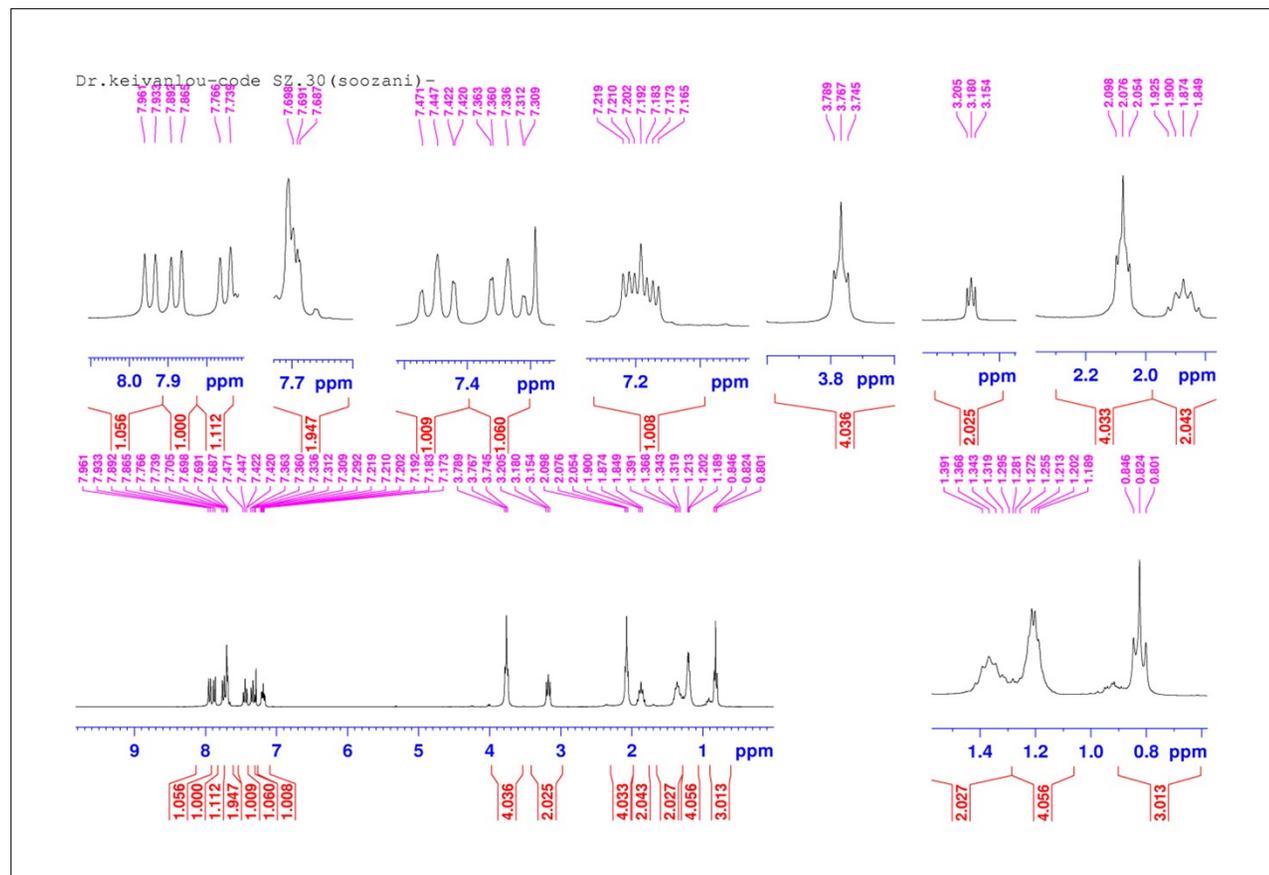
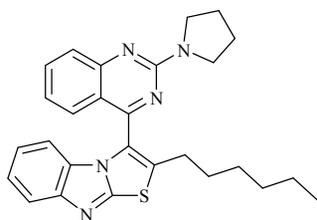


Figure 26 300 MHz ^1H NMR expand spectrum of compound **5i** in CDCl_3

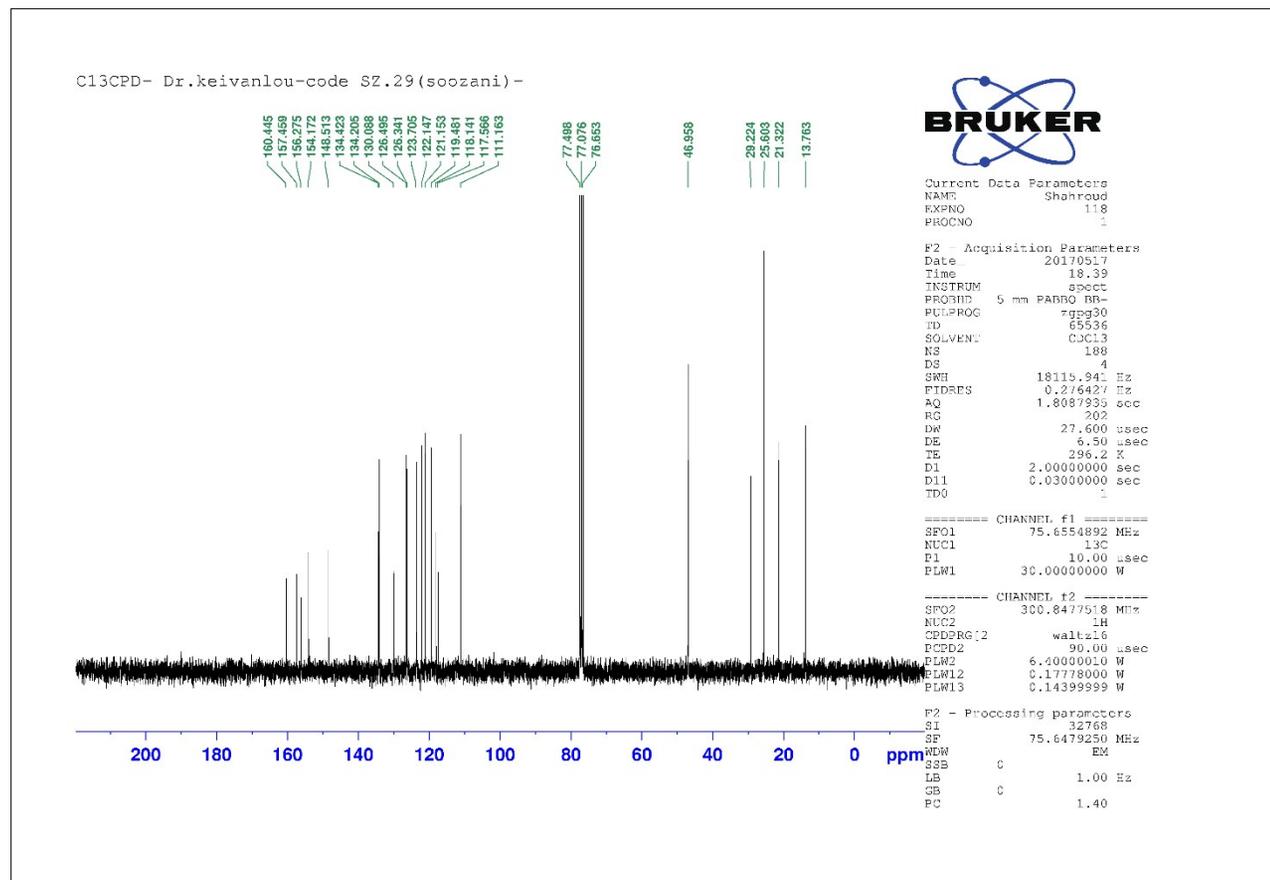
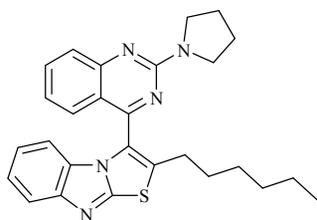


Figure 27 75 MHz ^{13}C NMR spectrum of compound **5i** in CDCl_3

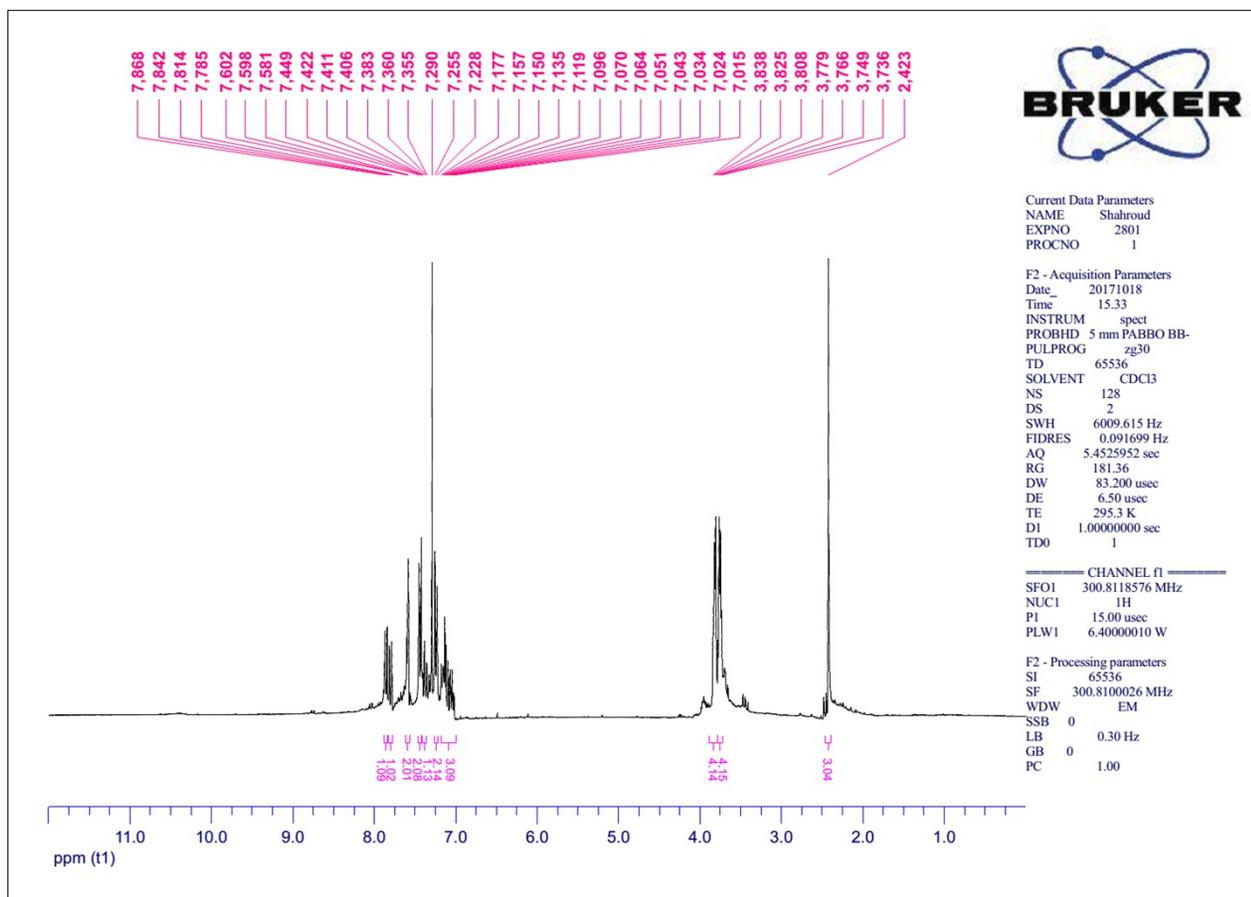
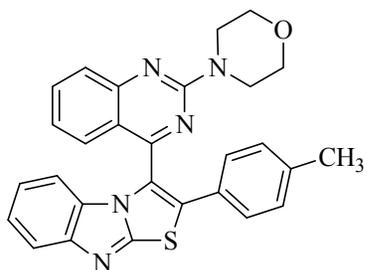


Figure 28 300 MHz ^1H NMR spectrum of compound **5j** in CDCl_3

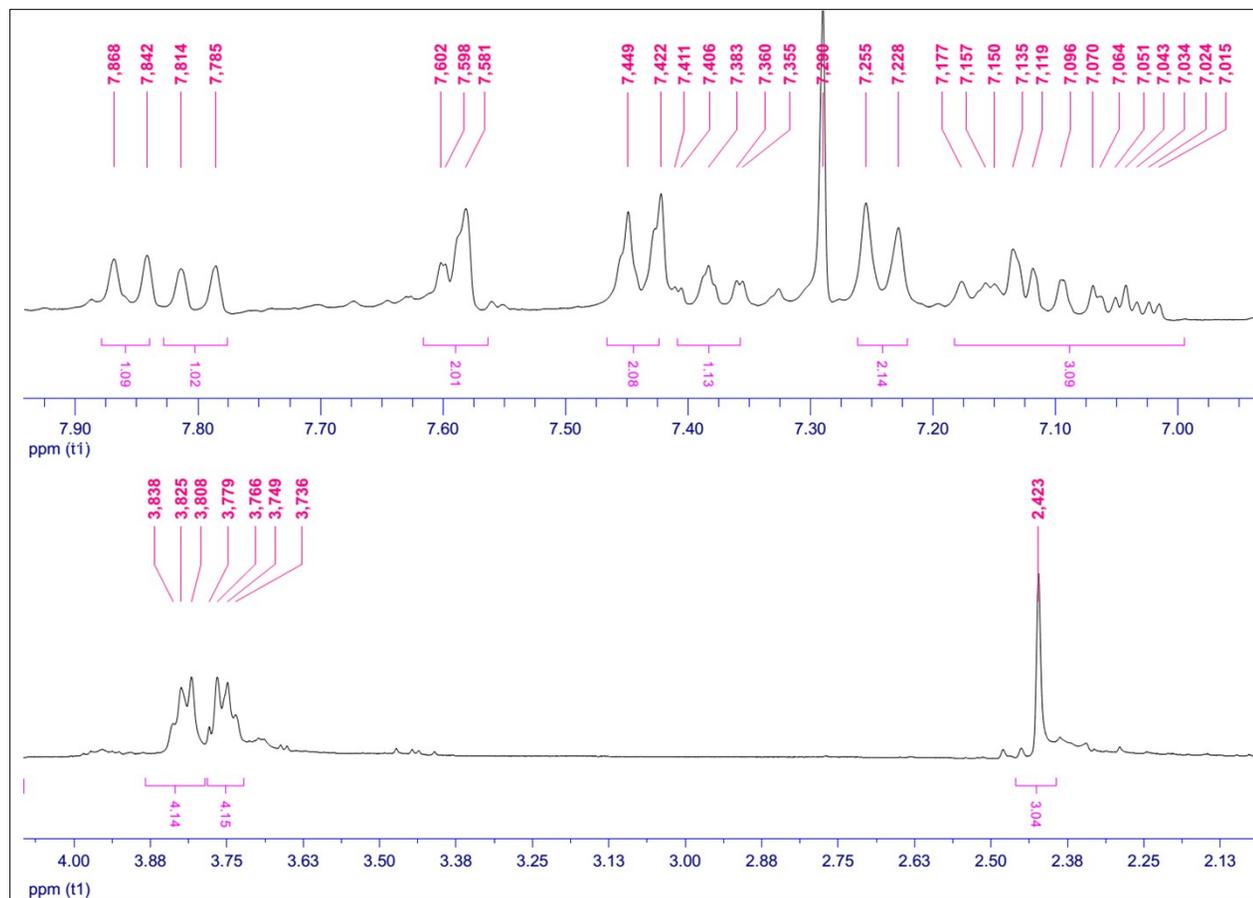
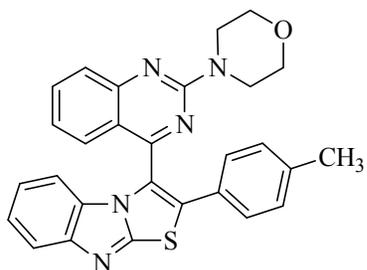


Figure 29 300 MHz ^1H NMR expand spectrum of compound **5j** in CDCl_3

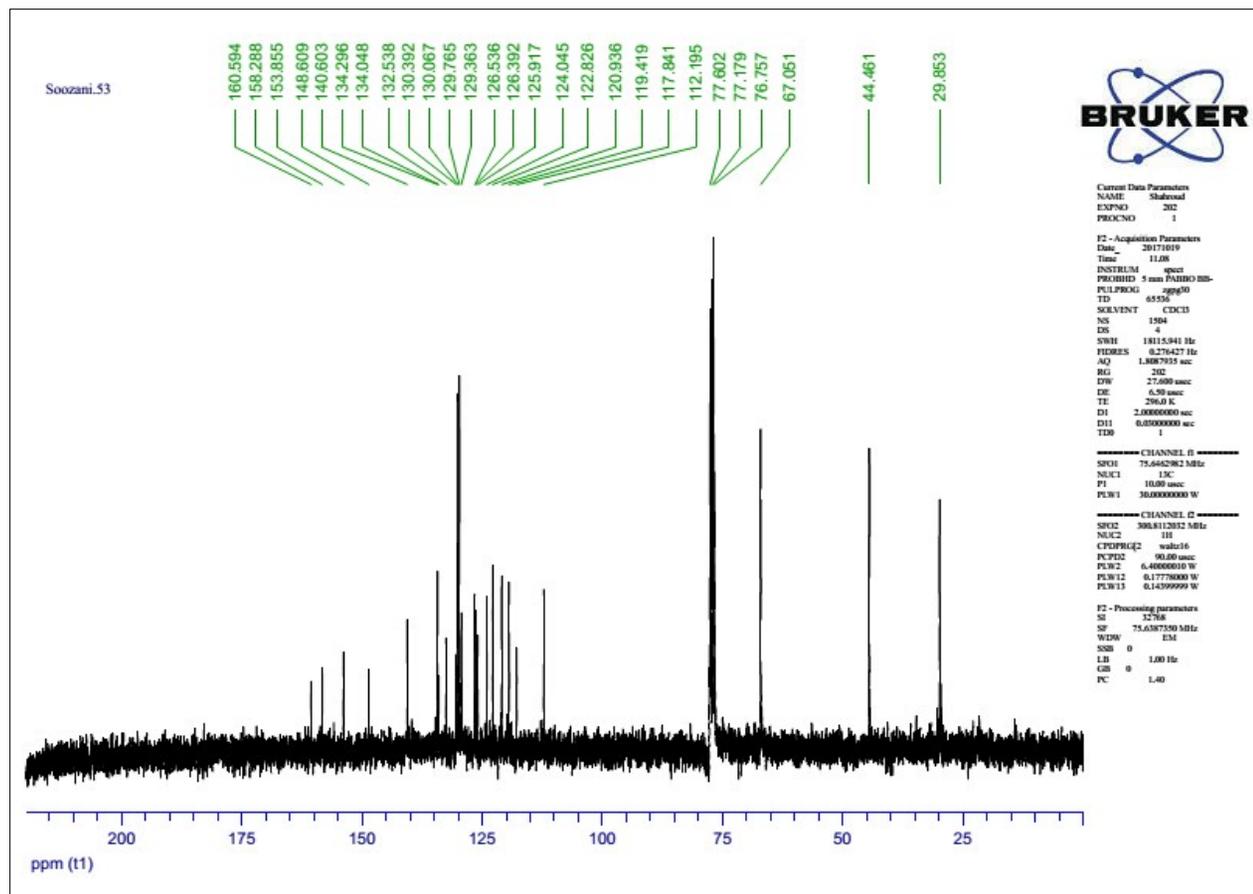
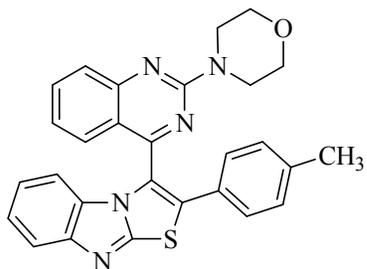
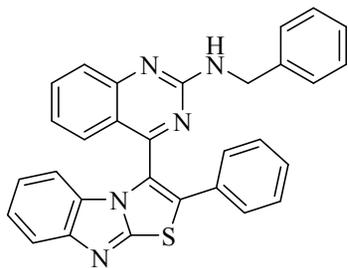
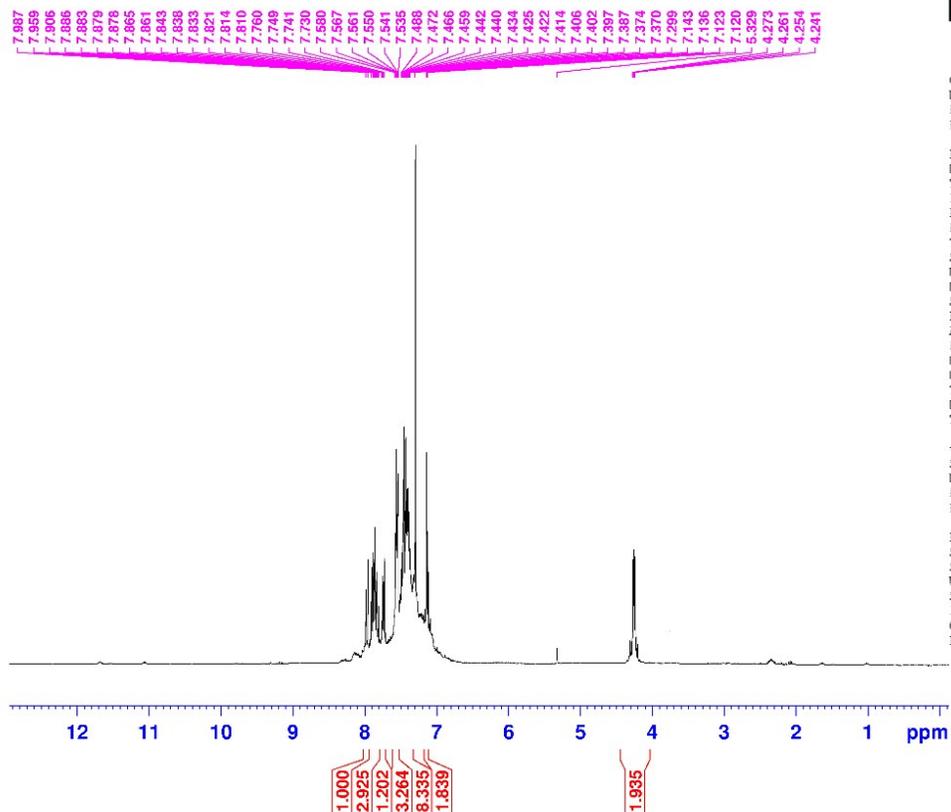


Figure 30 75 MHz ^{13}C NMR spectrum of compound **5j** in CDCl_3



C13CPD- Dr.Keavanloo- CODE SZ62 (Soozani)-



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Figure 31 300 MHz ¹H NMR spectrum of compound 5k in CDCl₃

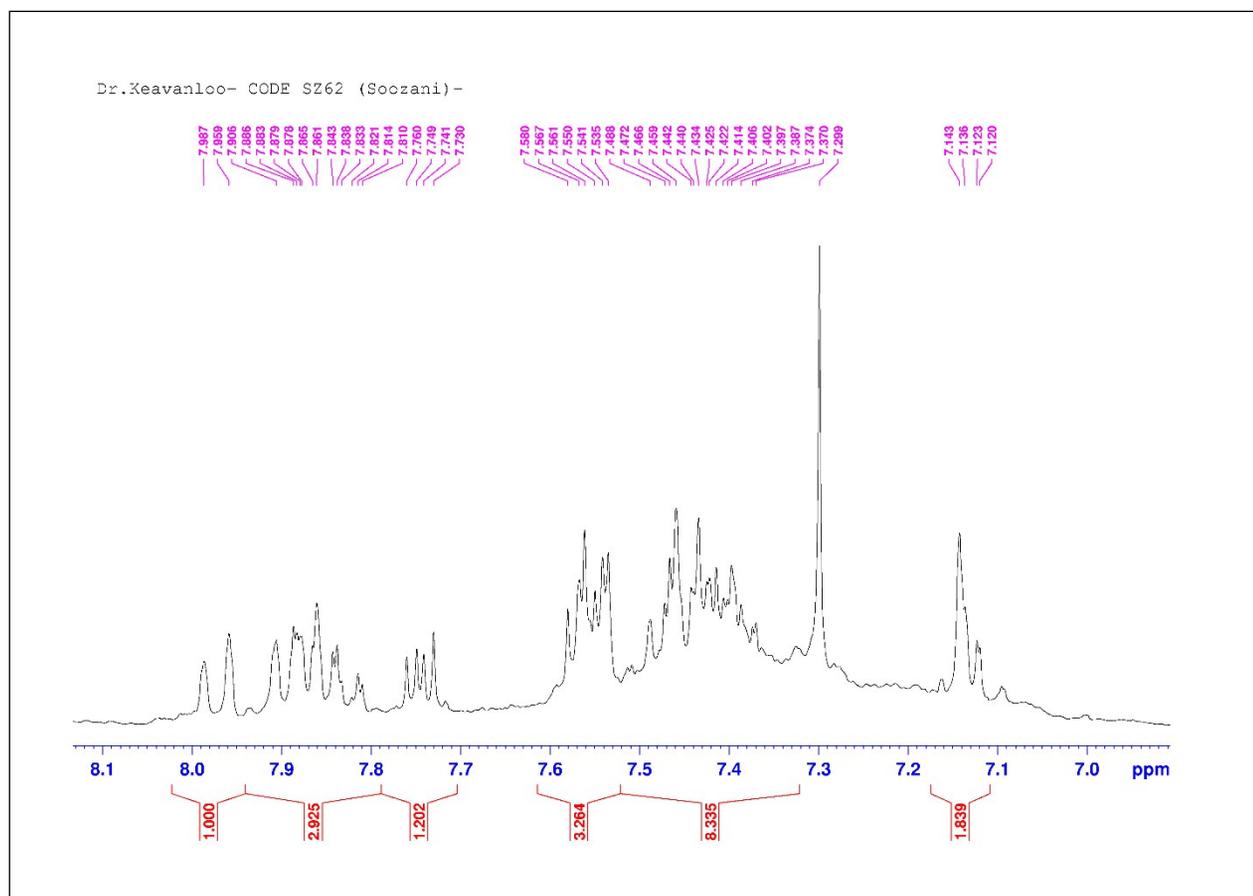
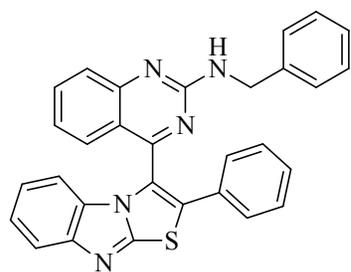
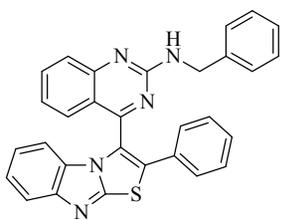
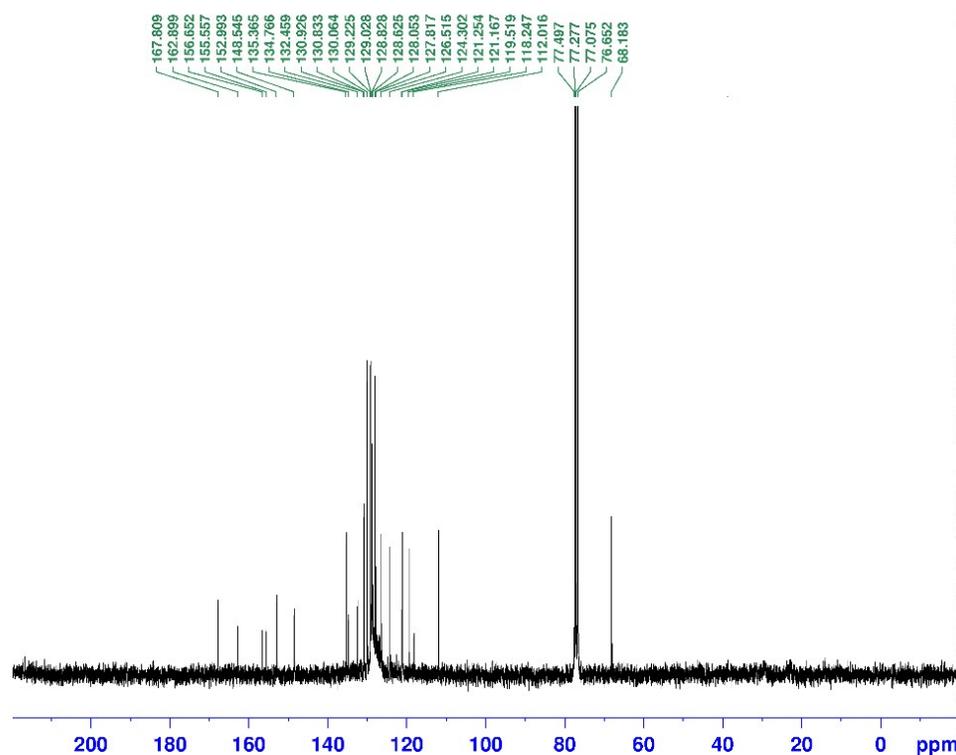


Figure 32 300 MHz ^1H NMR expand spectrum of compound 5k in CDCl_3



C13-Dr.Keyvanlou- code SZ.62 (soozani)-



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Figure 33 75 MHz ¹³C NMR spectrum of compound 5k in CDCl₃

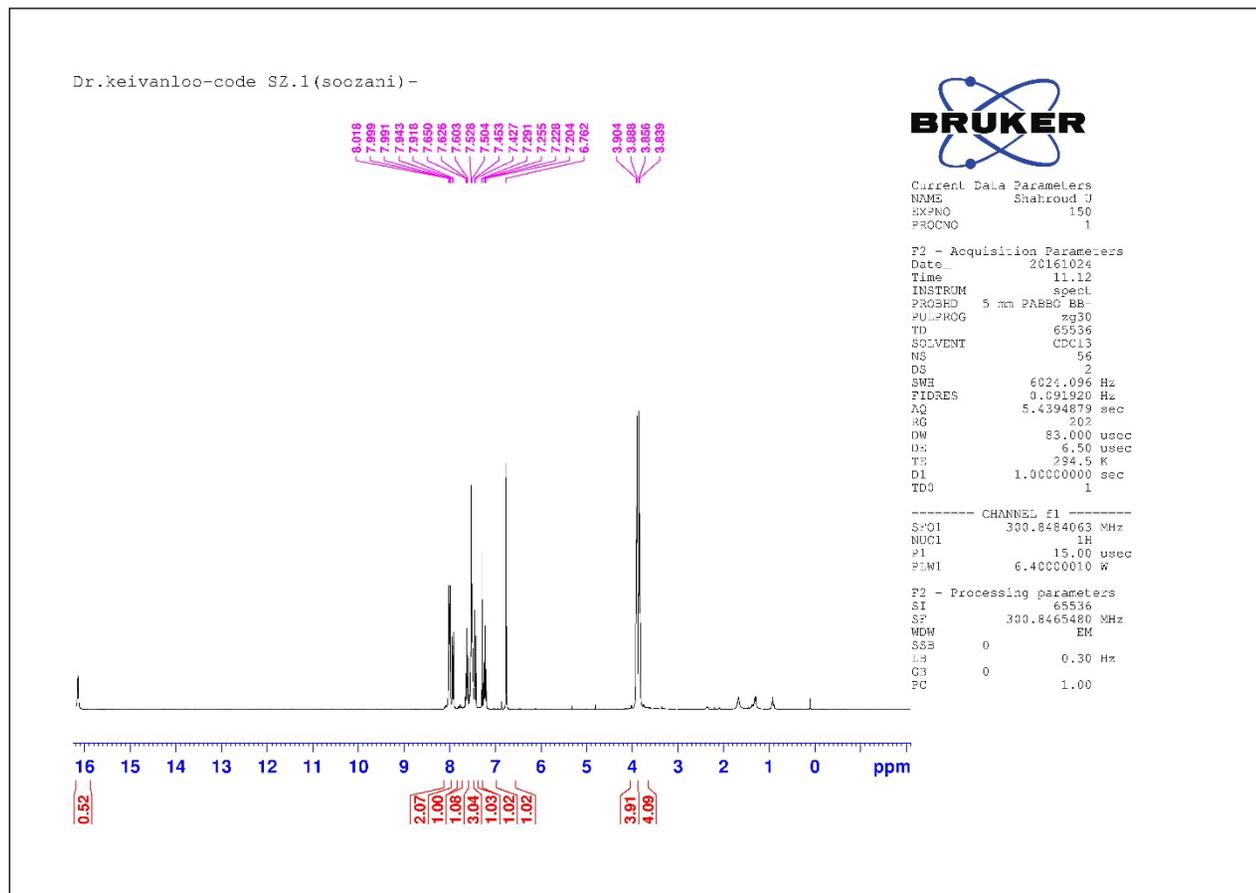
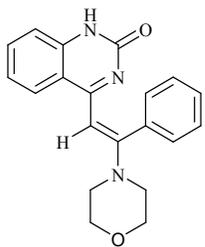


Figure 34 300 MHz ¹H NMR spectrum of compound 6 in CDCl₃

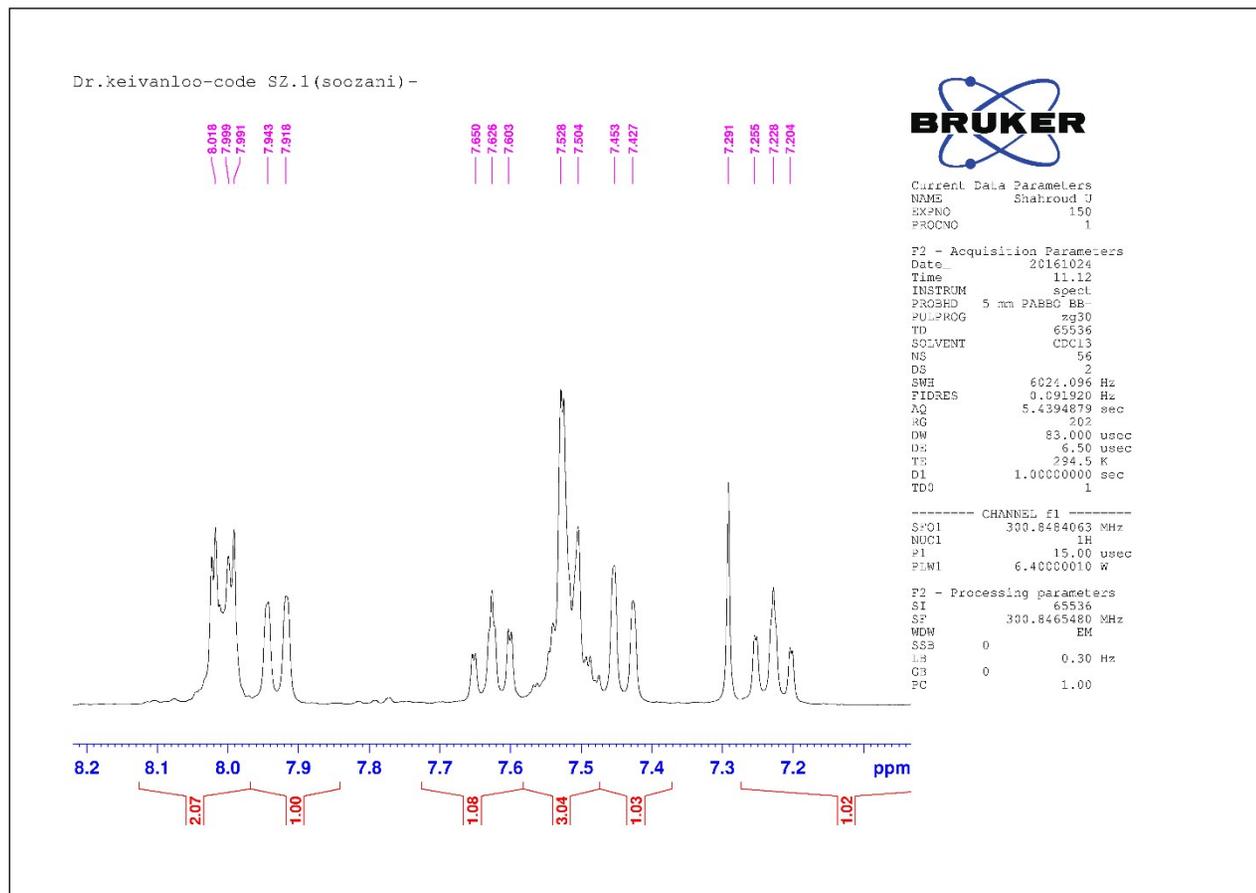
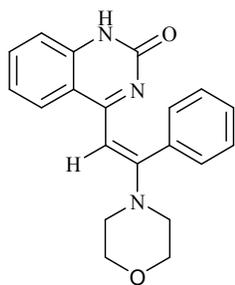


Figure 35 300 MHz ¹H NMR expand spectrum of compound 6 in CDCl₃

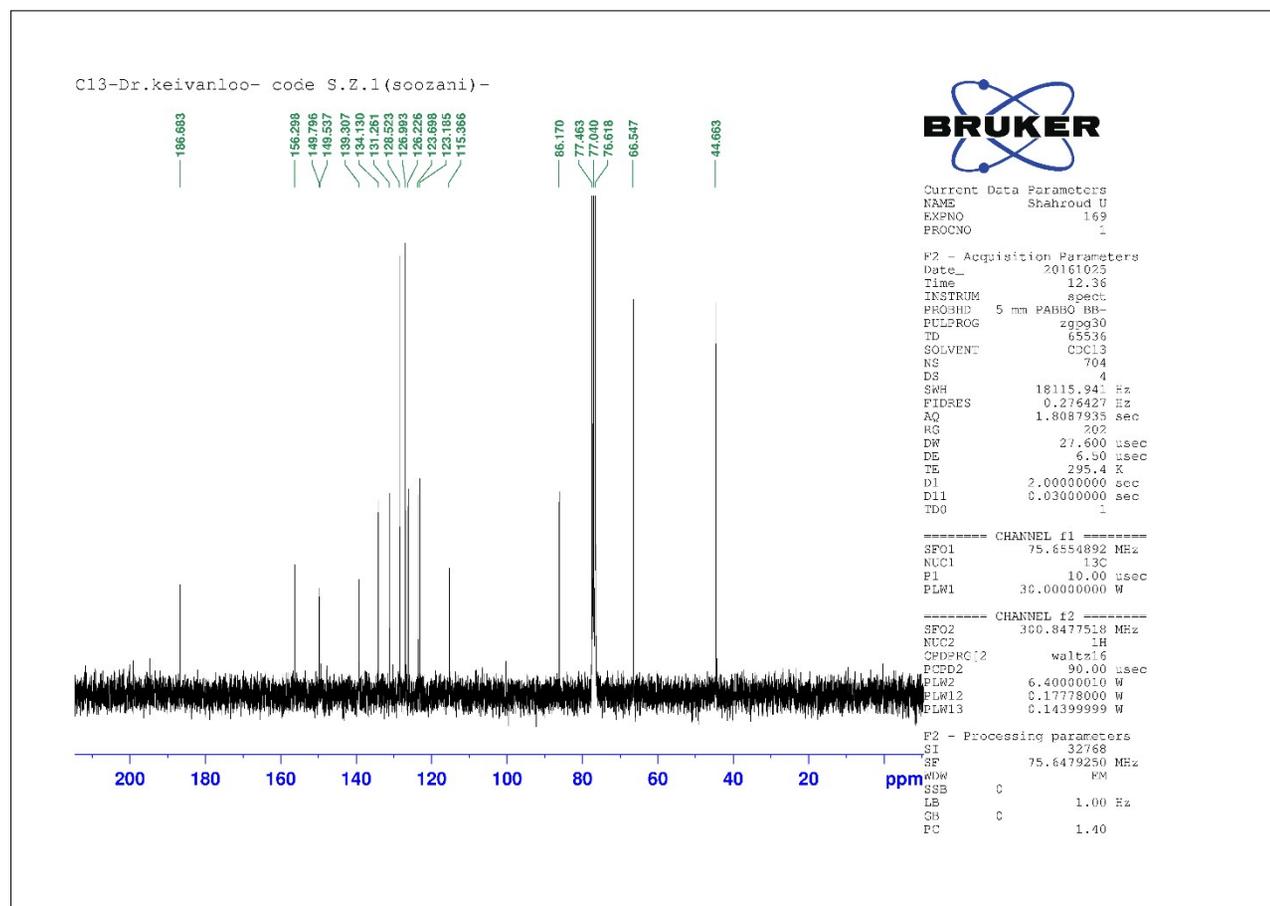
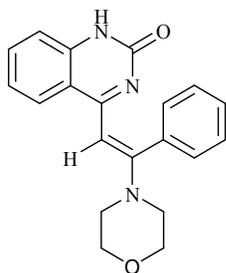


Figure 36 75 MHz ^{13}C NMR spectrum of compound 6 in CDCl_3

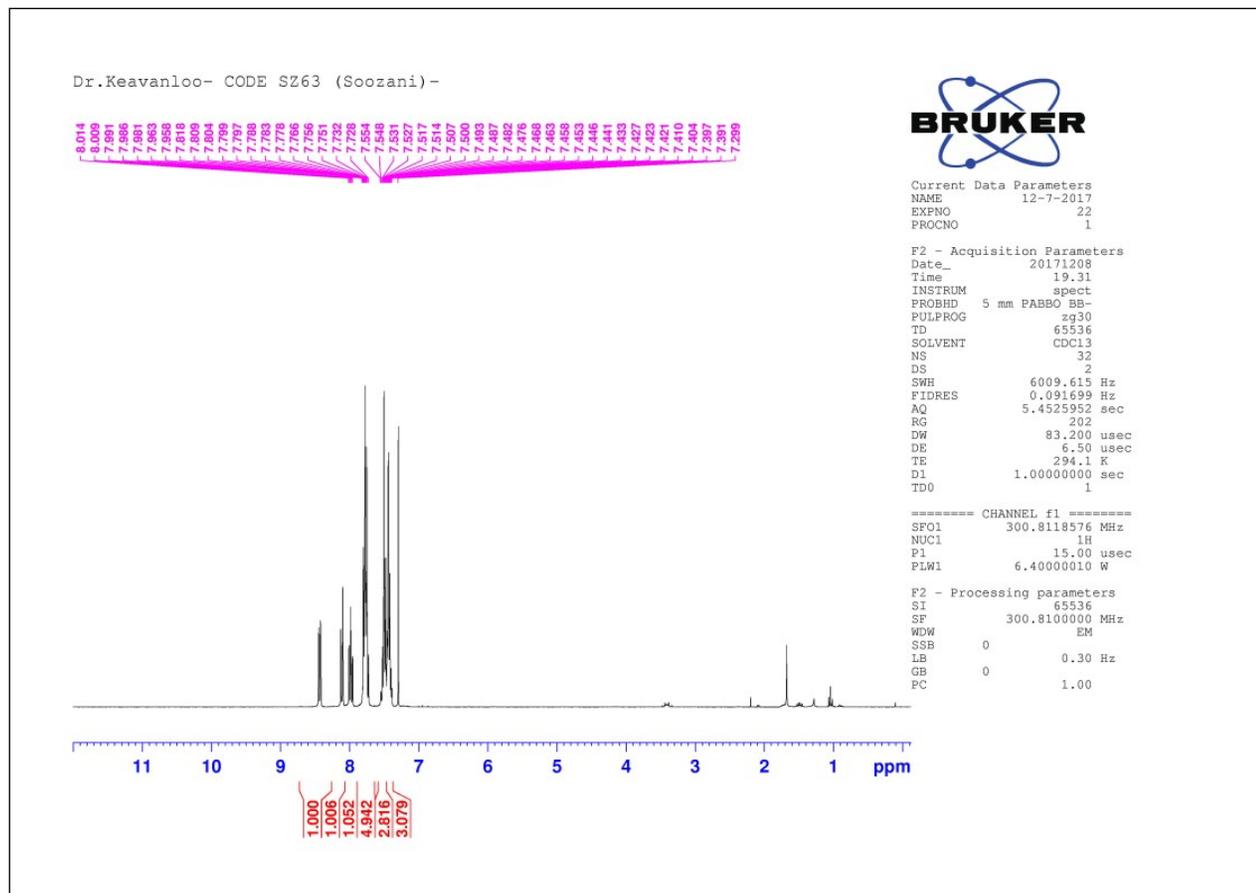
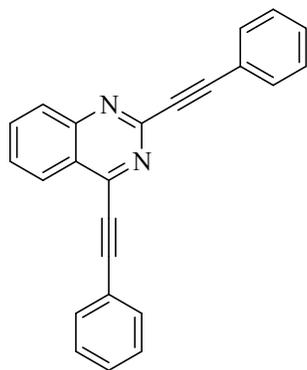


Figure 37 300 MHz ^1H NMR spectrum of compound 7 in CDCl_3

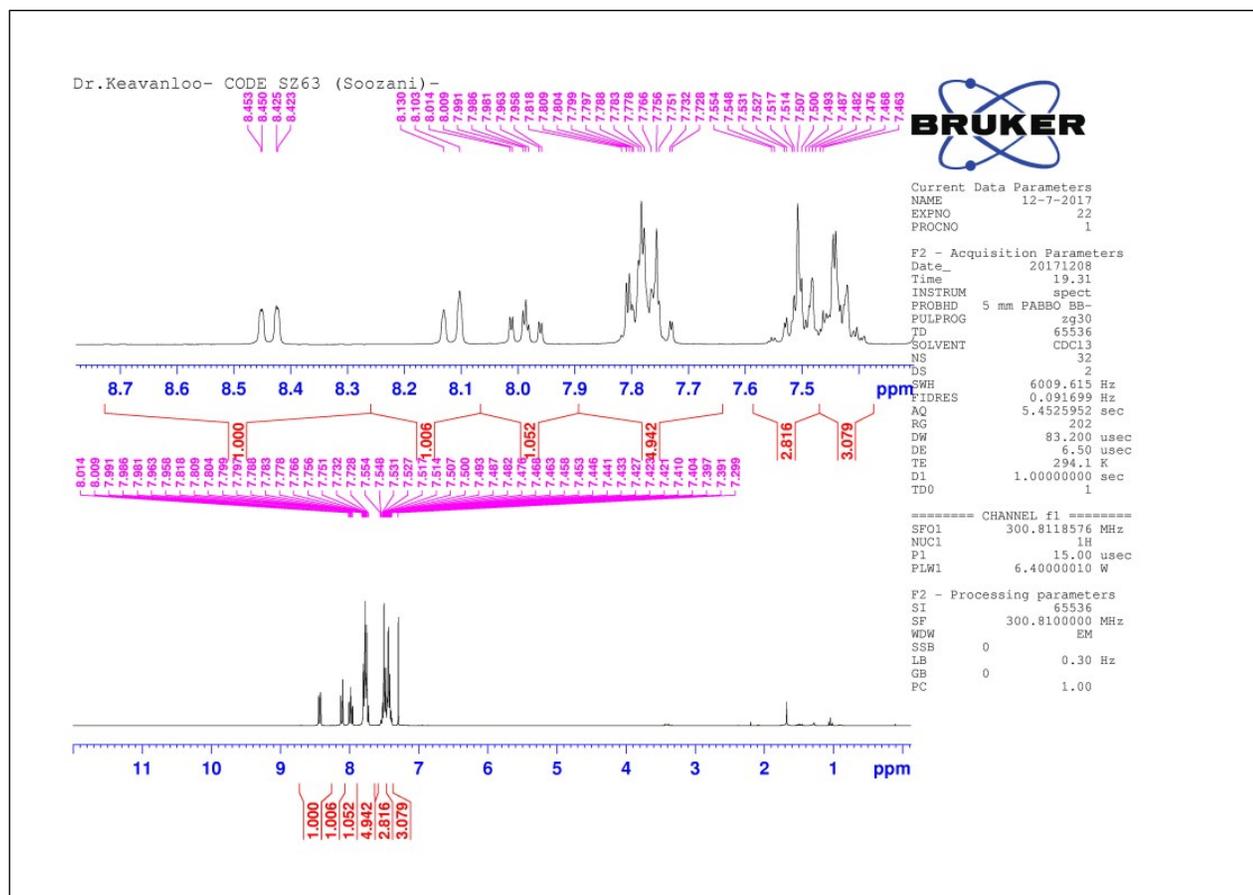
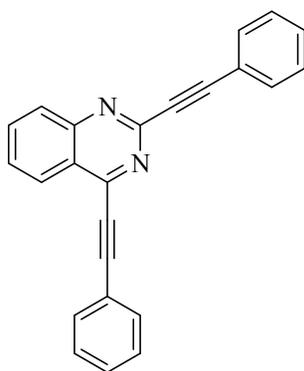


Figure 38 300 MHz ^1H NMR expand spectrum of compound 7 in CDCl_3

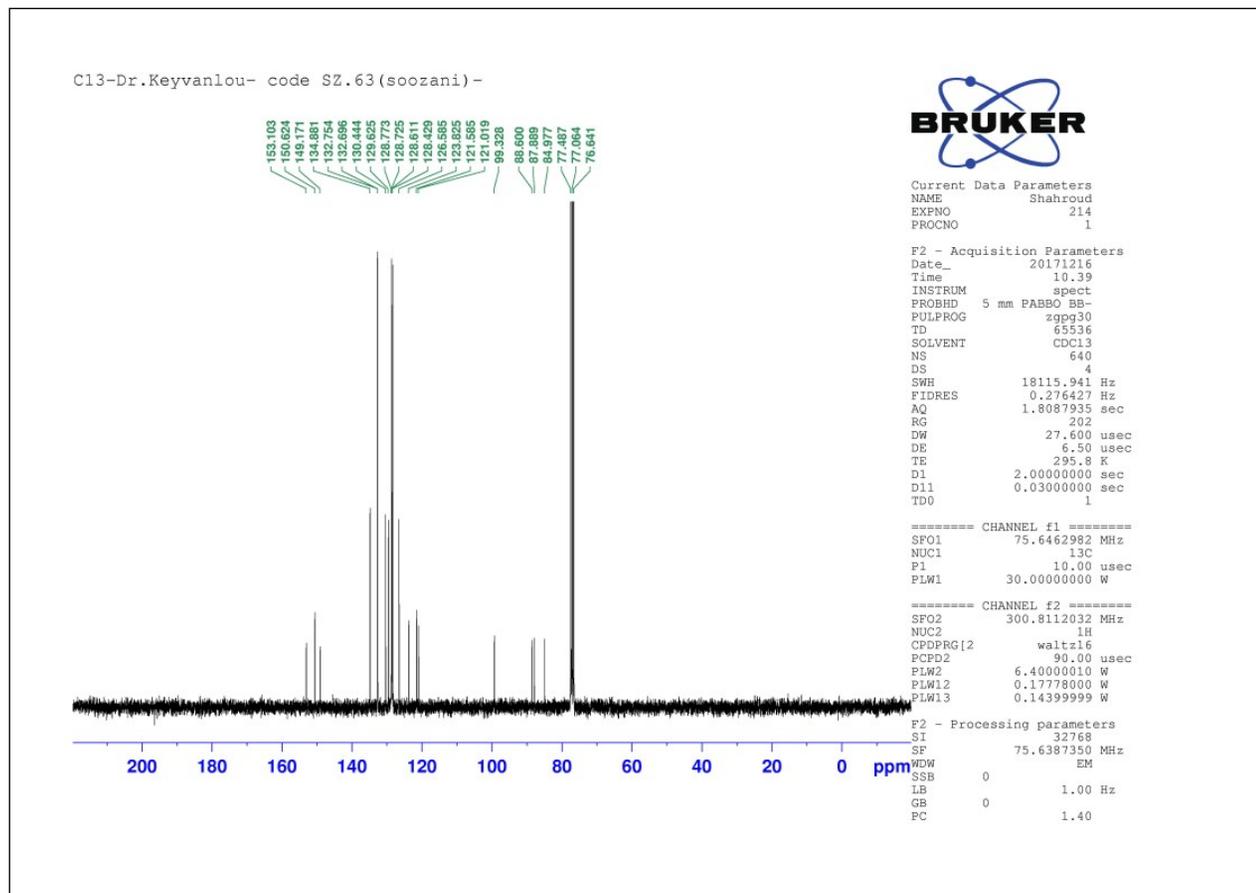
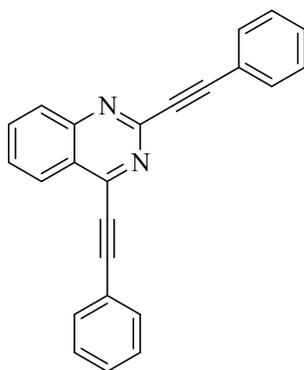


Figure 39 75 MHz ¹³C NMR spectrum of compound 7 in CDCl₃

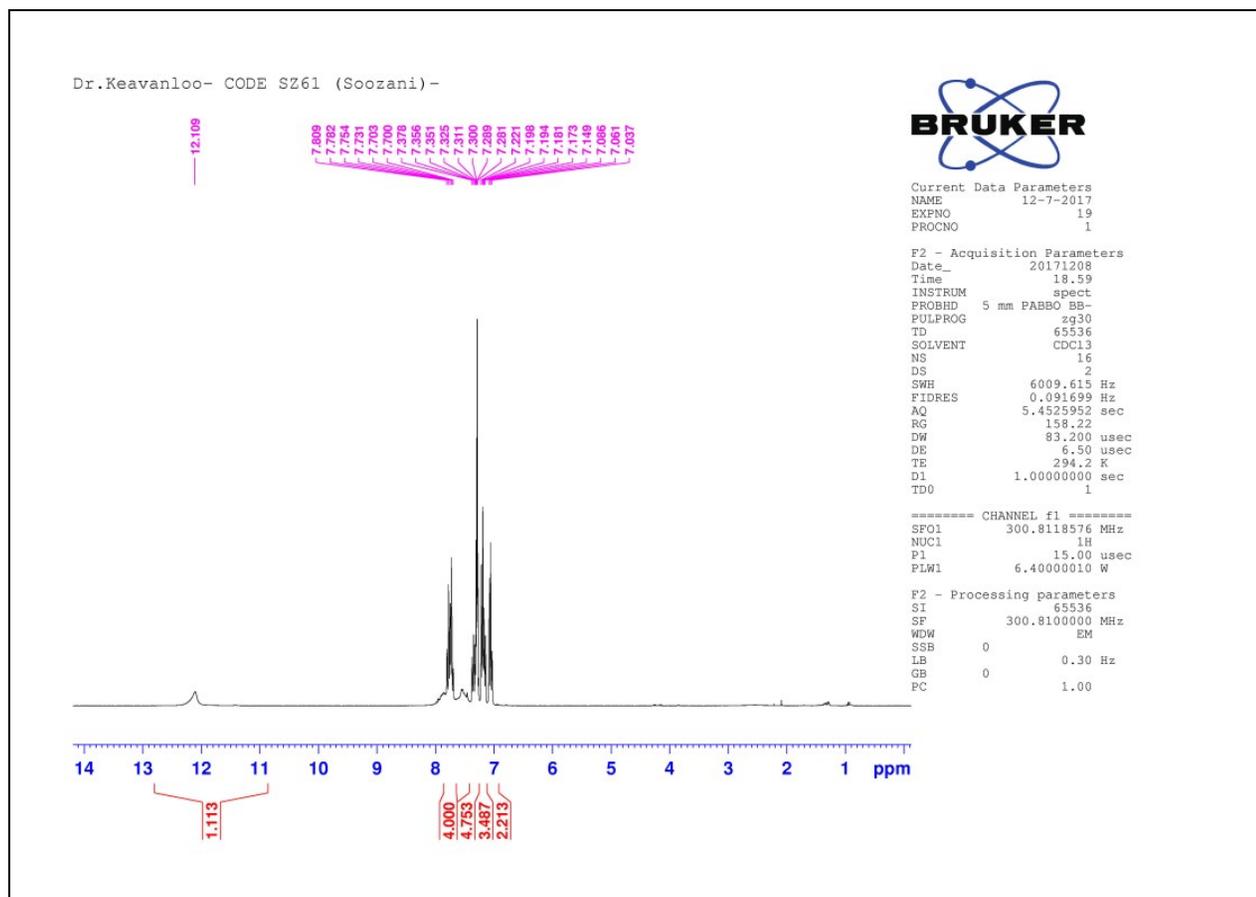
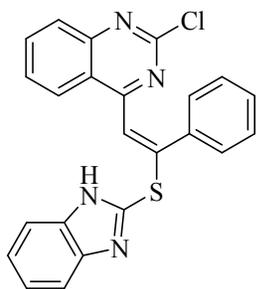


Figure 40 300 MHz ^1H NMR spectrum of compound **9** in CDCl_3

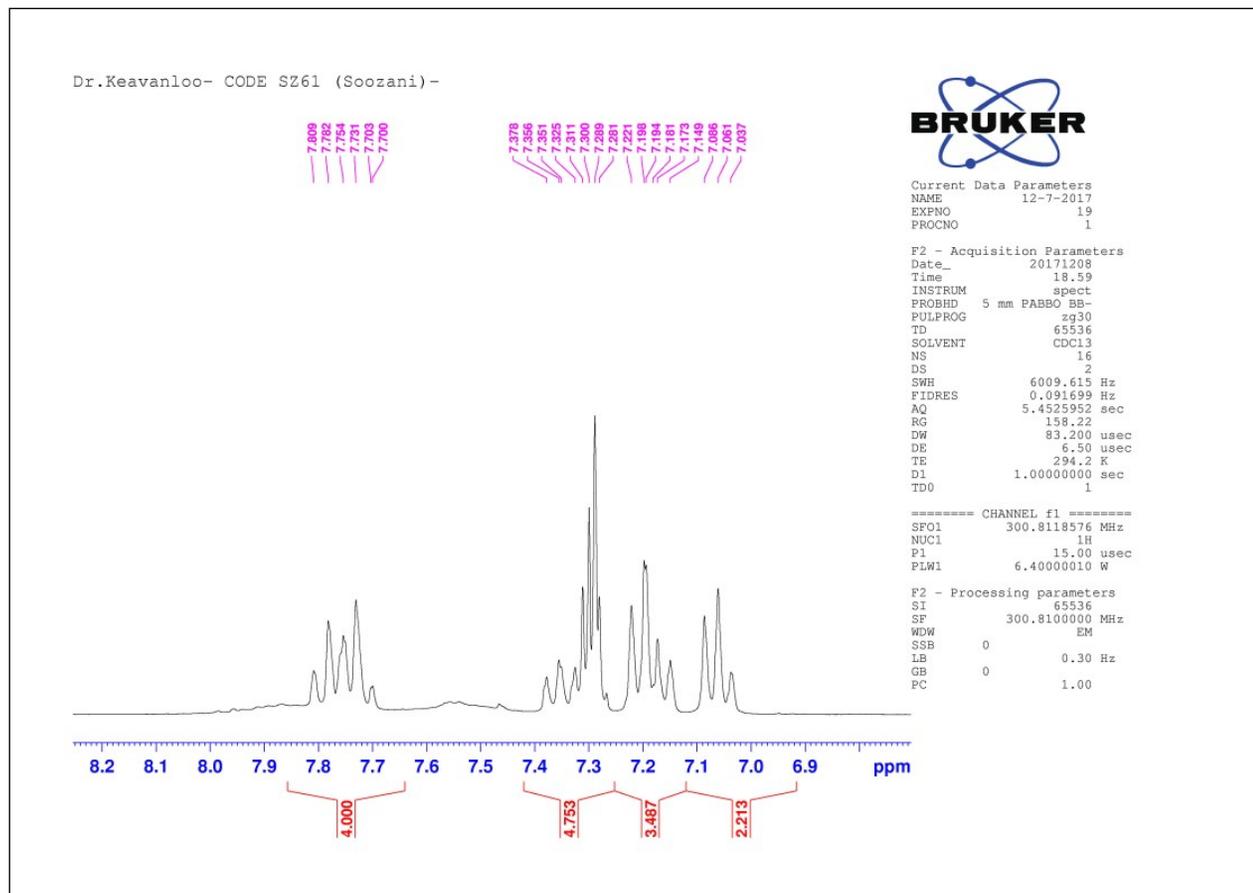
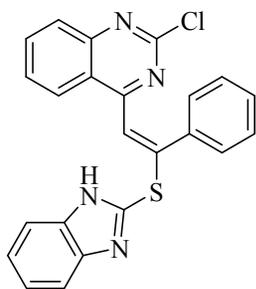


Figure 41 300 MHz ^1H NMR expand spectrum of compound **9** in CDCl_3

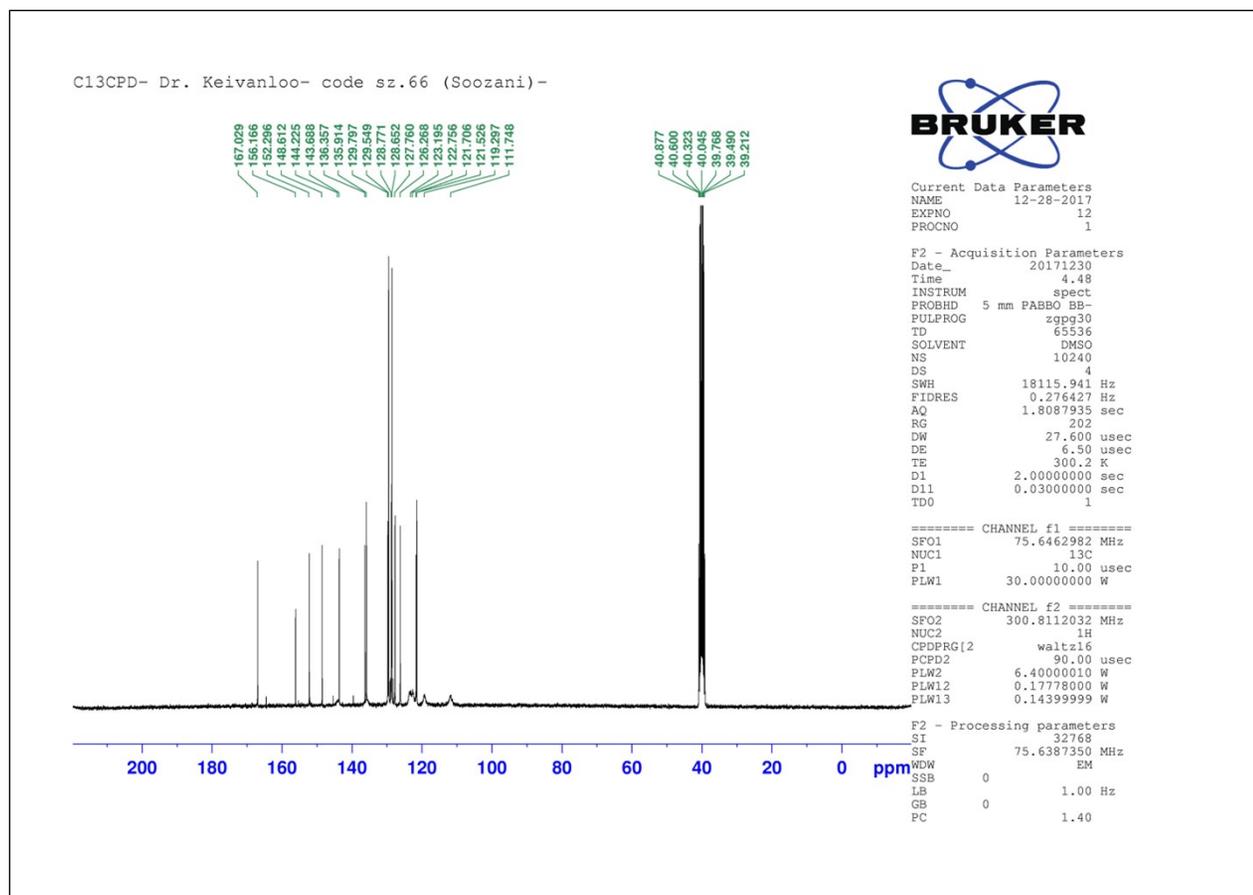
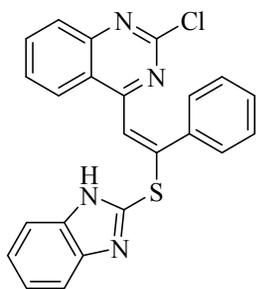


Figure 42 75 MHz ^{13}C NMR spectrum of compound 9 in CDCl_3