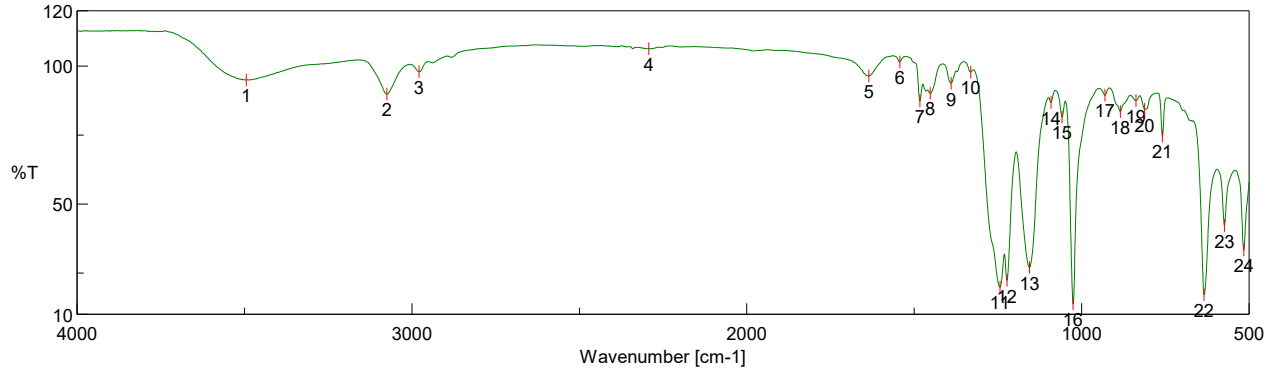
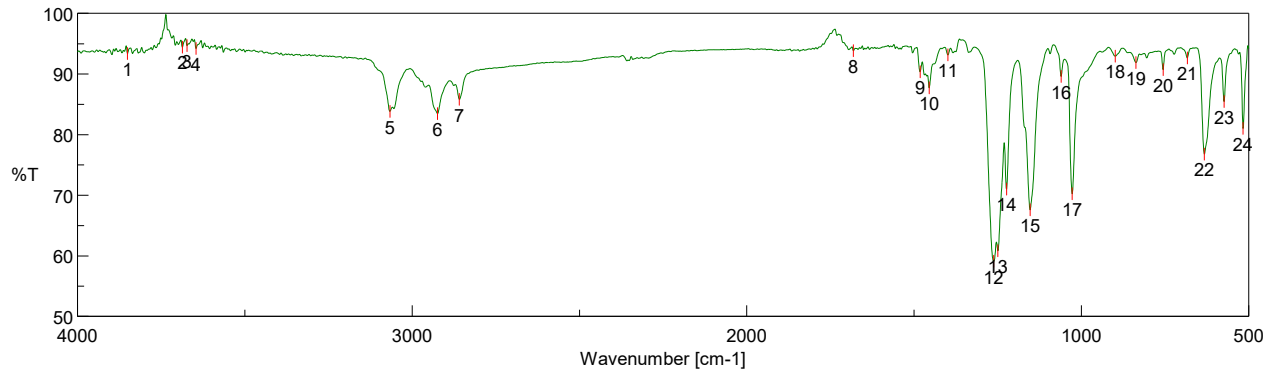
Supplementary Information



[Result of Peak Picking]

No.	Position	Intensity	No.	Position	Intensity	No.	Position	Intensity
1	3494	94.9176	2	3075	89.7686	3	2979	97.9145
4	2293	106.237	5	1635	96.3862	6	1543	101.491
7	1483	87.3402	8	1452	90.1129	9	1389	93.7227
10	1332	97.785	11	1244	19.8158	12	1223	22.2915
13	1156	26.9864	14	1092	86.7606	15	1059	81.5273
16	1026	13.7494	17	930	89.398	18	884	83.4578
19	838	87.4704	20	812	84.2682	21	759	74.5611
22	634	17.135	23	574	42.183	24	516	33.2534

Figure S1. FT-IR spectra of complex **Ru-1**.



[Result of Peak Picking]

No.	Position	Intensity	No.	Position	Intensity	No.	Position	Intensity
1	3851	93.34	2	3686	94.42	3	3673	94.6801
4	3646	94.2036	5	3066	83.8163	6	2925	83.4536
7	2859	85.7969	8	1682	93.8347	9	1482	90.3395
10	1455	87.6786	11	1399	93.122	12	1262	59.0777
13	1250	60.8128	14	1224	70.9811	15	1153	67.5587
16	1061	89.5923	17	1028	70.236	18	899	92.9349
19	837	91.8782	20	756	90.7185	21	684	92.6372
22	633	76.7674	23	574	85.43	24	517	80.9983

Figure S2. FT-IR spectra of complex **Ru-2**.

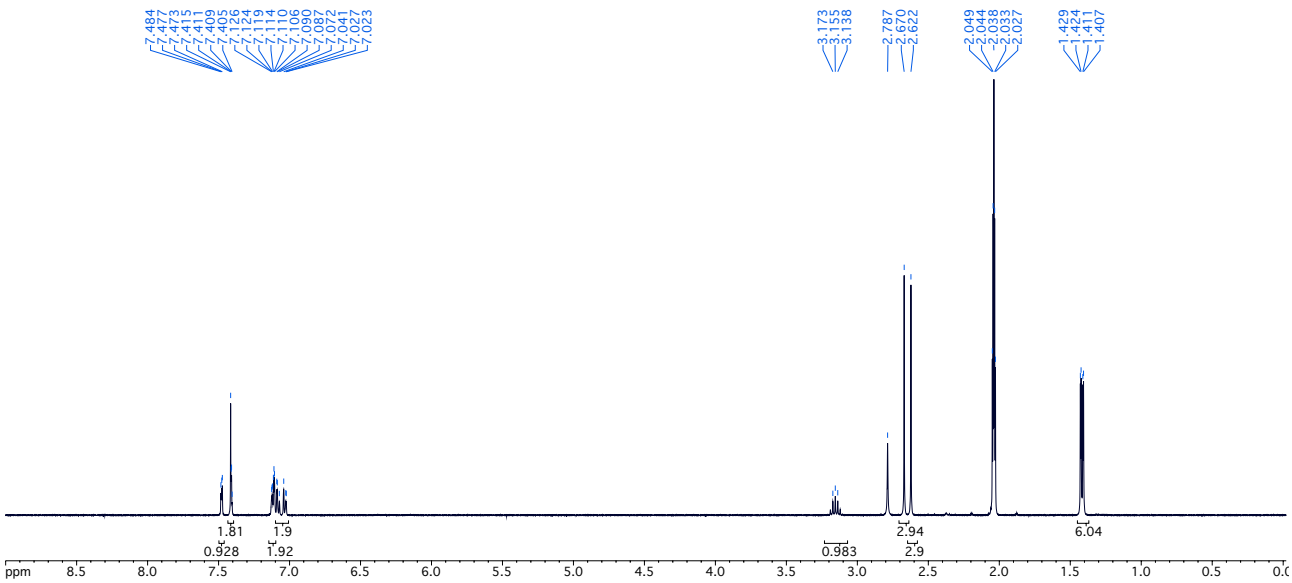


Figure S3. ^{1}H NMR spectrum of **Ru-1** (acetone d6).

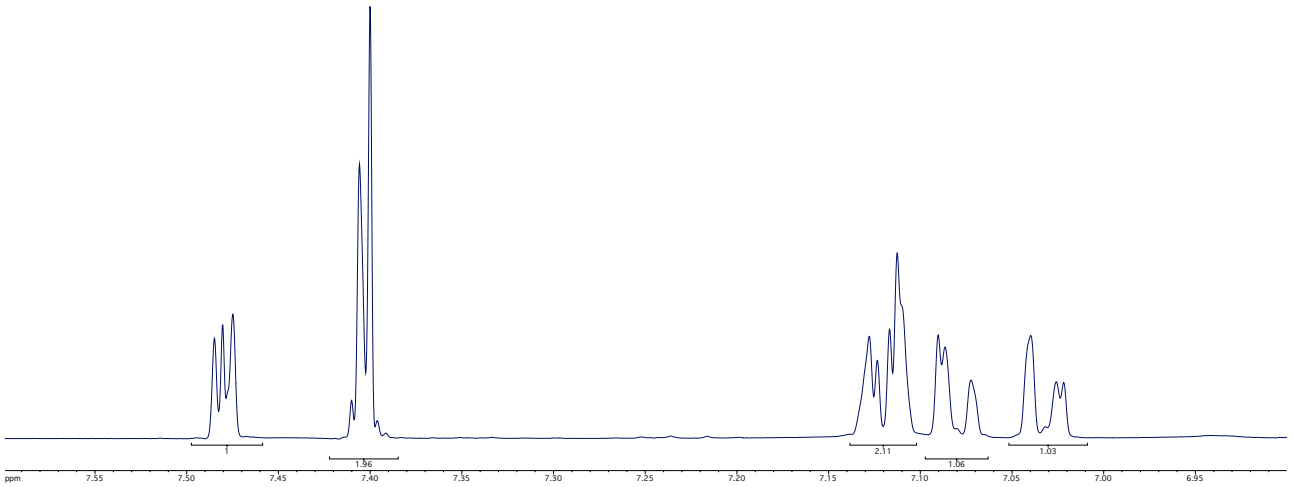


Figure S4. ^{1}H NMR spectrum of **Ru-1** (aromatic region, acetone d6).

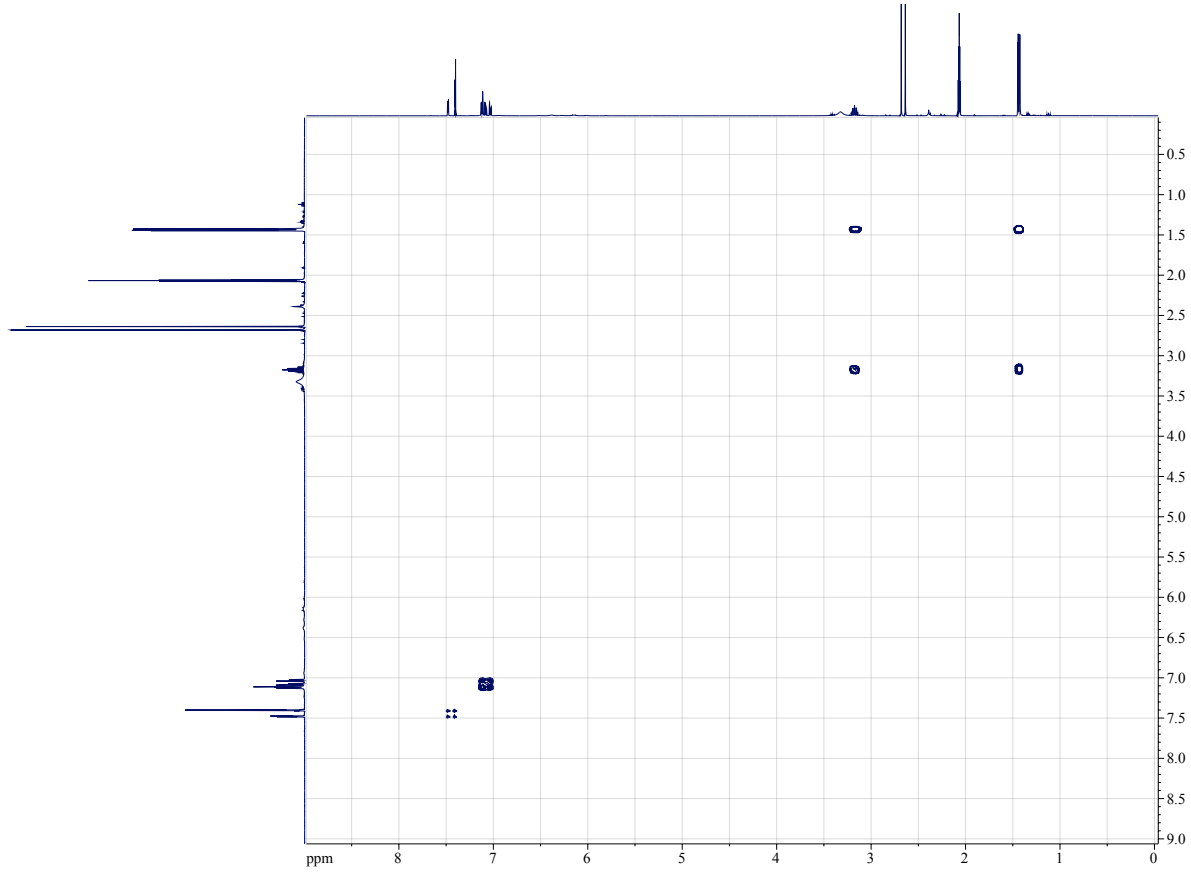


Figure S5. 2D COSY spectrum of **Ru-1** (acetone d6).

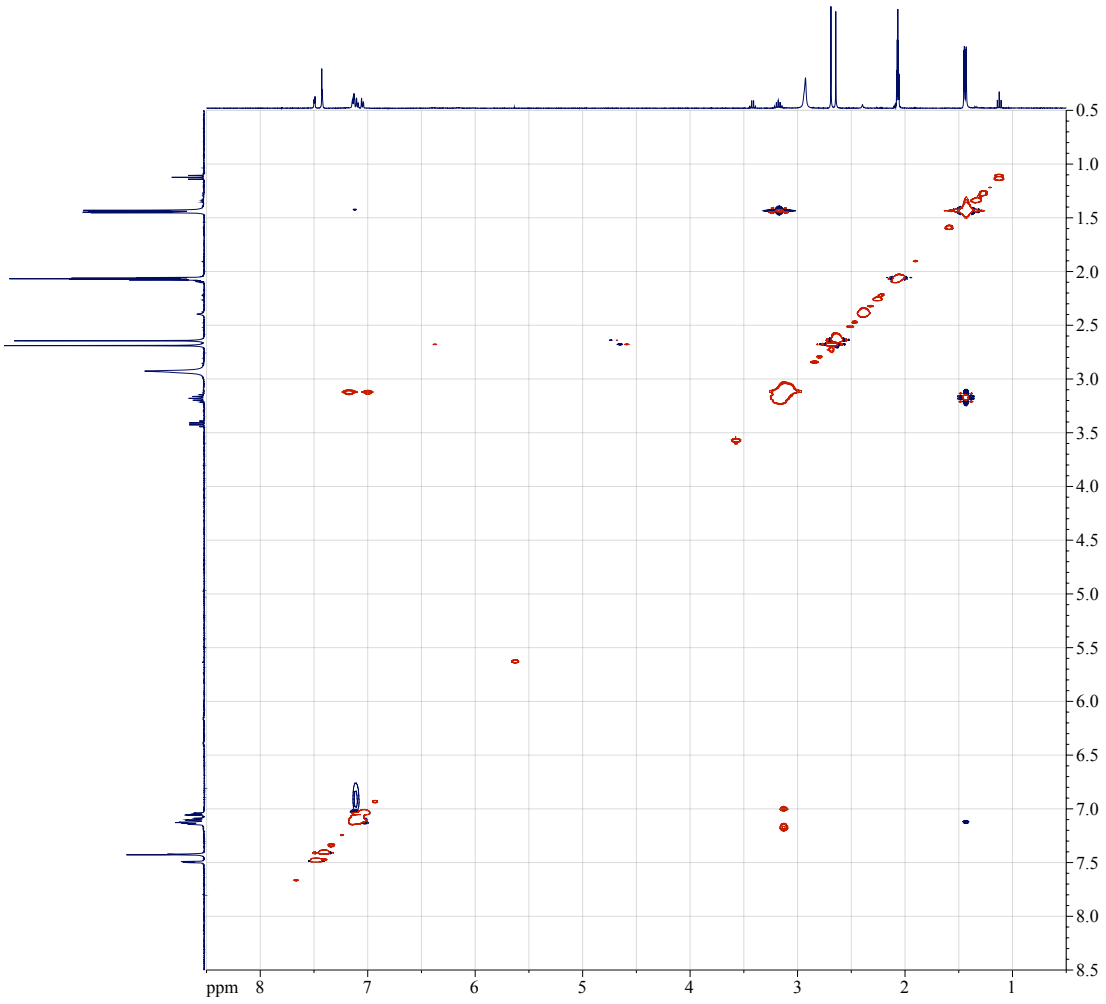


Figure S6. 2D NOESY spectrum of **Ru-1** (acetone d6).

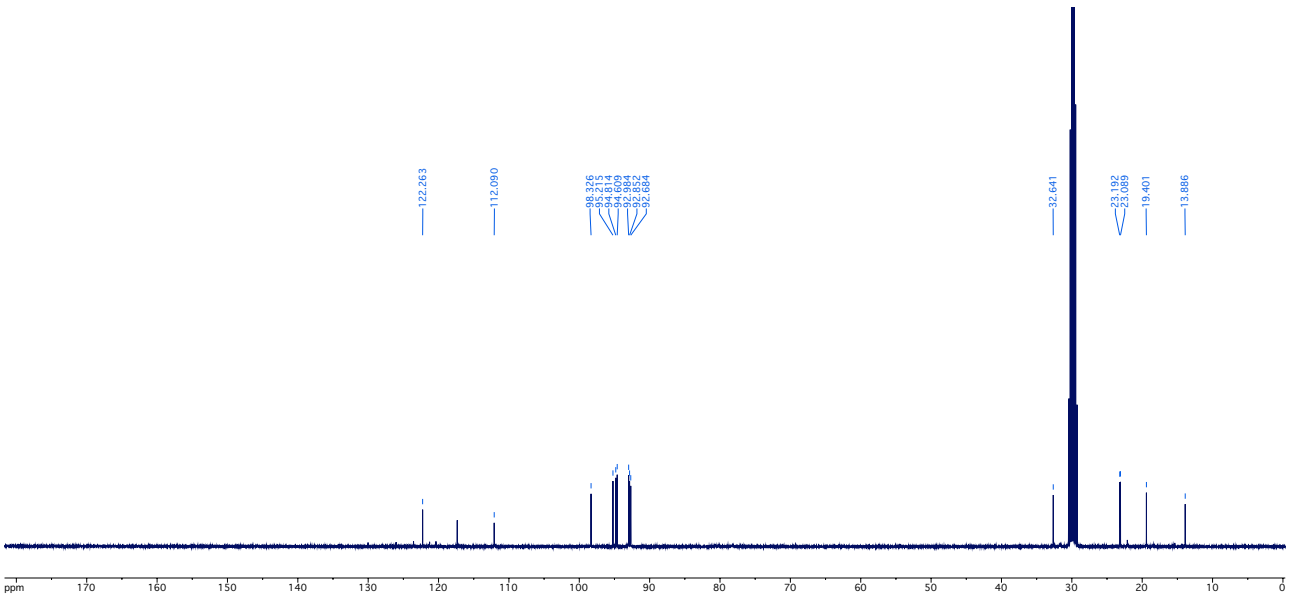


Figure S7. ^{13}C NMR spectrum of **Ru-1** (acetone d6).

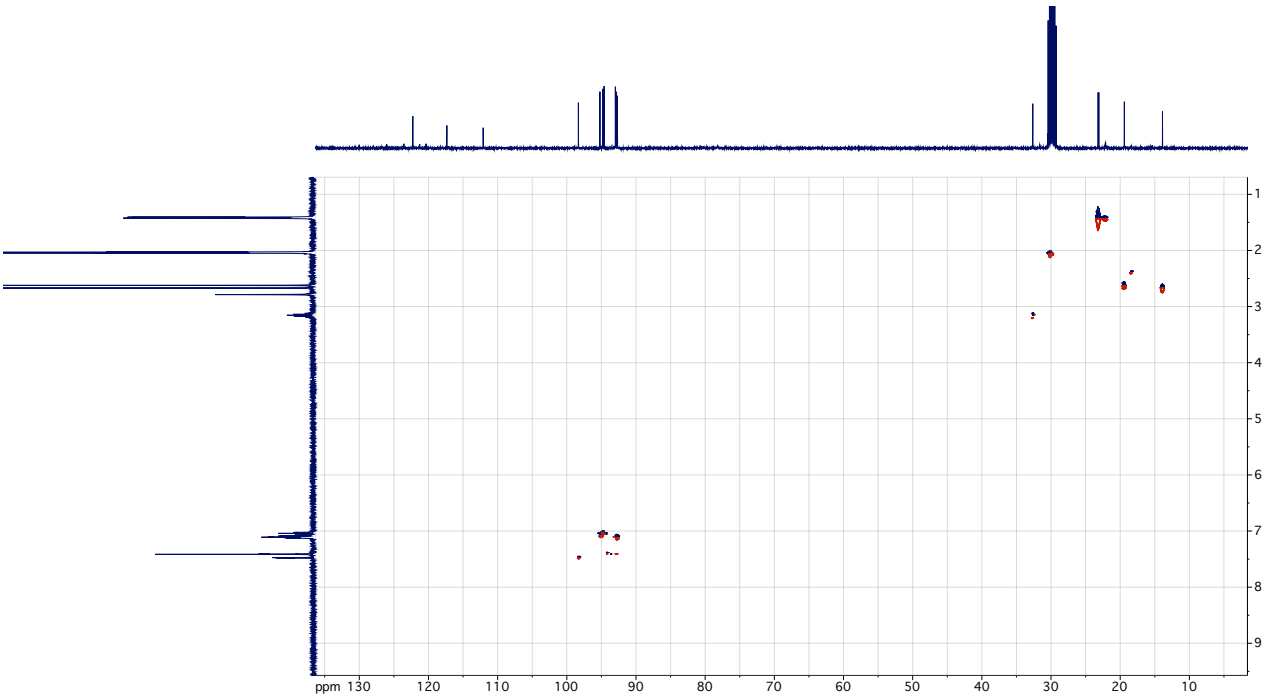


Figure S8. H-C HSQC spectrum of **Ru-1** (acetone d6).

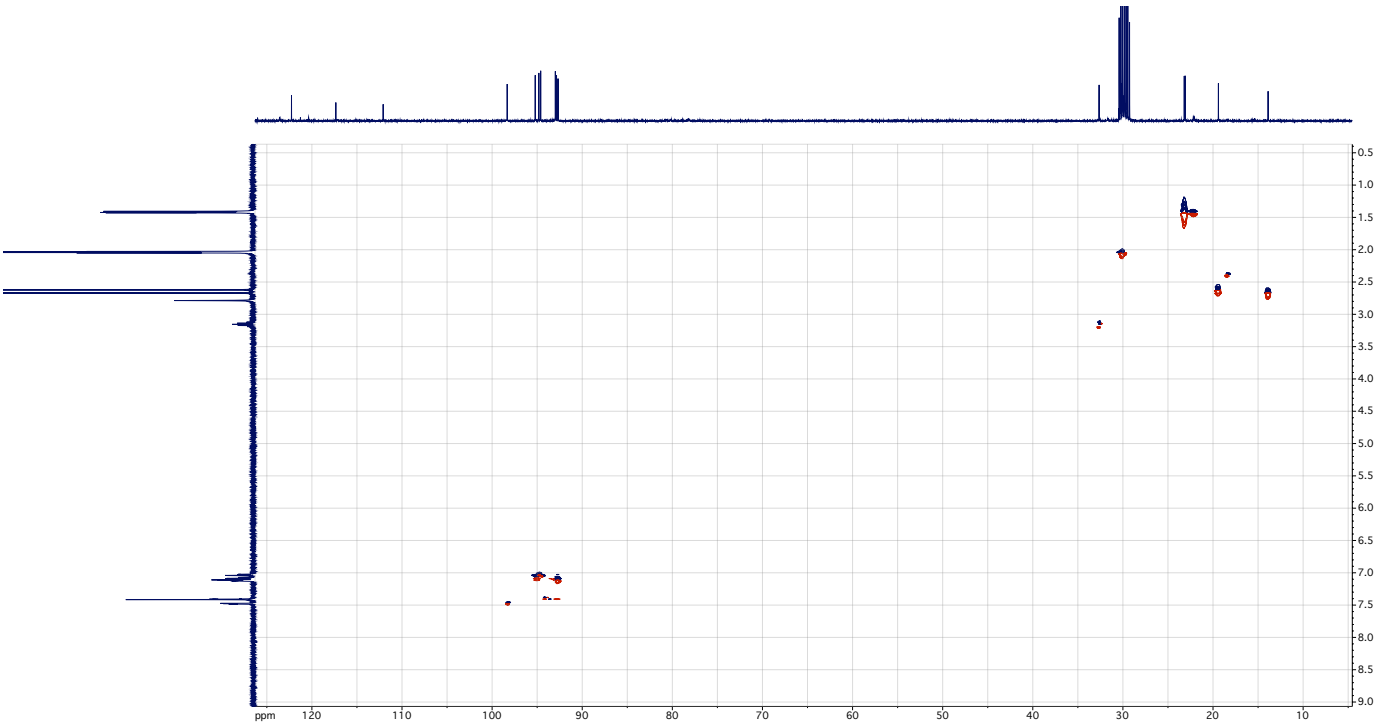


Figure S9. H-C HMBC spectrum of **Ru-1** (acetone d6).

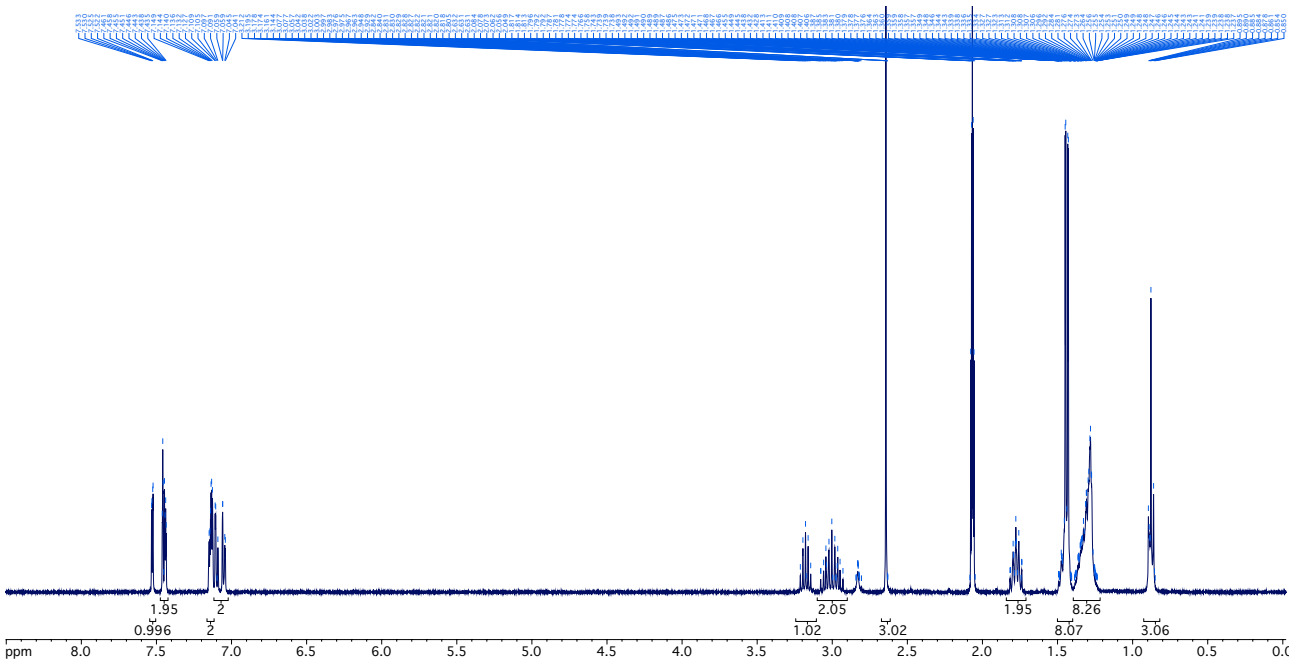


Figure S10. ^{1}H NMR spectrum of **Ru-2** (acetone d6).

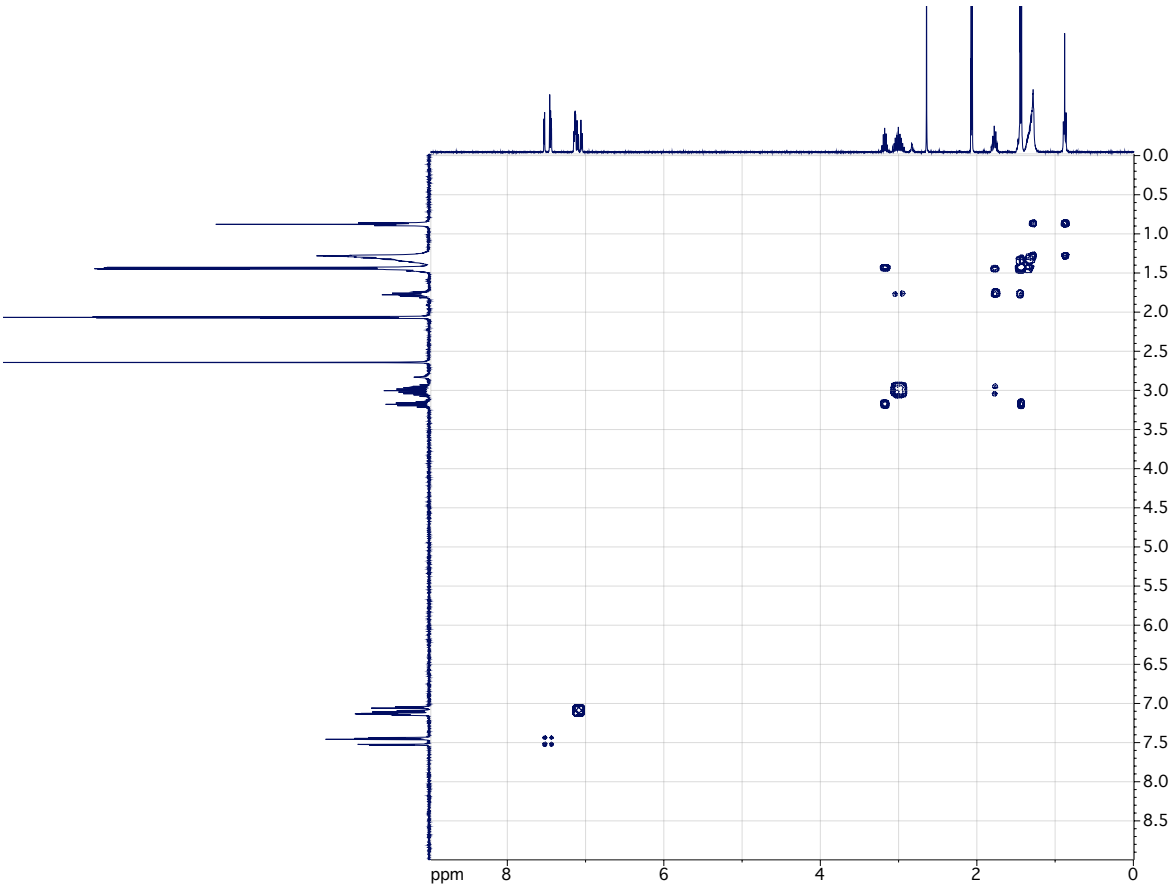


Figure S11. 2D COSY spectrum of **Ru-2** (acetone d6).

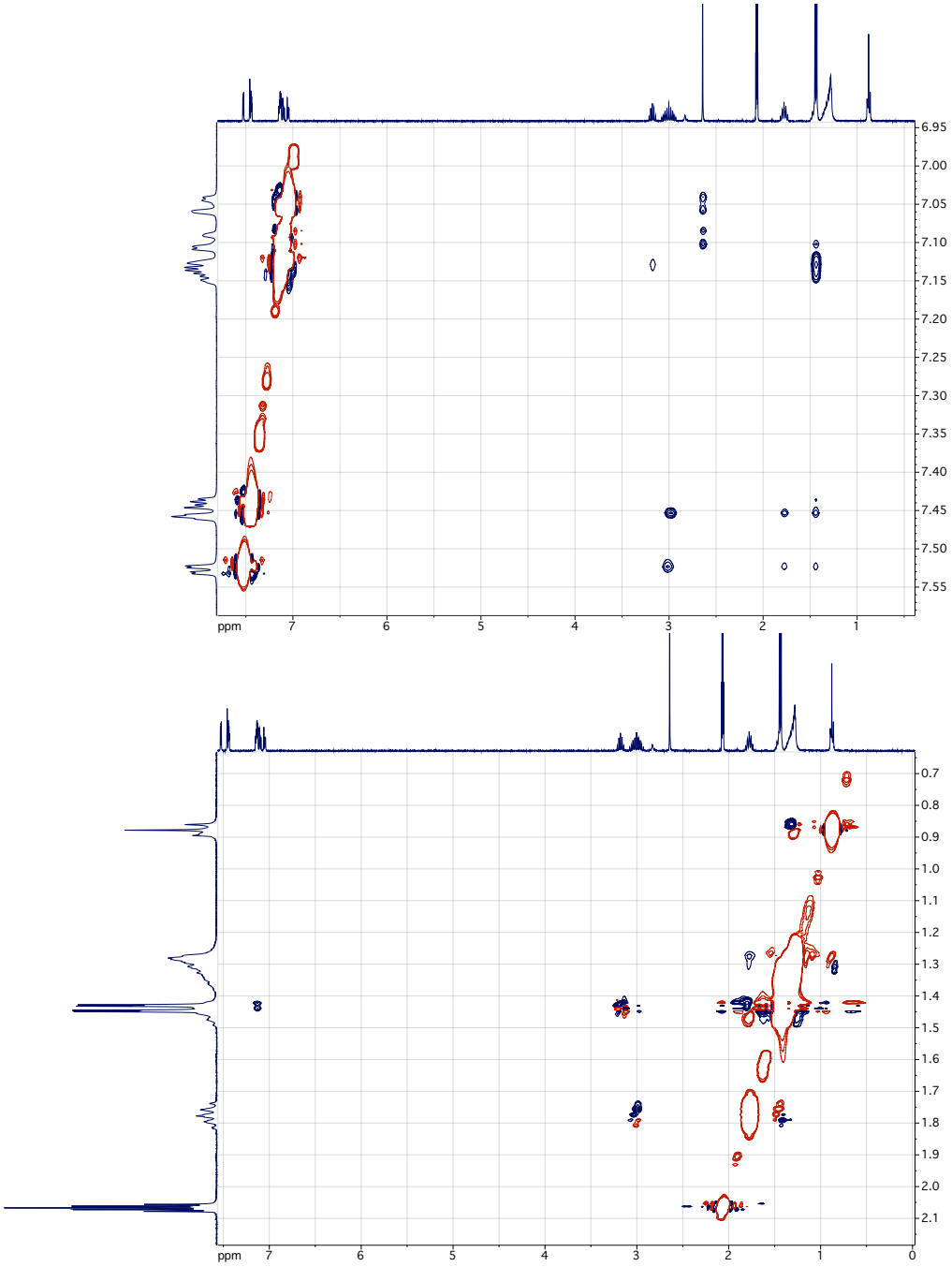


Figure S12. Sections of the 2D ROESY spectrum of **Ru-2** (acetone d6).

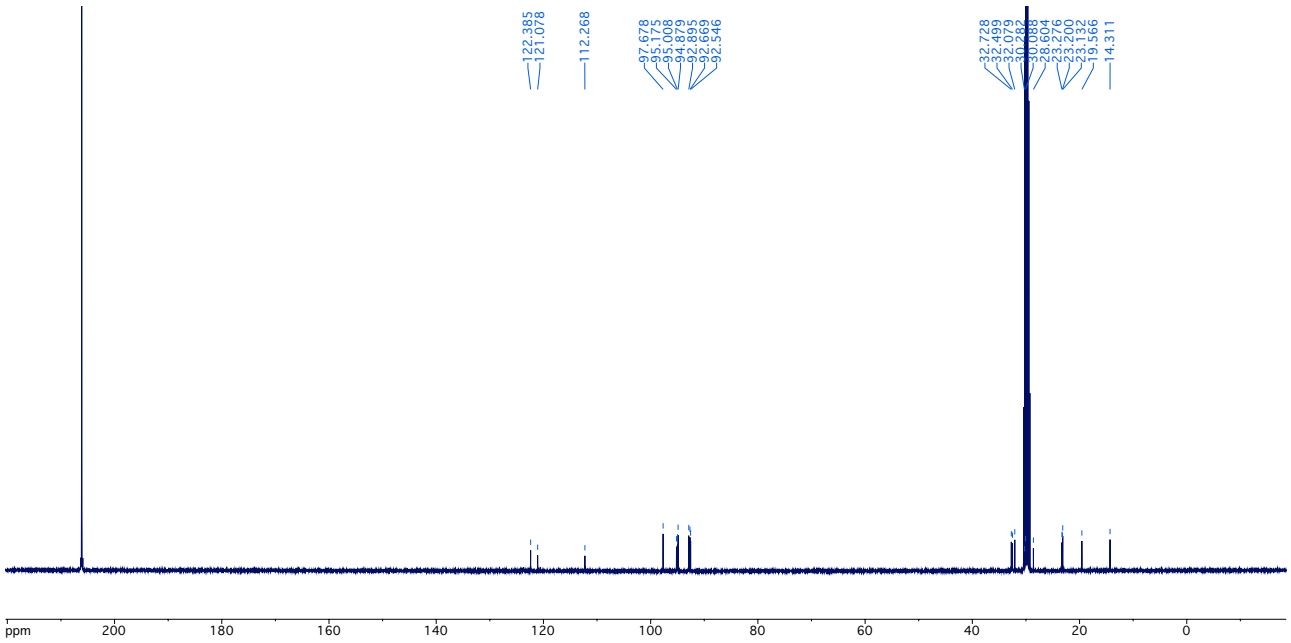


Figure S13. ^{13}C NMR spectrum of **Ru-2** (acetone d6).

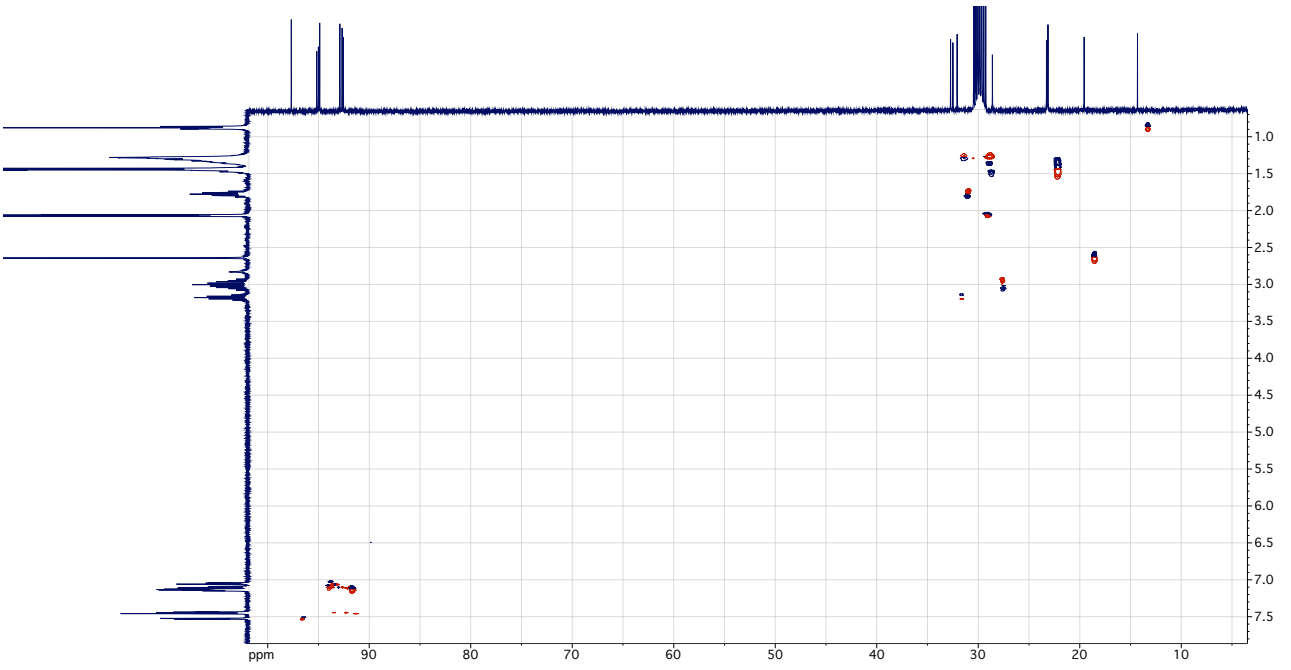


Figure S14. Section of the H-C HSQC spectrum of **Ru-2** (acetone-d6).

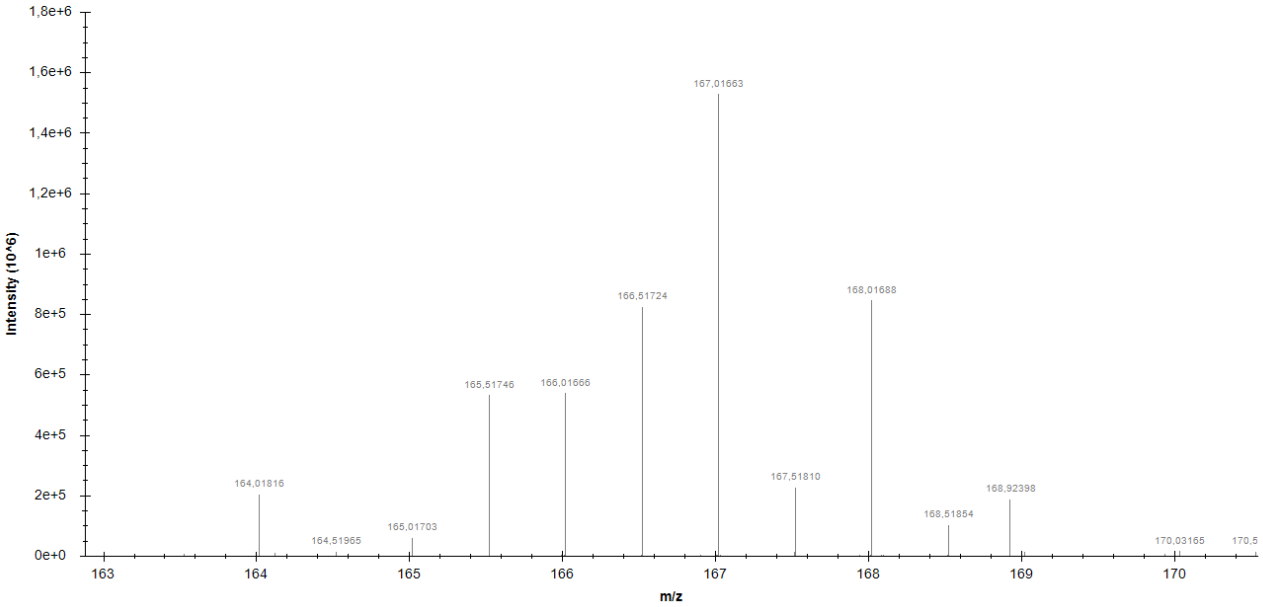


Figure S15. ESI-MS spectra of **Ru-1**.

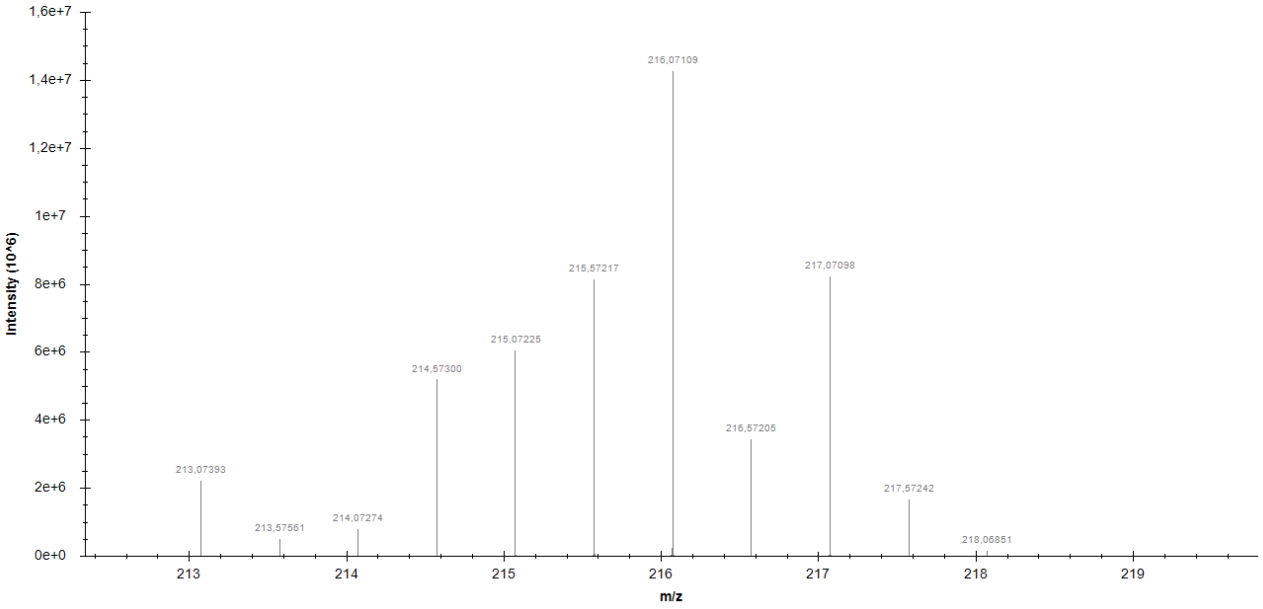


Figure S16. ESI-MS spectra of **Ru-2**.

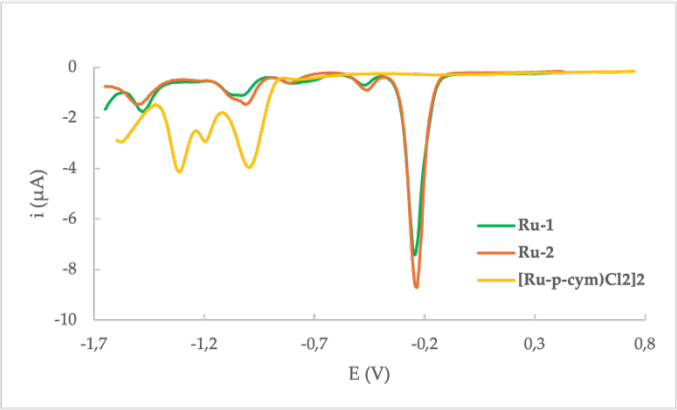


Figure S17. Differential pulse voltammetry curves of **Ru-1** and **Ru-2**, and of the parent complex $[Ru(p\text{-cymene})Cl_2]_2$ in 0.1 M $TBAPF_6$-CH_3CN solvent system. Working electrode: Pt disk.