

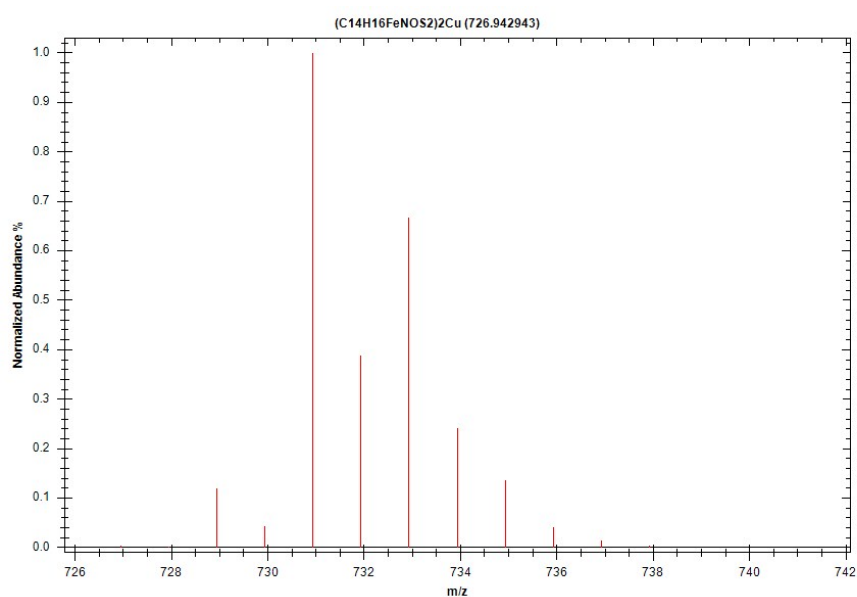
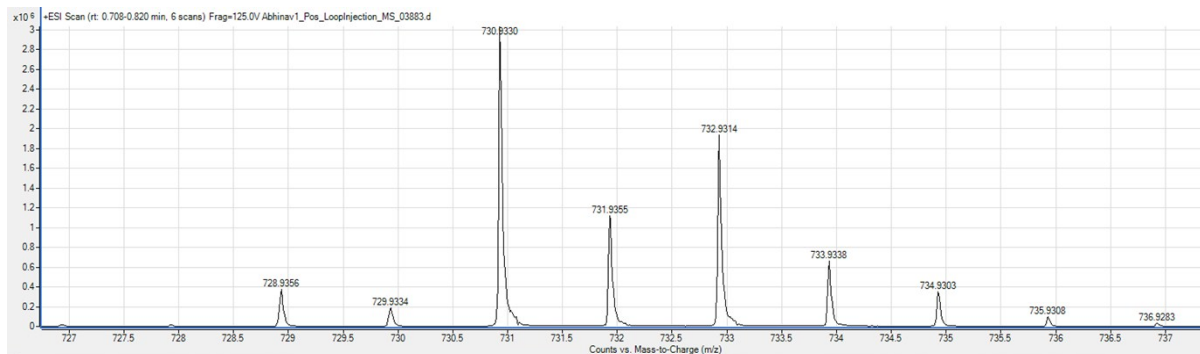
New main group ferrocenyldithiocarbamates and conversion to ferrocene oxazolidine-2-thione and -2-one

Reena Yadav,^a Suryabhan Singh,^b Manoj Trivedi,^c Gabriele Kociok-Köhn,^d Nigam P. Rath,^e Randolph D. Köhn,^{f*} Mohd. Muddassir,^g and Abhinav Kumar^{a*}

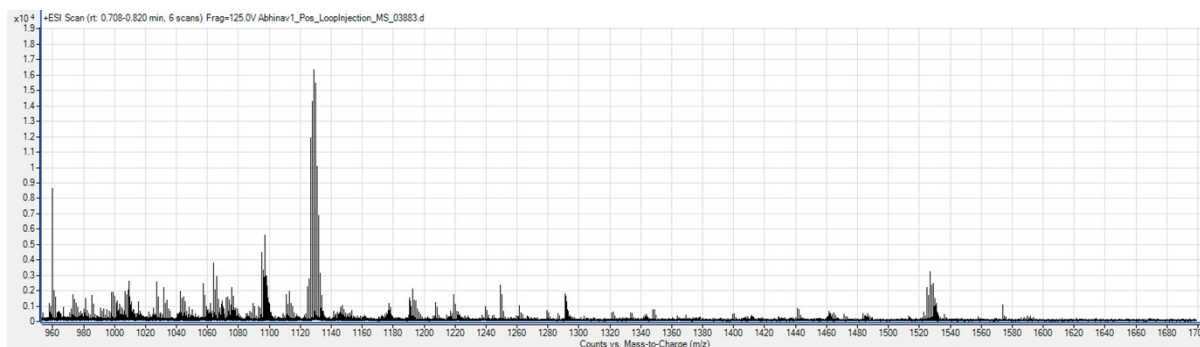
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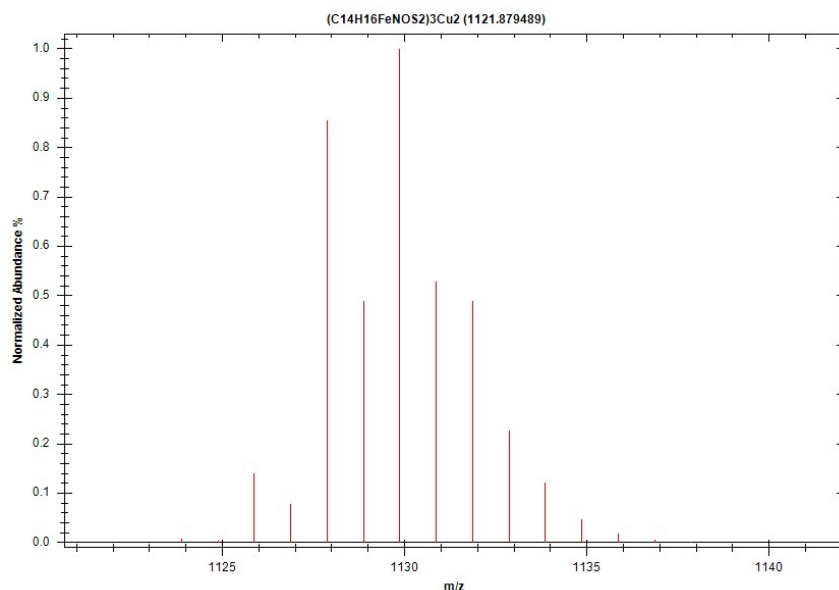
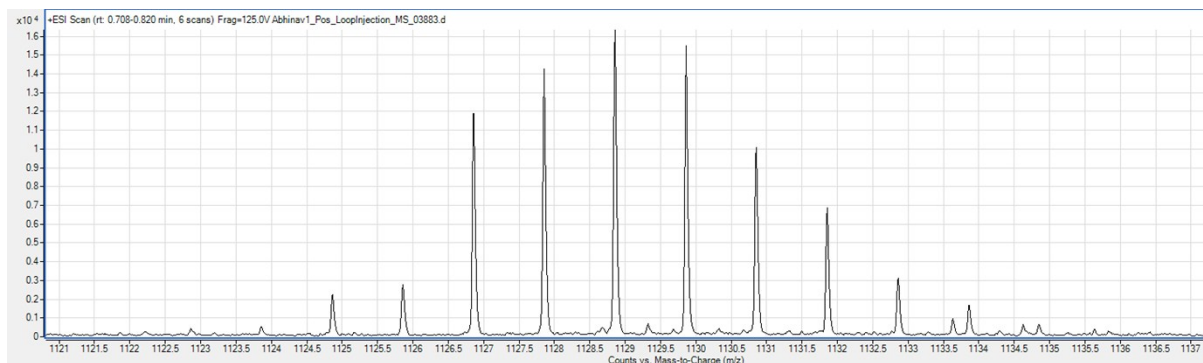
ESI-MS results related to the Comproportionation reactions of Copper Complex

Copper complex in MeCN:

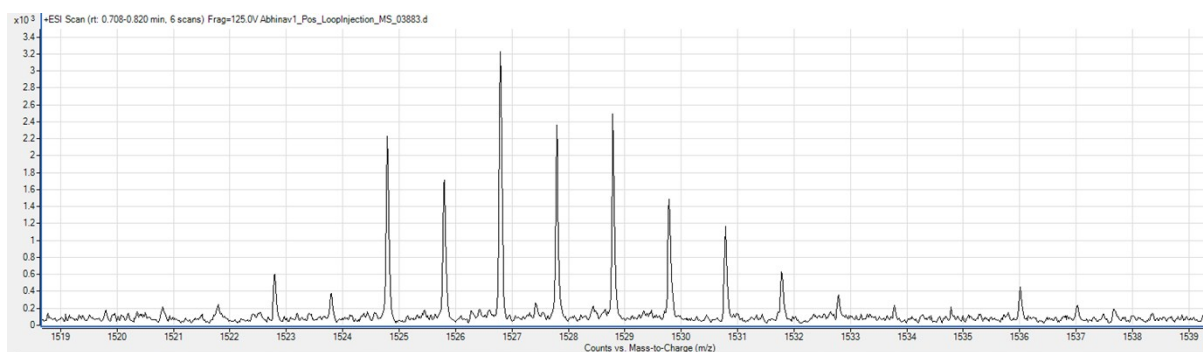


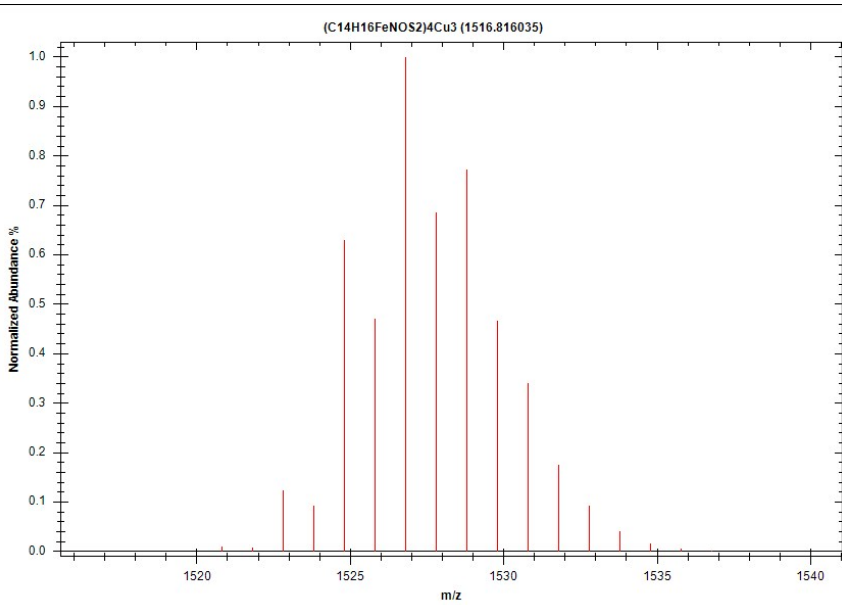
| m/z | Abund (% largest) | Abund (% sum) | Abund (% first) |
|----------|----------------------|------------------|--------------------|
| 726.9429 | 0.37 | 0.14 | 100 |
| 727.9458 | 0.13 | 0.05 | 34.62 |
| 728.9383 | 11.95 | 4.49 | 3208.31 |
| 729.9411 | 4.4 | 1.66 | 1181.61 |
| 730.9338 | 100 | 37.61 | 26848.16 |
| 731.9364 | 38.83 | 14.6 | 10424.64 |
| 732.932 | 66.79 | 25.12 | 17933.14 |
| 733.9341 | 24.05 | 9.04 | 6455.66 |
| 734.9305 | 13.59 | 5.11 | 3648.55 |
| 735.9315 | 4.04 | 1.52 | 1083.67 |
| 736.929 | 1.34 | 0.5 | 358.49 |
| 737.9291 | 0.32 | 0.12 | 86.11 |
| 738.9276 | 0.07 | 0.03 | 19.89 |
| 739.9273 | 0.01 | 0.01 | 3.82 |
| 740.9266 | 0 | 0 | 0.67 |



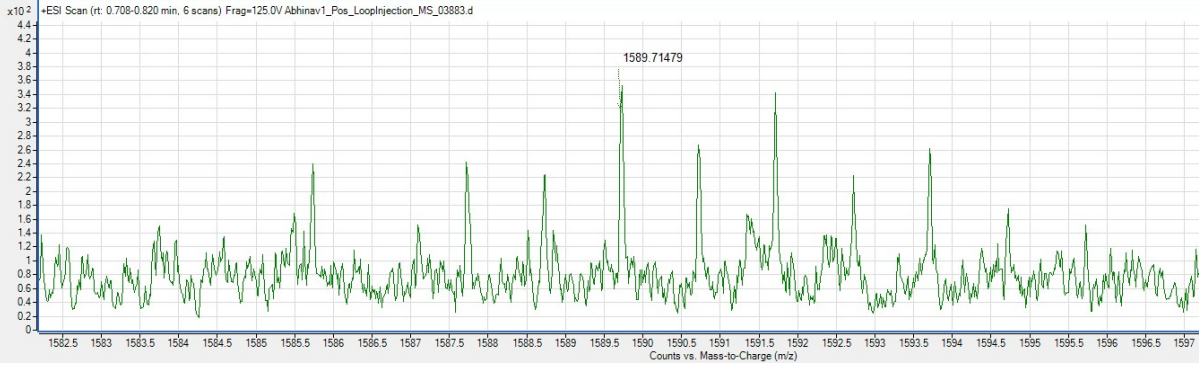
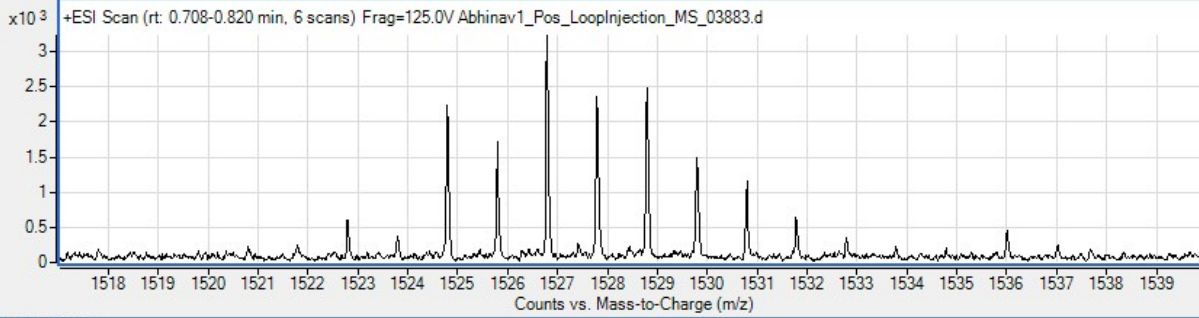


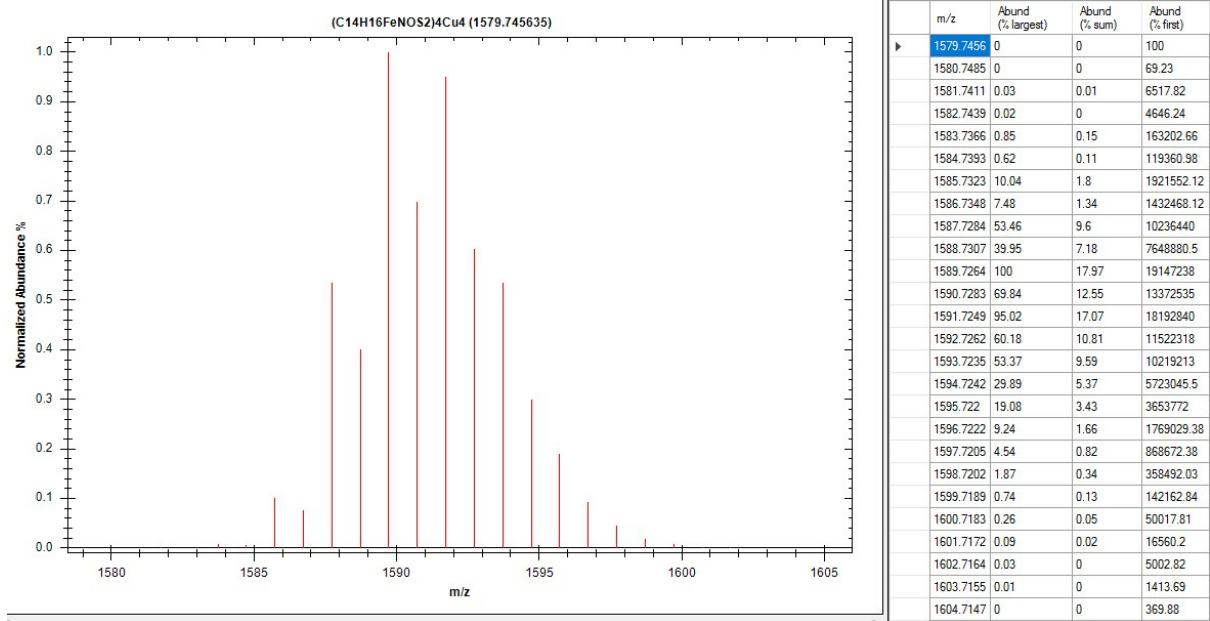
| m/z | Abund (% largest) | Abund (% sum) | Abund (% first) |
|-----------|----------------------|------------------|--------------------|
| 1121.8795 | 0.02 | 0 | 100 |
| 1122.8824 | 0.01 | 0 | 51.93 |
| 1123.8749 | 0.85 | 0.21 | 4839.26 |
| 1124.8777 | 0.46 | 0.11 | 2616.7 |
| 1125.8704 | 14.04 | 3.5 | 80178.61 |
| 1126.873 | 7.87 | 1.96 | 44924.42 |
| 1127.8662 | 85.52 | 21.28 | 488210.19 |
| 1128.8686 | 49.05 | 12.21 | 279986.22 |
| 1129.8644 | 100 | 24.89 | 570875.88 |
| 1130.8663 | 52.9 | 13.17 | 301982.25 |
| 1131.863 | 48.93 | 12.18 | 279331.56 |
| 1132.8641 | 22.62 | 5.63 | 129146.11 |
| 1133.8617 | 12.26 | 3.05 | 70015.62 |
| 1134.8619 | 4.68 | 1.17 | 26725.78 |
| 1135.8601 | 1.79 | 0.45 | 10231.21 |
| 1136.8598 | 0.56 | 0.14 | 3210.28 |
| 1137.8585 | 0.17 | 0.04 | 951.79 |
| 1138.8579 | 0.04 | 0.01 | 247.61 |
| 1139.8569 | 0.01 | 0 | 59.62 |
| 1140.8563 | 0 | 0 | 12.99 |



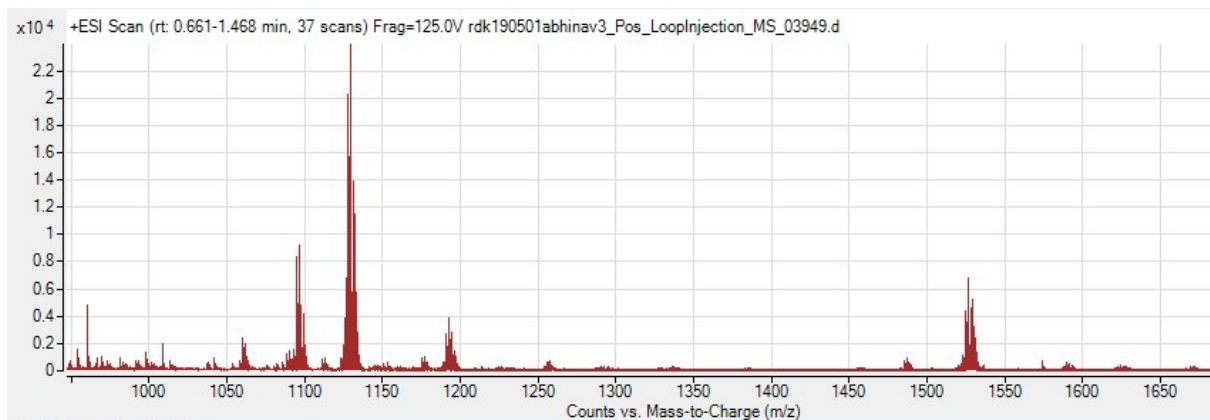
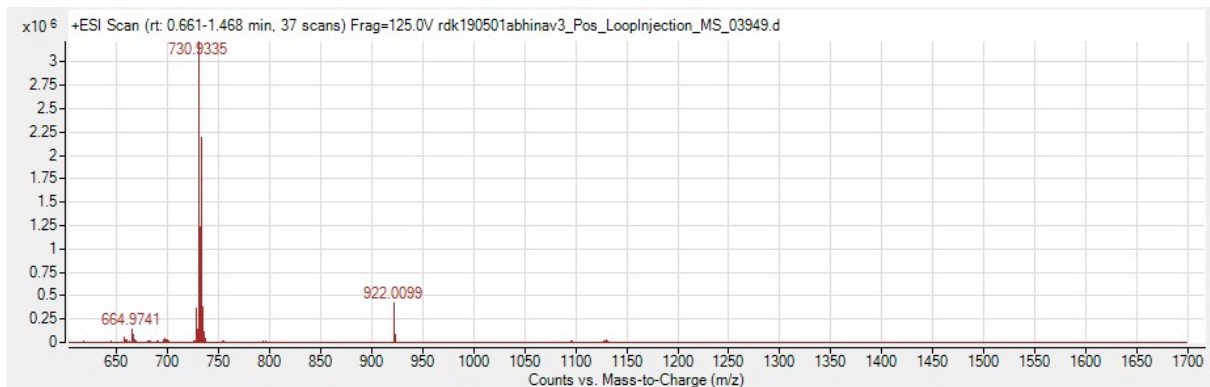


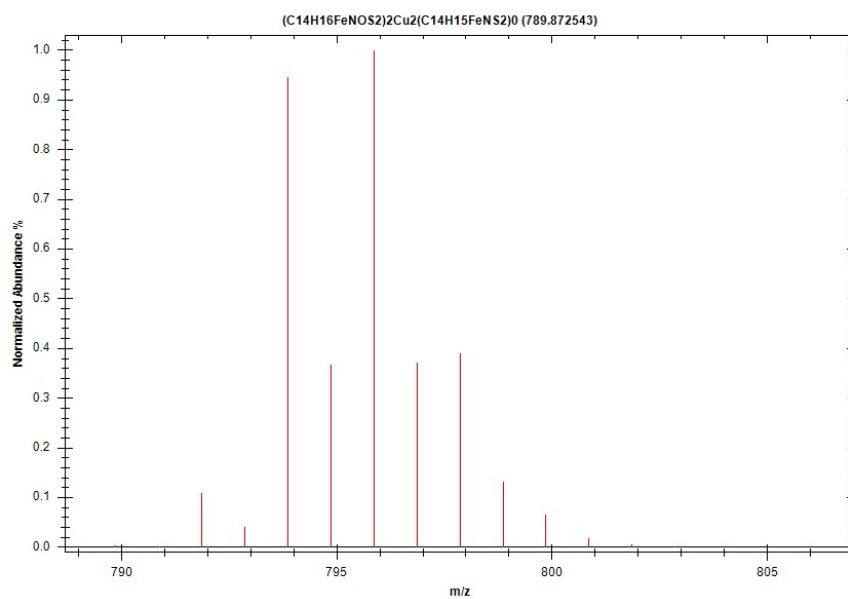
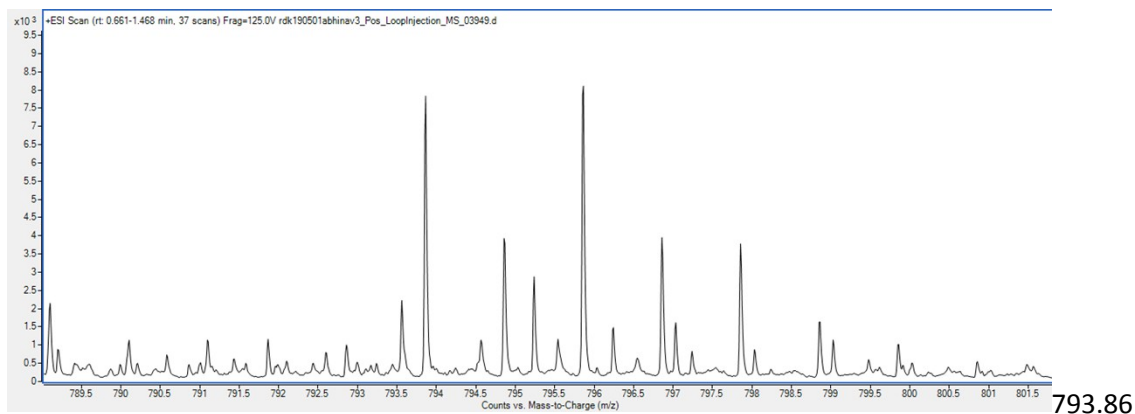
| m/z | Abund (% largest) | Abund (% sum) | Abund (% first) |
|-----------|----------------------|------------------|--------------------|
| 1516.816 | 0 | 0 | 100 |
| 1517.8189 | 0 | 0 | 69.23 |
| 1518.8115 | 0.04 | 0.01 | 6473.21 |
| 1519.8143 | 0.03 | 0.01 | 4615.35 |
| 1520.807 | 1.07 | 0.22 | 160314.77 |
| 1521.8096 | 0.78 | 0.16 | 117301.93 |
| 1522.8026 | 12.38 | 2.51 | 1850030.75 |
| 1523.8051 | 9.23 | 1.87 | 1380136 |
| 1524.7987 | 62.96 | 12.77 | 9411082 |
| 1525.8009 | 47.05 | 9.54 | 7033158.5 |
| 1526.7968 | 100 | 20.28 | 14948656 |
| 1527.7985 | 68.47 | 13.89 | 10234820 |
| 1528.7954 | 77.09 | 15.64 | 11523770 |
| 1529.7965 | 46.53 | 9.44 | 6956241 |
| 1530.7941 | 33.97 | 6.89 | 5078094.5 |
| 1531.7944 | 17.52 | 3.55 | 2619646.25 |
| 1532.7927 | 9.29 | 1.88 | 1388273 |
| 1533.7925 | 4.02 | 0.81 | 600322.44 |
| 1534.7911 | 1.67 | 0.34 | 249319.91 |
| 1535.7905 | 0.61 | 0.12 | 90669.25 |
| 1536.7894 | 0.21 | 0.04 | 30933.37 |
| 1537.7886 | 0.06 | 0.01 | 9567.39 |
| 1538.7877 | 0.02 | 0 | 2759.85 |
| 1539.7869 | 0 | 0 | 734.51 |



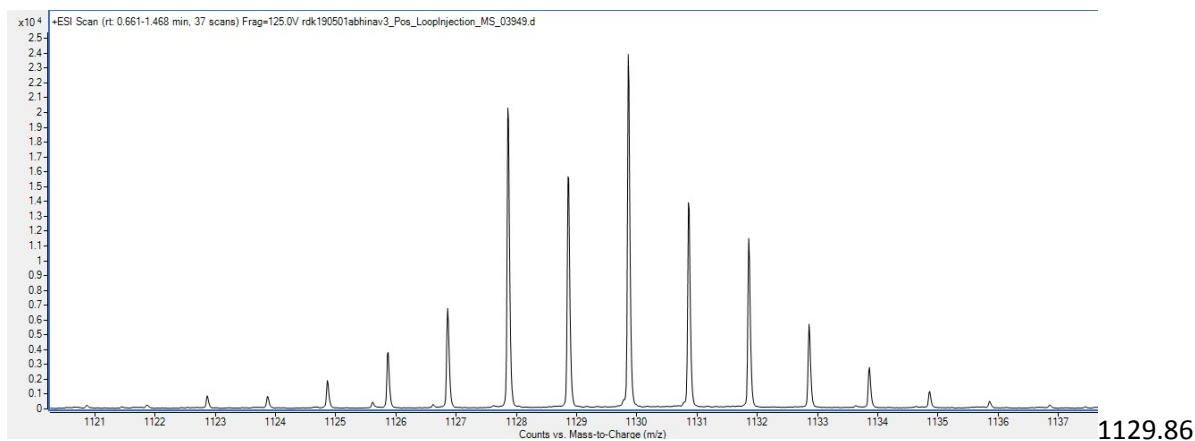


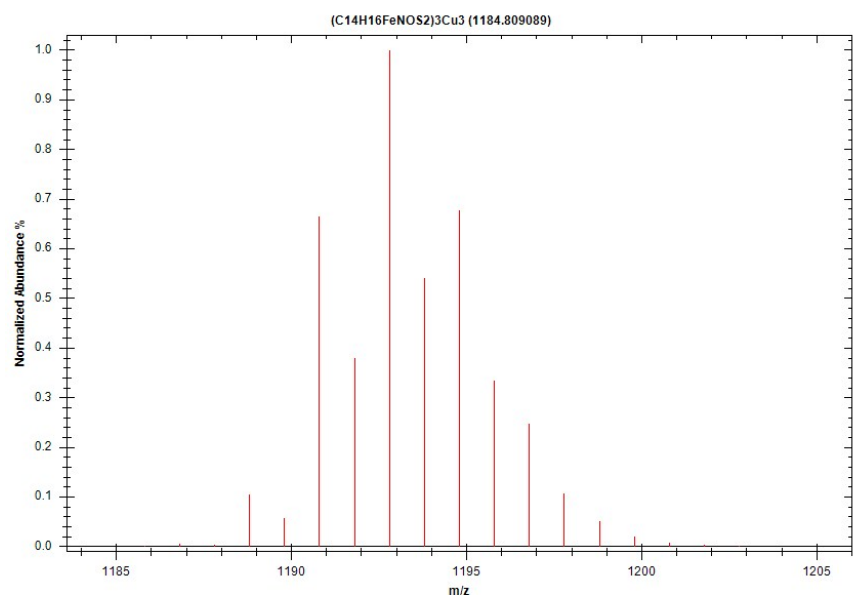
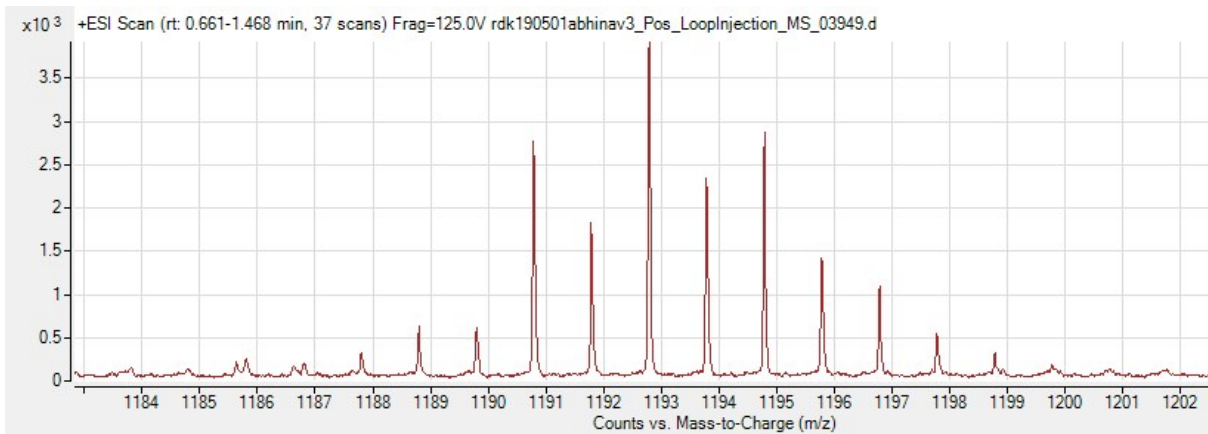
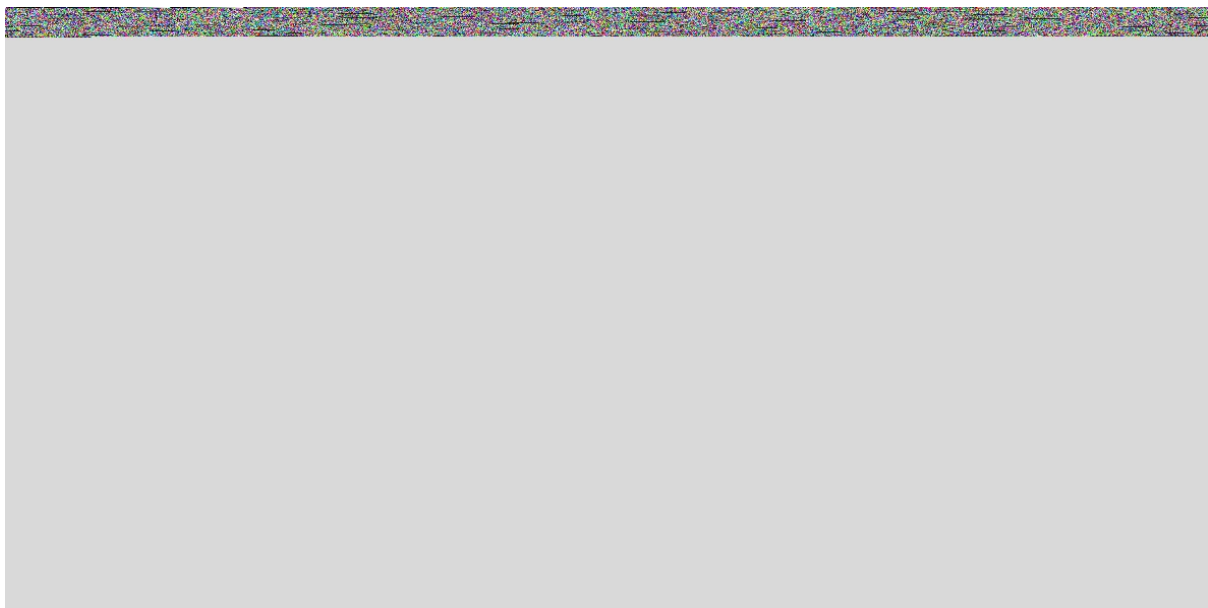
After 1d with Cu powder in DCM, drop of filtered solution into MeCN





| m/z | Abund (% largest) | Abund (% sum) | Abund (% first) |
|----------|----------------------|------------------|--------------------|
| 789.8725 | 0.33 | 0.1 | 100 |
| 790.8754 | 0.12 | 0.03 | 34.62 |
| 791.868 | 10.88 | 3.15 | 3252.92 |
| 792.8707 | 4 | 1.16 | 1197.05 |
| 793.8636 | 94.55 | 27.39 | 28279.49 |
| 794.8661 | 36.61 | 10.61 | 10951.79 |
| 795.8616 | 100 | 28.97 | 29910.96 |
| 796.8639 | 37.13 | 10.76 | 11106.42 |
| 797.8599 | 38.95 | 11.28 | 11649.09 |
| 798.8617 | 13.25 | 3.84 | 3963.75 |
| 799.8584 | 6.64 | 1.92 | 1986.23 |
| 800.8592 | 1.9 | 0.55 | 569.57 |
| 801.8568 | 0.6 | 0.17 | 179.83 |
| 802.8569 | 0.14 | 0.04 | 42.24 |
| 803.8555 | 0.03 | 0.01 | 9.54 |
| 804.8552 | 0.01 | 0 | 1.81 |
| 805.8544 | 0 | 0 | 0.31 |





| m/z | Abund (% largest) | Abund (% sum) | Abund (% first) |
|-----------|----------------------|------------------|--------------------|
| 1184.8091 | 0.01 | 0 | 100 |
| 1185.812 | 0.01 | 0 | 51.93 |
| 1186.8045 | 0.62 | 0.15 | 4883.87 |
| 1187.8073 | 0.33 | 0.08 | 2639.87 |
| 1188.8001 | 10.44 | 2.48 | 82337.55 |
| 1189.8027 | 5.84 | 1.39 | 46091.82 |
| 1190.7959 | 66.44 | 15.8 | 523980.47 |
| 1191.7984 | 38.04 | 9.05 | 300028.44 |
| 1192.794 | 100 | 23.78 | 788681.88 |
| 1193.7961 | 54.13 | 12.87 | 426892.91 |
| 1194.7924 | 67.71 | 16.1 | 534017.31 |
| 1195.7939 | 33.46 | 7.96 | 263869.94 |
| 1196.791 | 24.68 | 5.87 | 194634.27 |
| 1197.7918 | 10.69 | 2.54 | 84341.94 |
| 1198.7895 | 5.26 | 1.25 | 41467.39 |
| 1199.7896 | 1.92 | 0.46 | 15133.49 |
| 1200.7879 | 0.7 | 0.17 | 5516.25 |
| 1201.7876 | 0.21 | 0.05 | 1679.82 |
| 1202.7863 | 0.06 | 0.01 | 484.24 |
| 1203.7857 | 0.02 | 0 | 123.45 |
| 1204.7847 | 0 | 0 | 29.2 |

