

## **Supplementary material**

### **SYNTHESIS, CHARACTERIZATION, AND BIOLOGICAL ACTIVITY OF 1,3-DISUBSTITUTED BENZIMIDAZOLIUM SALT AND ITS Ag-NHC COMPLEX**

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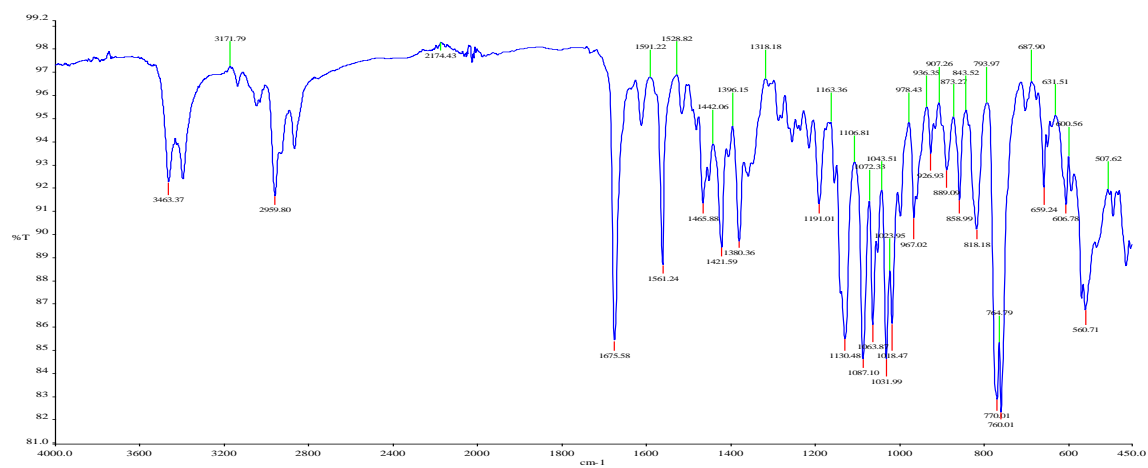
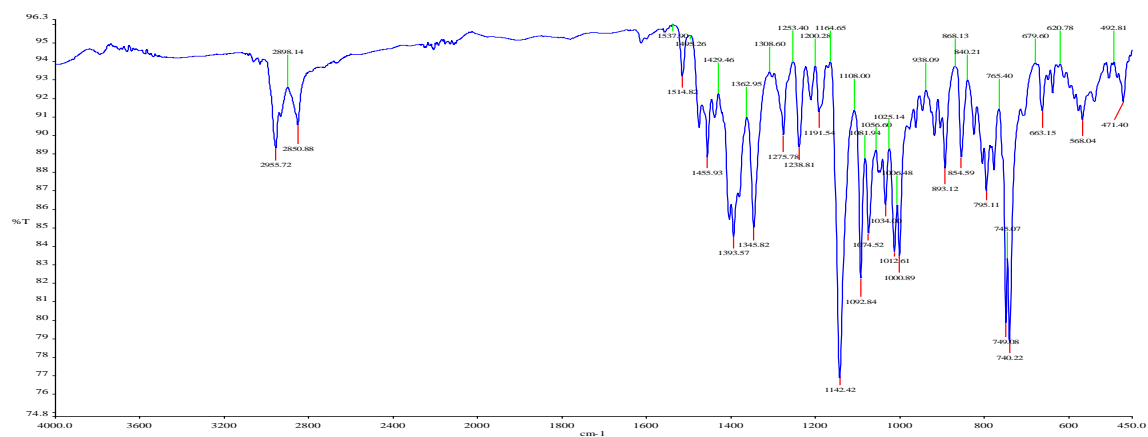
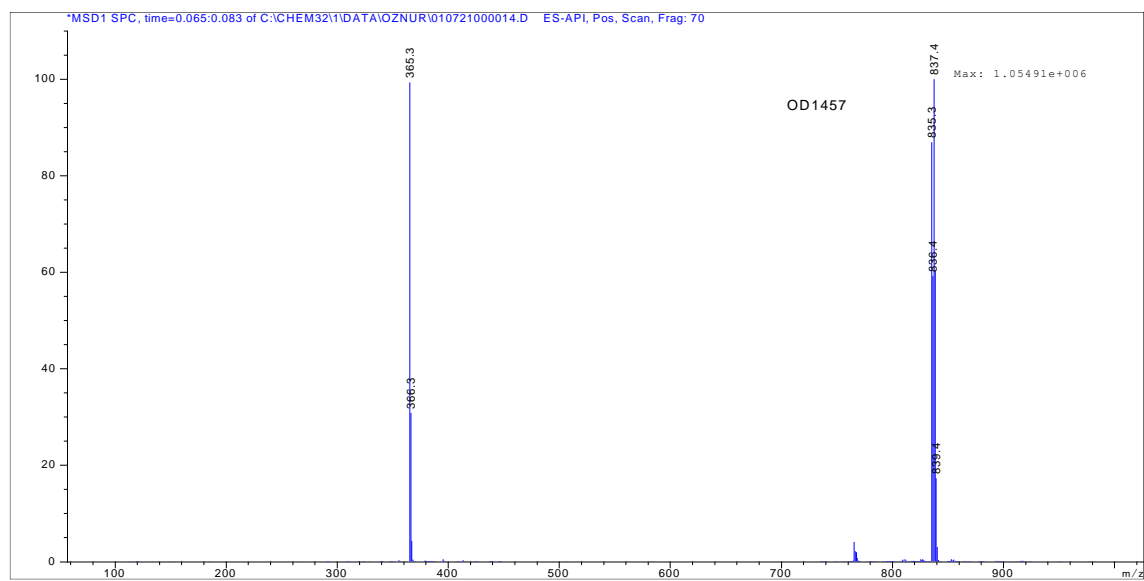


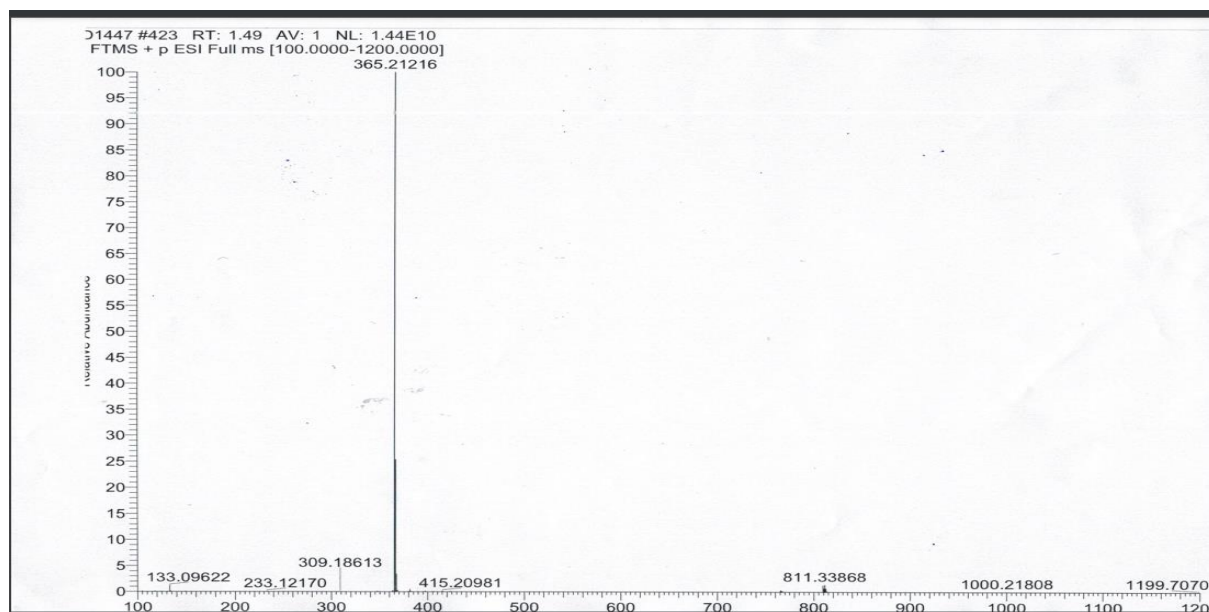
Figure S1. The FT-IR spectrum of benzimidazolium compound 1



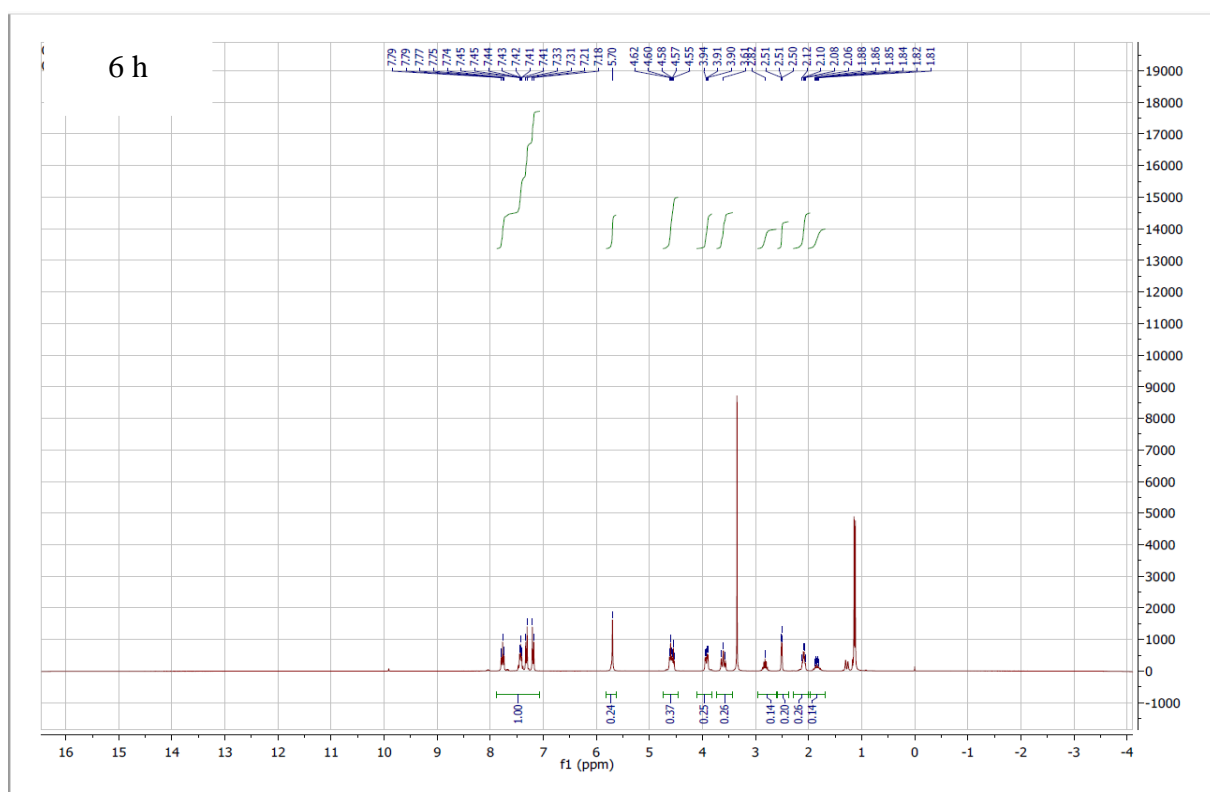
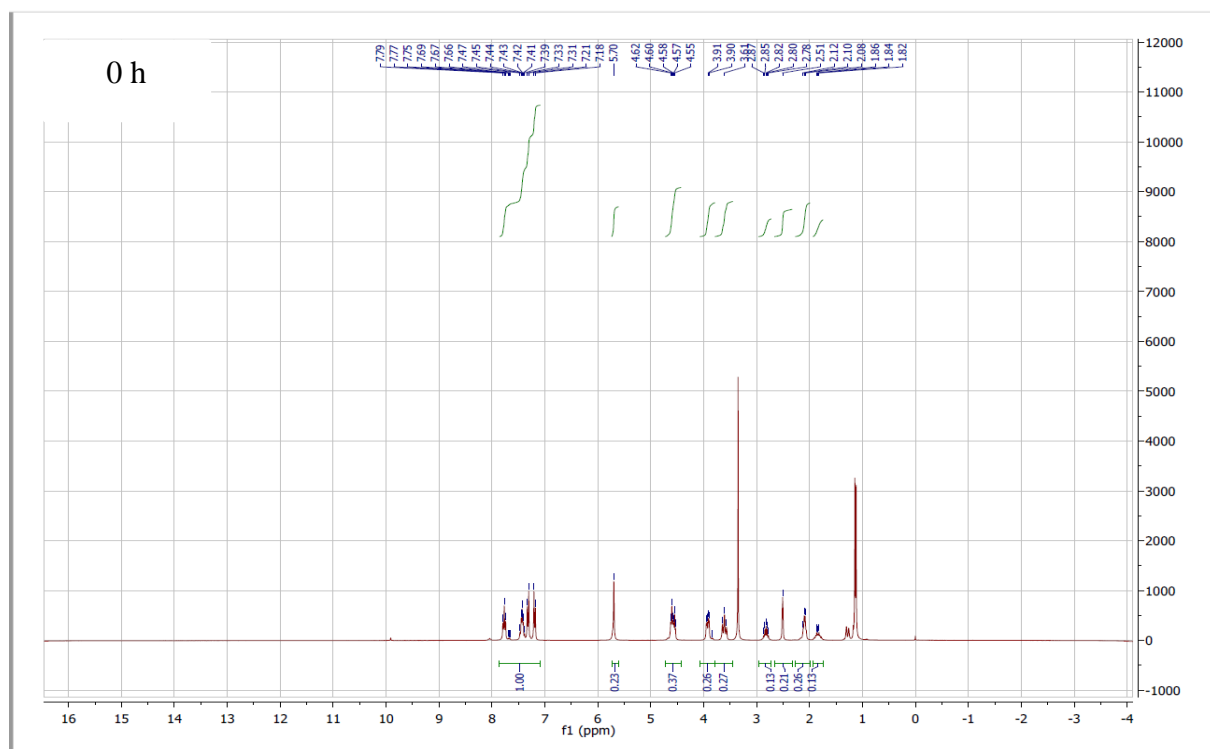
**Figure S2.** The FT-IR spectrum of compound 2

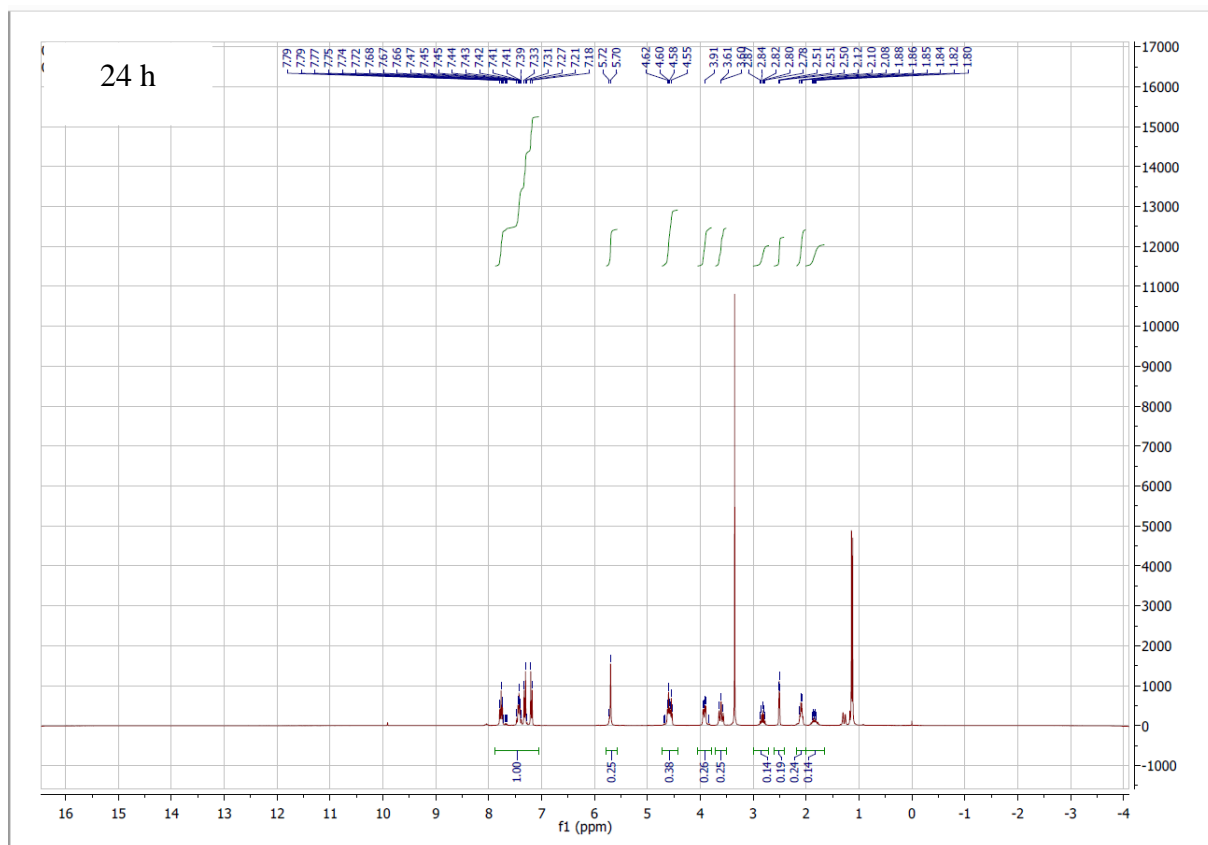


**Figure S3.** The LC-MS data of compound **2**



**Figure S4.** The LC-MS data of ligand 1





**Figure S5.**  $^1\text{H}$  NMR stability study of compound **2** in DMSO- $d_6$  for 0, 6, and 24 h