

Figure S1. a. FTIR spectrum of pure azodicarbonamide.

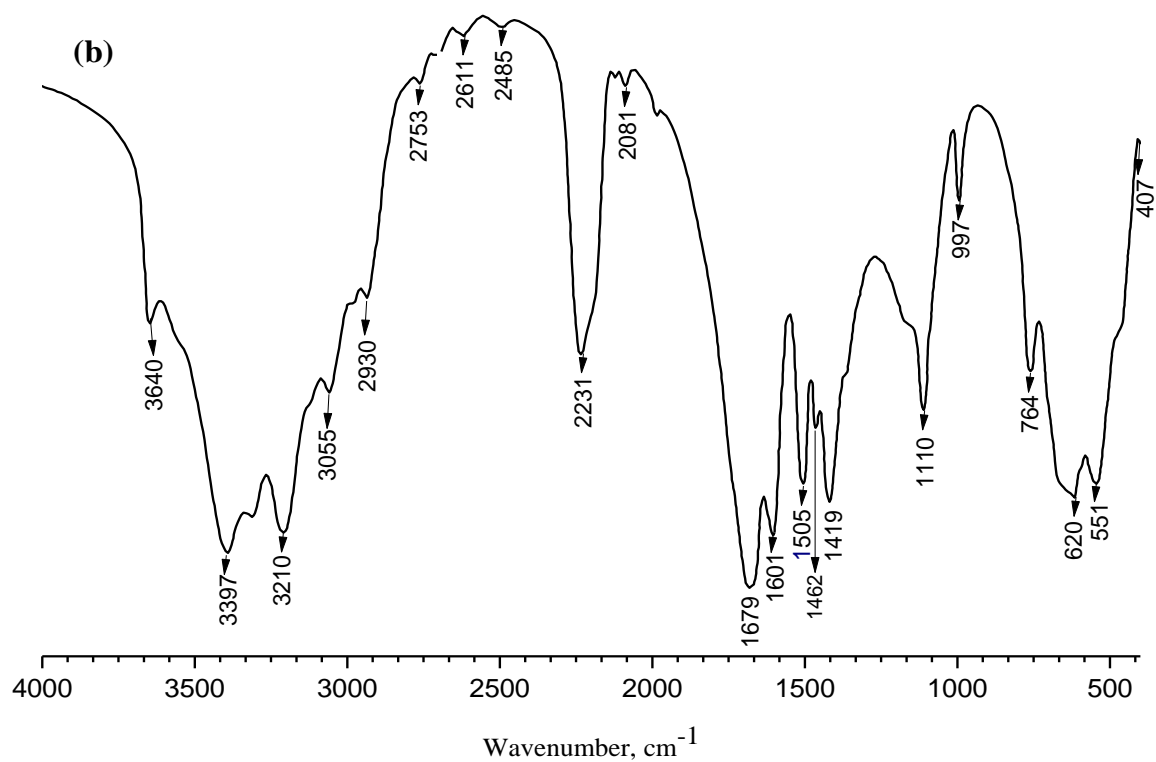


Figure S1. b. FTIR spectrum of Ni(II) complex.

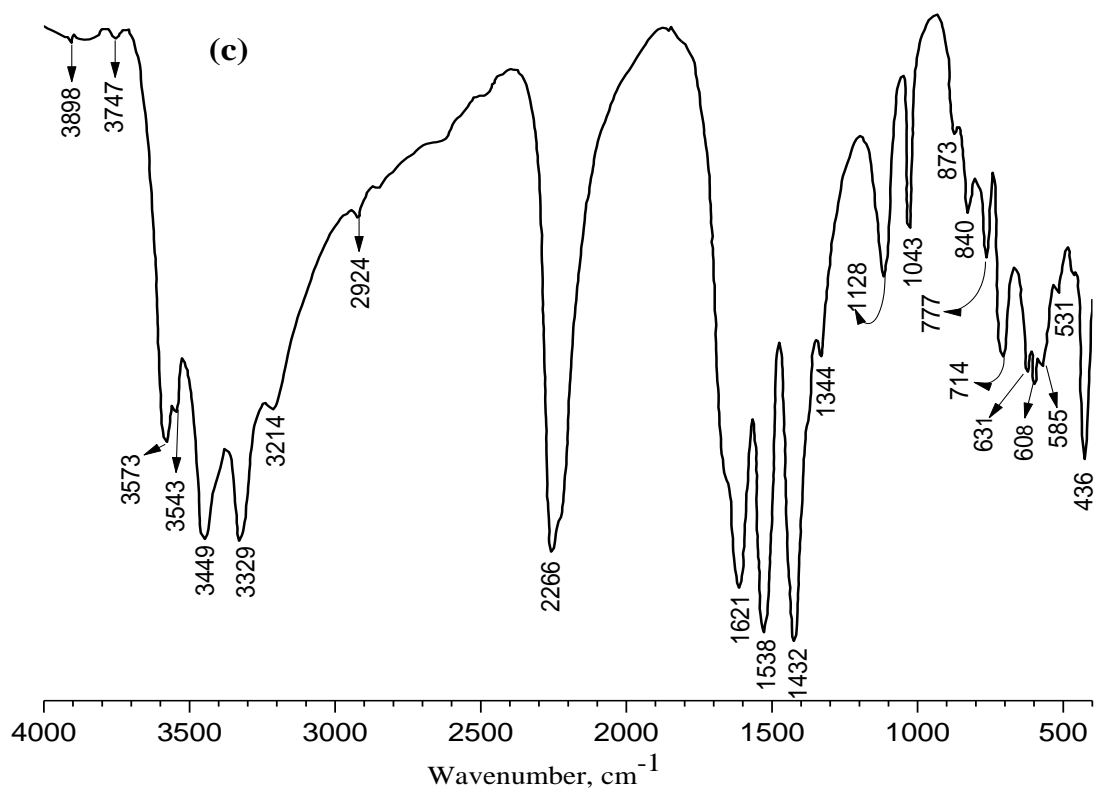


Figure S1. c. FTIR spectrum of Cu(II) complex.

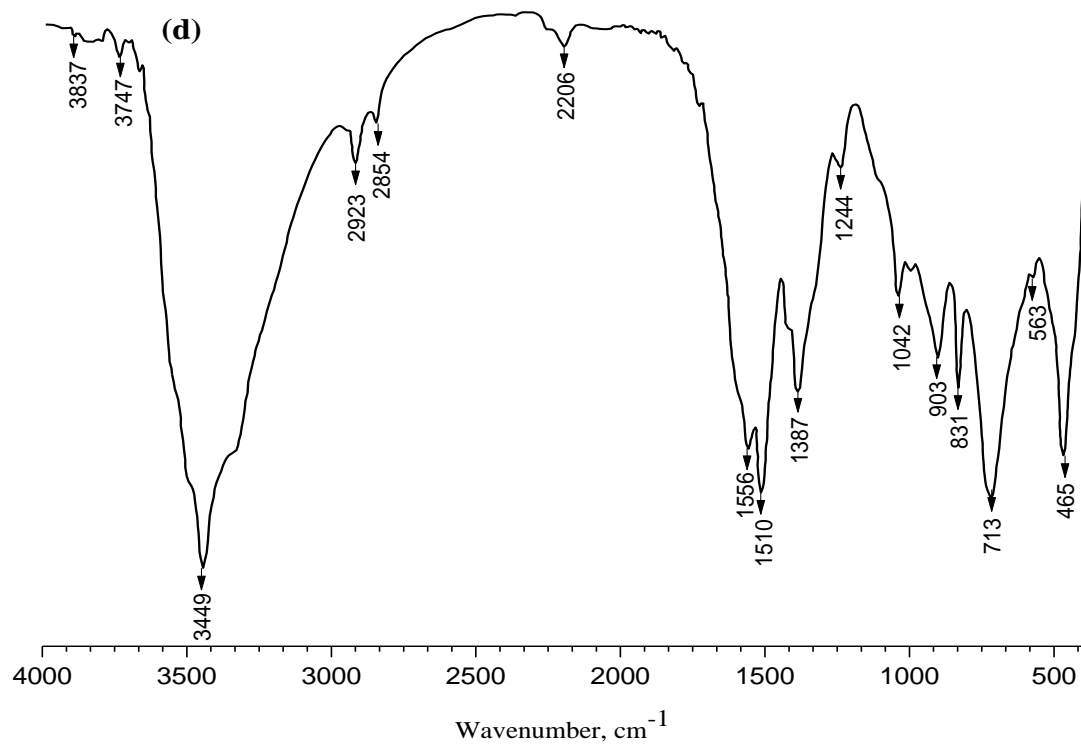
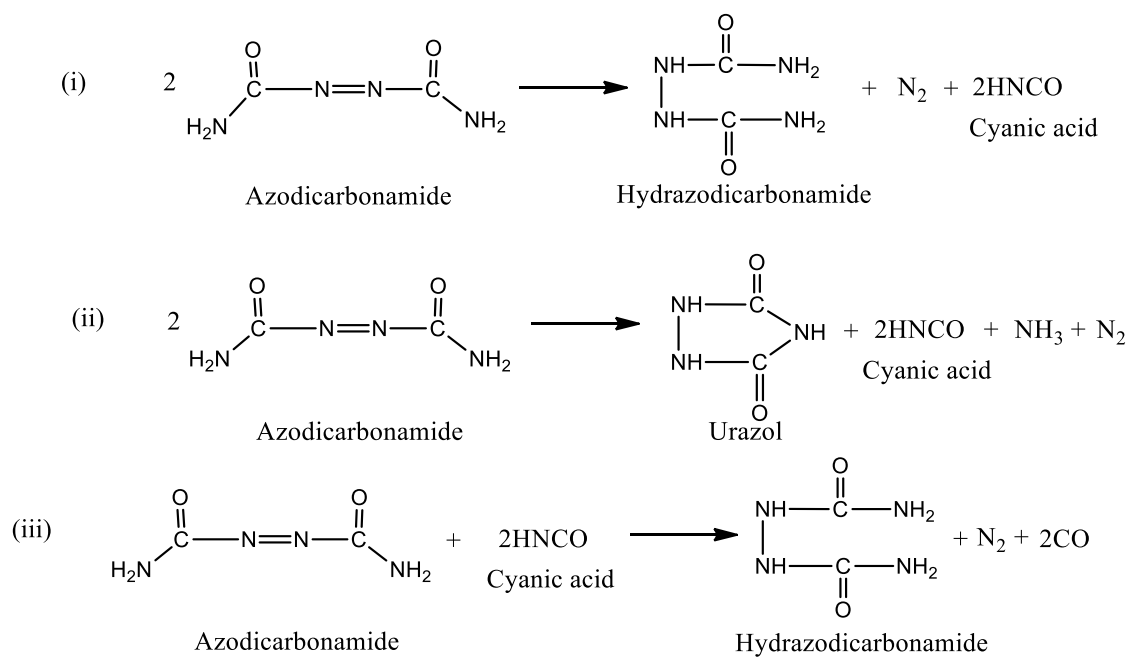
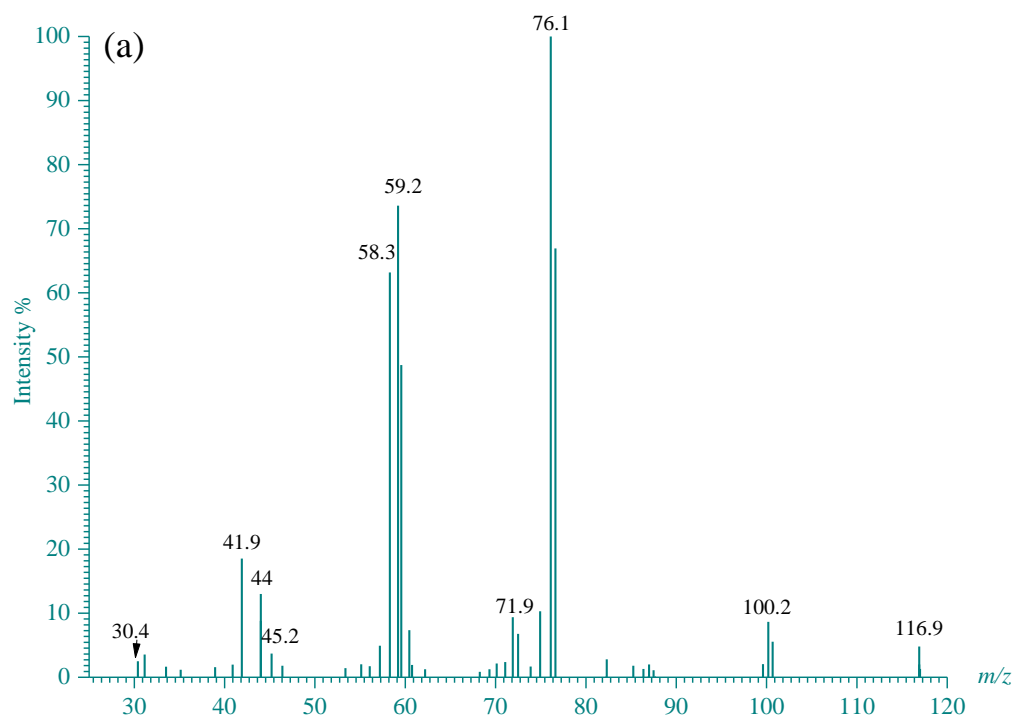


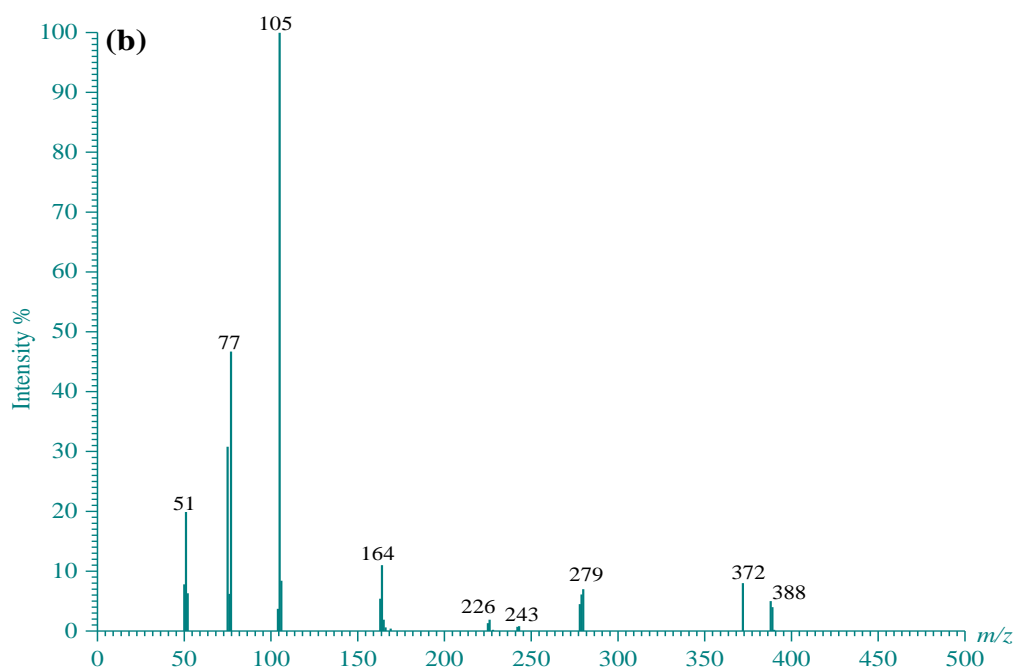
Figure S1. d. FTIR spectrum of Zn(II) complex.



**Scheme S1.** Decomposition reaction for azodicarbonamide.



**Figure S2. a.** Mass spectra of Azodicarbonamide ligand [40].



**Figure S2. b.** Mass spectra of Ni(II) complex.

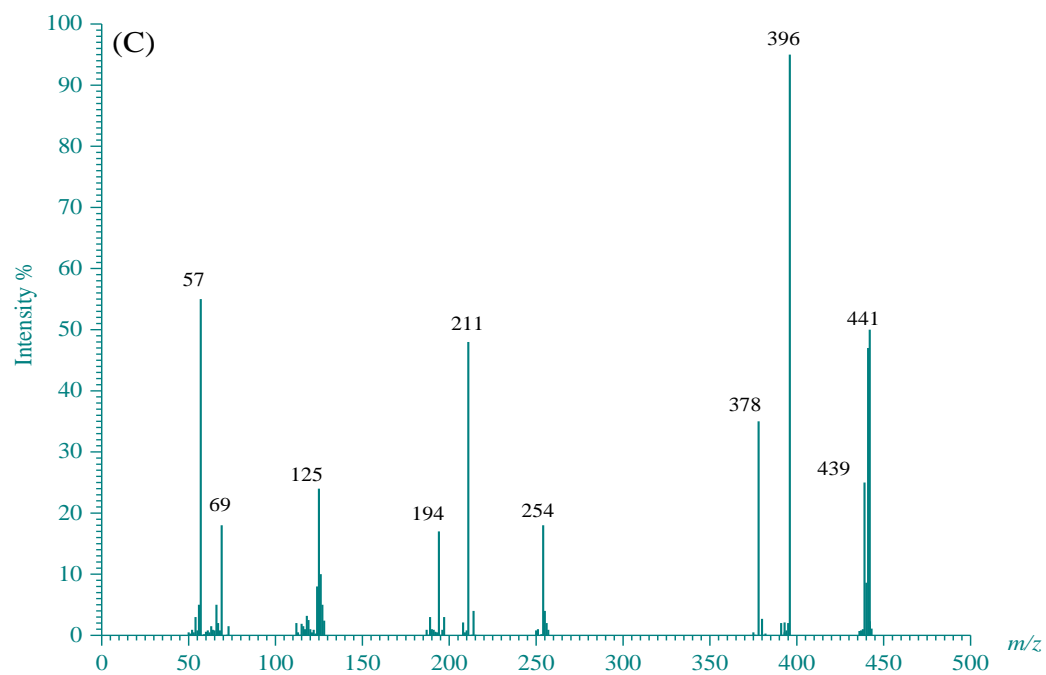


Figure S2. c. Mass spectra of Cu(II) complex.

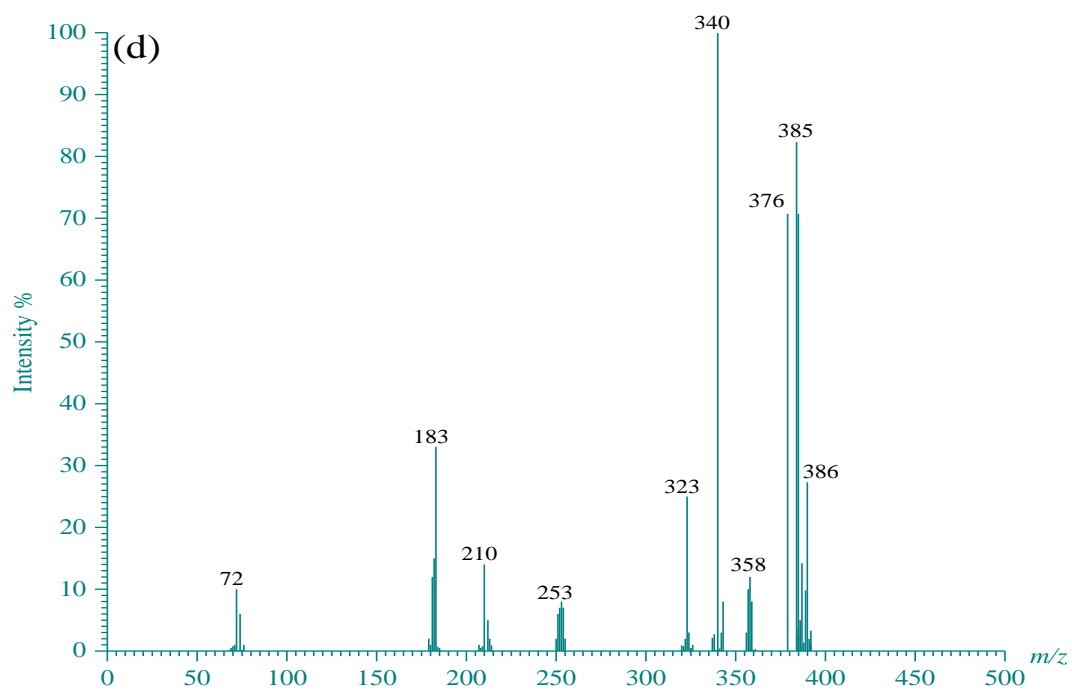
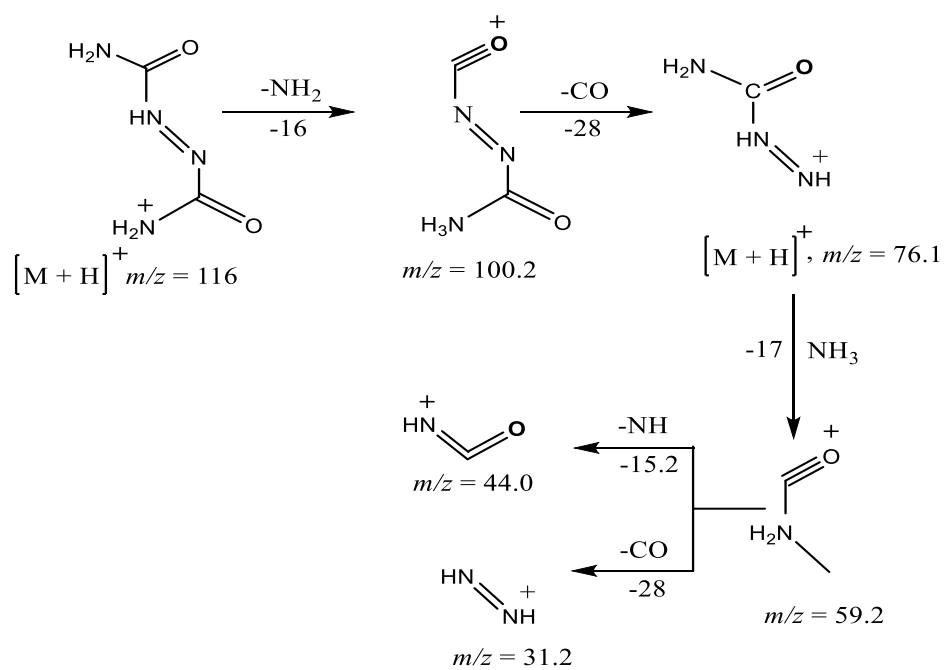
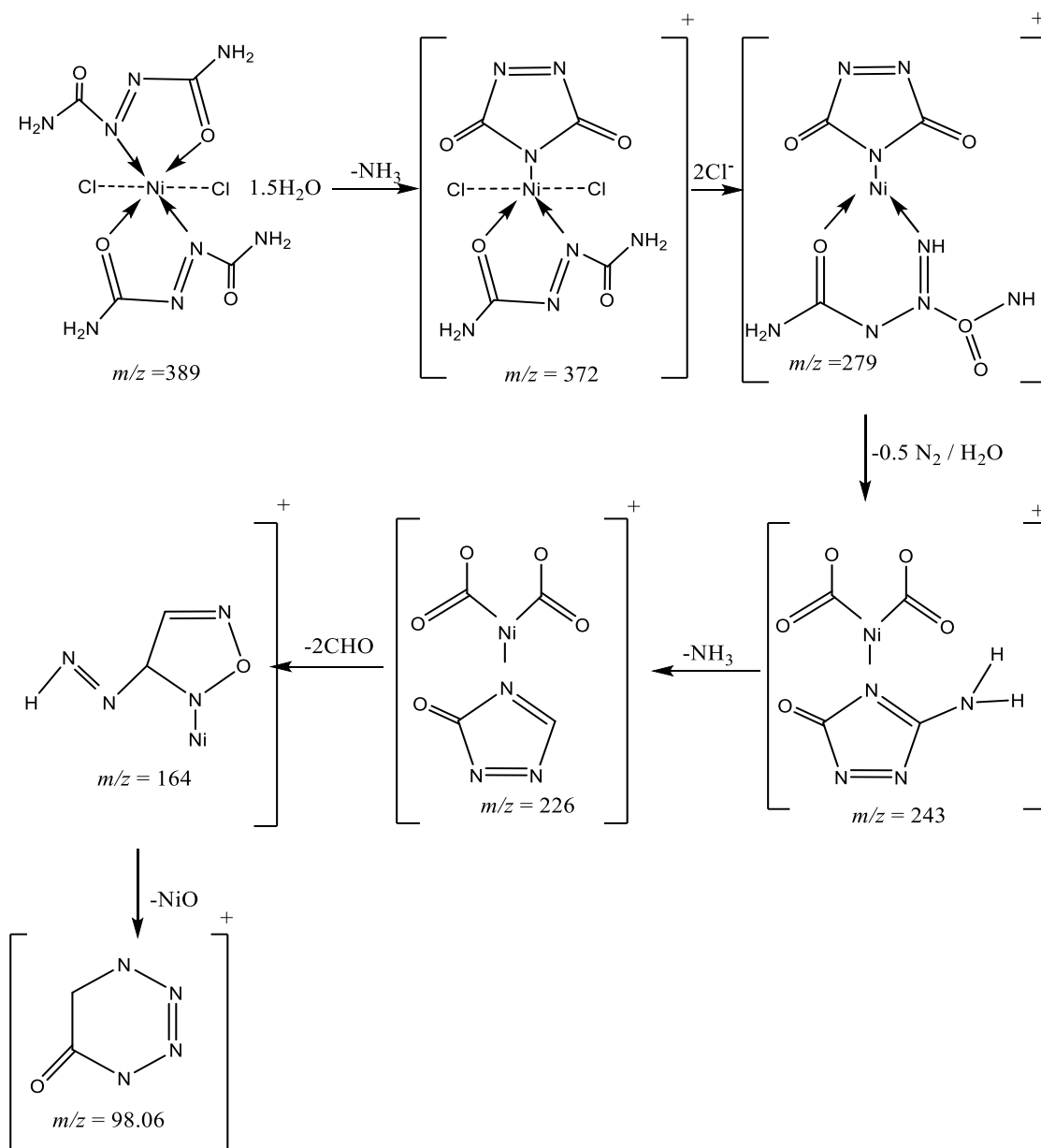


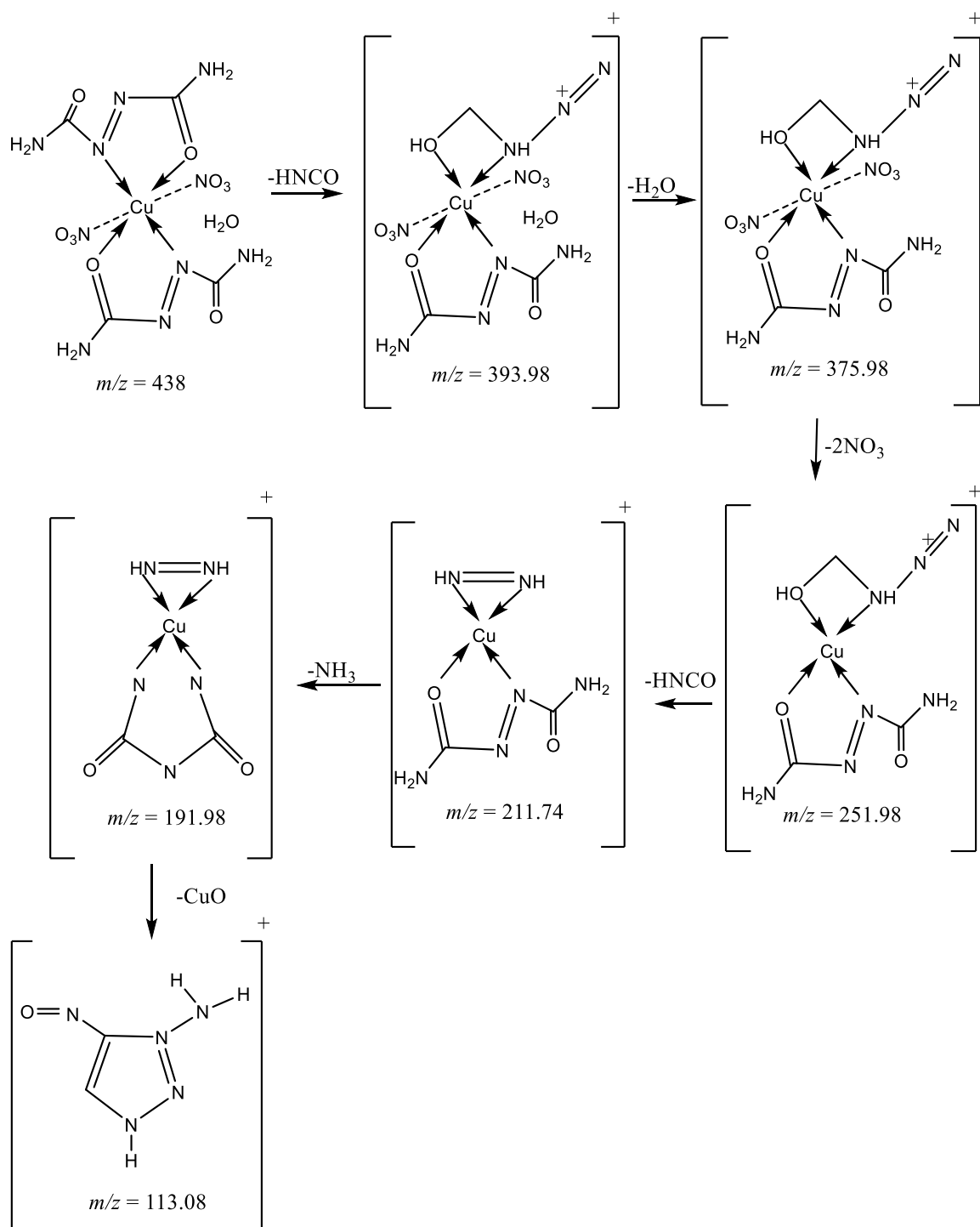
Figure S2. d. Mass spectra of Zn(II) complex.



**Scheme S2.** Fragmentation pattern of azodicarbonamide ligand.

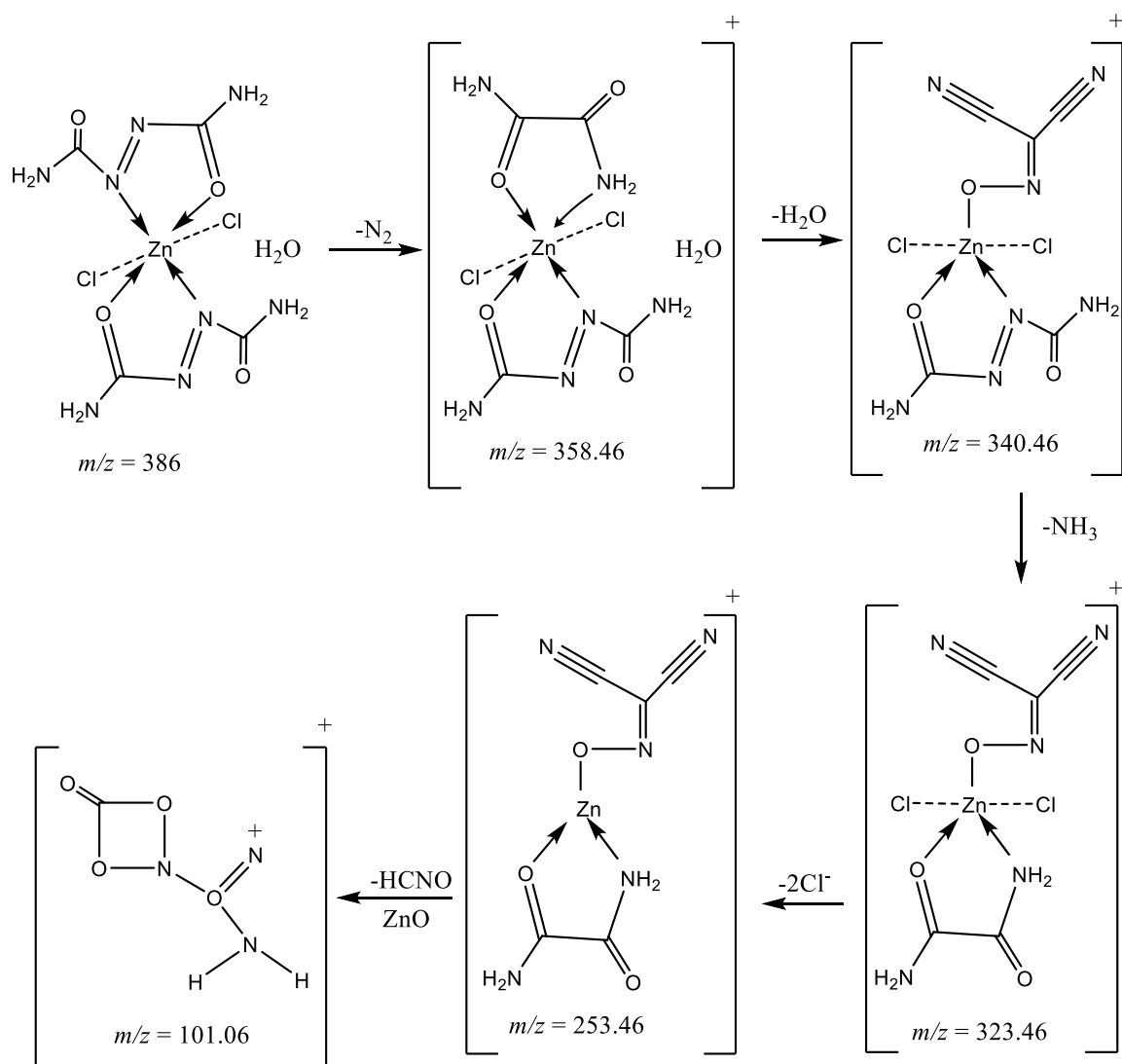


**Scheme S3.** Fragmentation pattern of Ni(II) complex.



**Scheme S4.** Fragmentation pattern of Cu(II) complex.





**Scheme S5.** Fragmentation pattern of Zn(II) complex.