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Supplementary Information for

Highly Selective Ratiometric Fluorescent Recognition of Histidine by Tetraphenylethene-Terpyridine-Zn(II) Complexes

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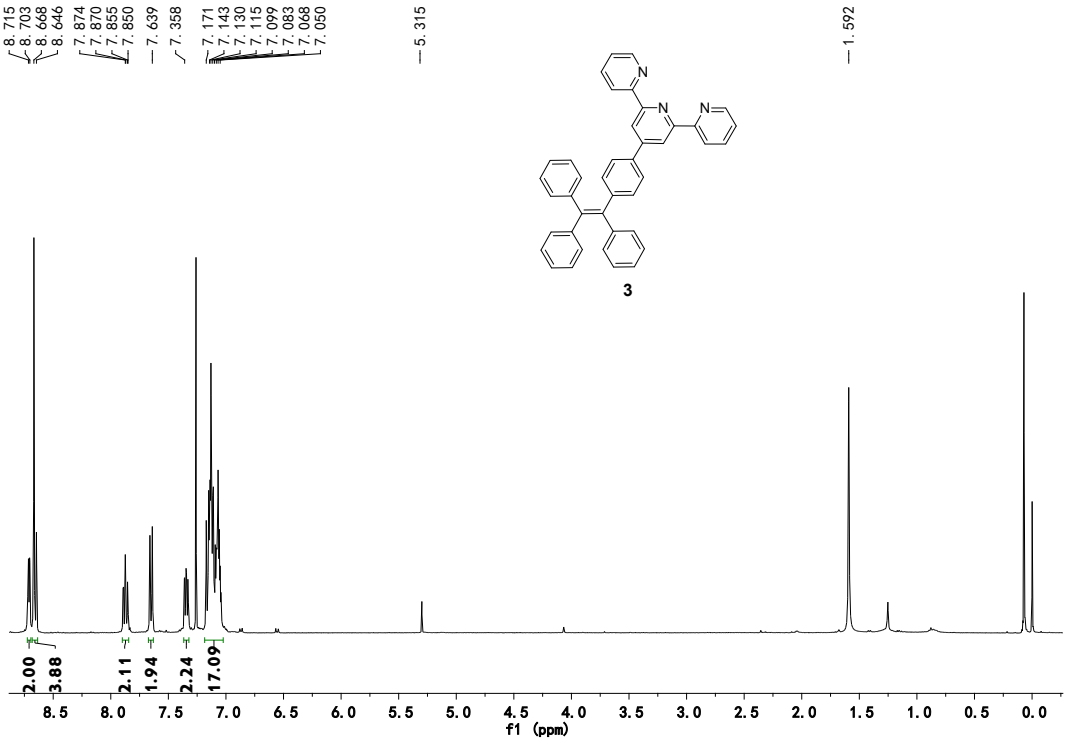
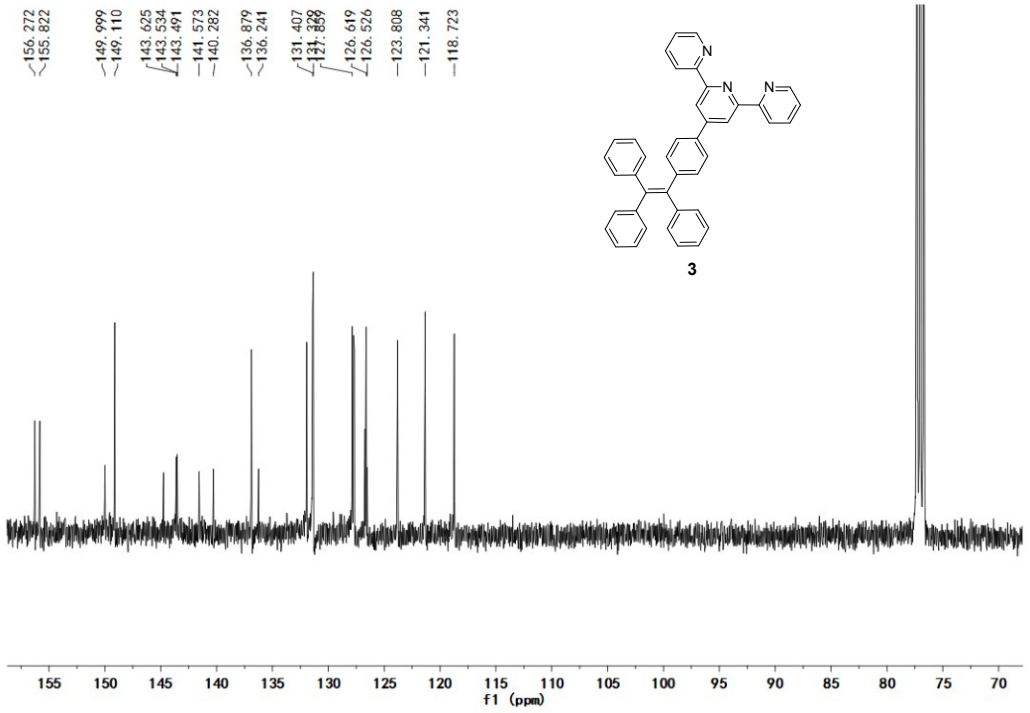
Preparation of the HEPES buffer solution

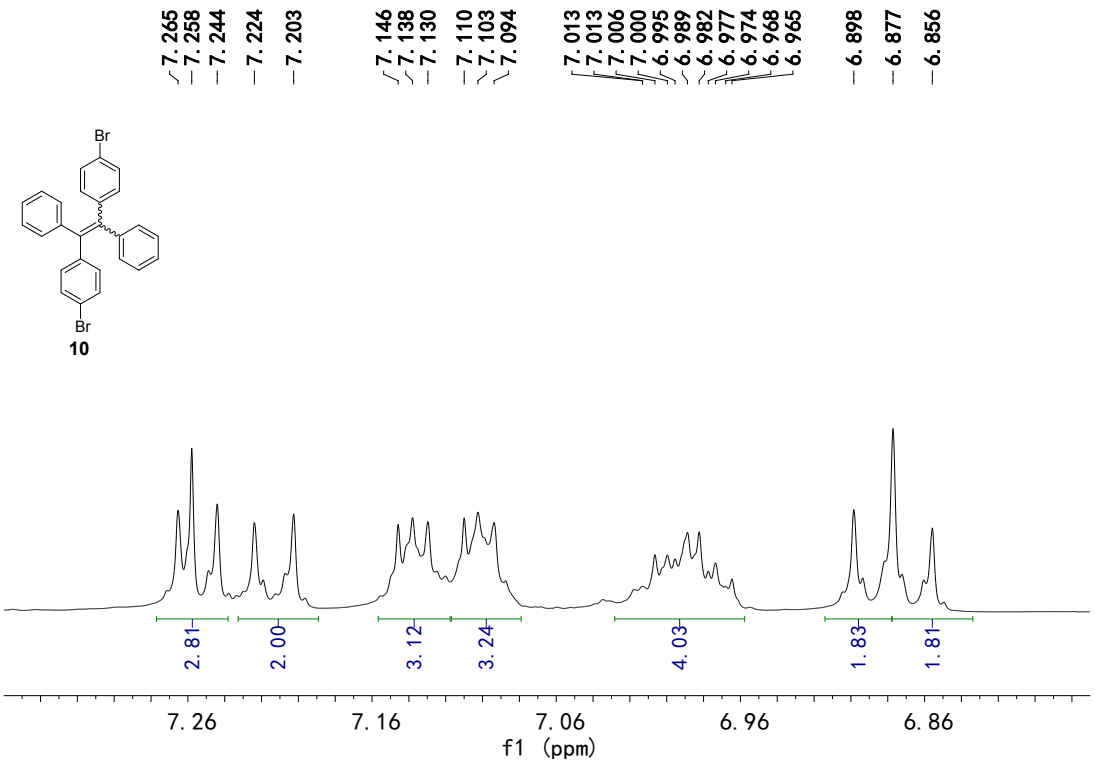
HEPES powder (5.958 g, 25 mmmol) was added to a 1L volumetric flask and water (900 mL) was added to dissolve the HEPES powder. NaOH solution (2.0 M) was added dropwise to the mixture until the pH was adjusted to 7.35. Then the volumeric flask was filled with water to obtain the HEPES buffer solution (25 mM, pH = 7.35).

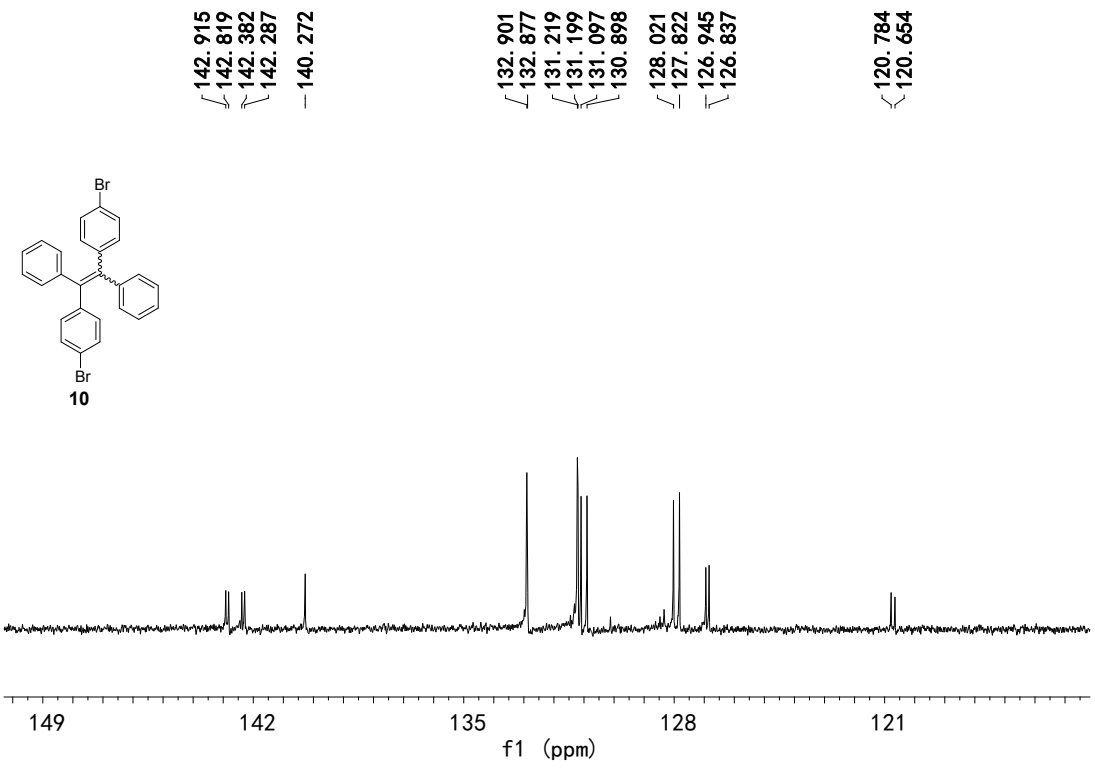
NMR Spectra of Compound 3



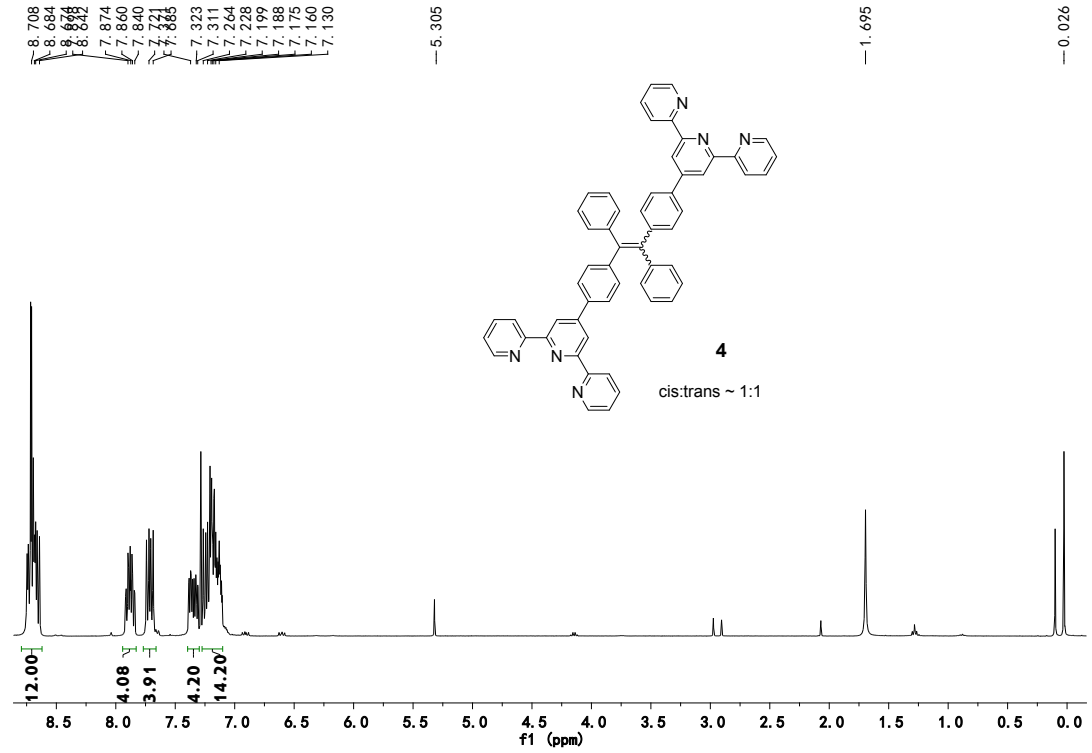


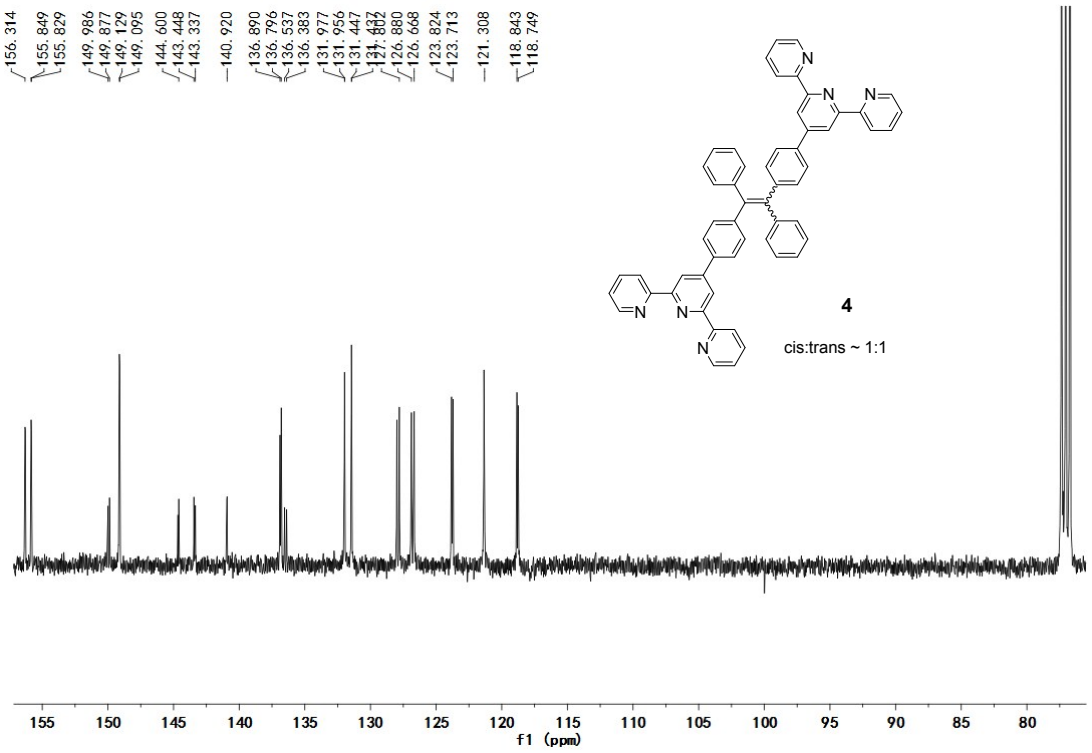
NMR Spectra of Compound 10



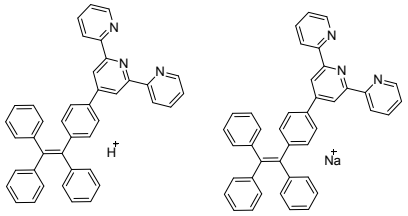


NMR spectra of compound 4



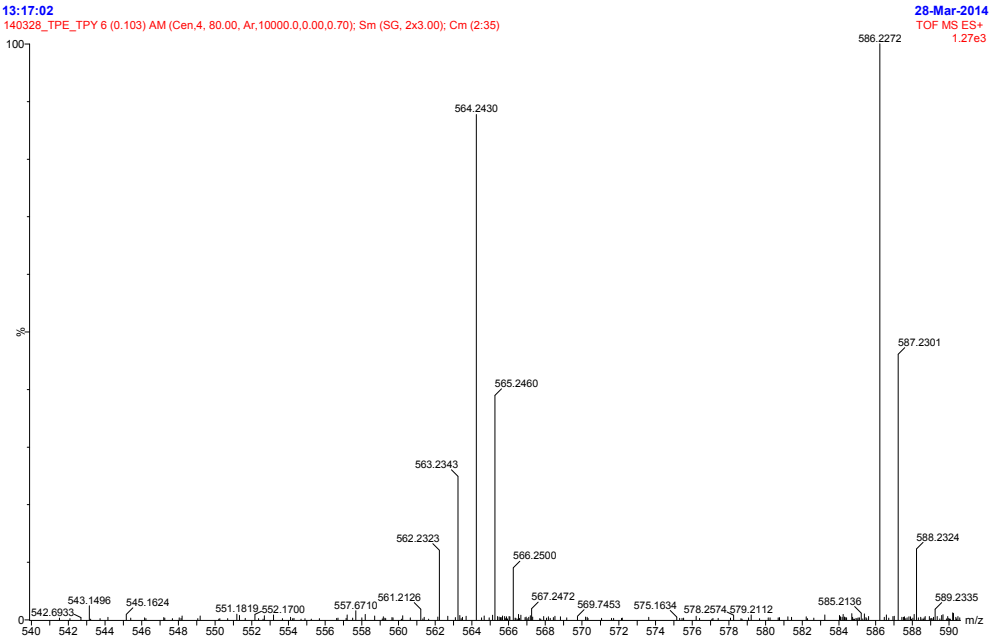


HRMS of compound 3

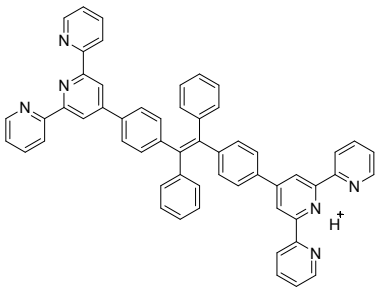


Chemical Formula: $C_{41}H_{30}N_3^+$
Exact Mass: 564.2434

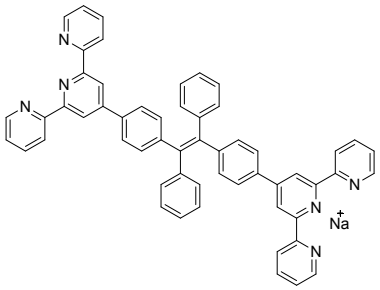
Chemical Formula: $C_{41}H_{29}N_3Na^+$
Exact Mass: 586.2254



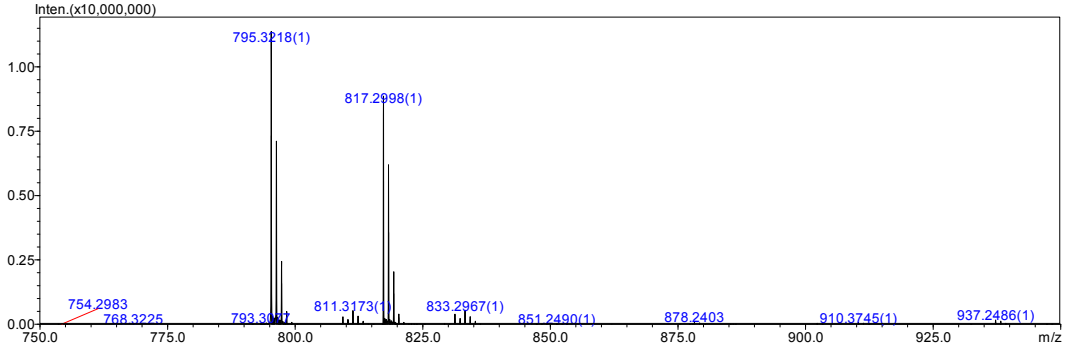
HRMS of compound 4

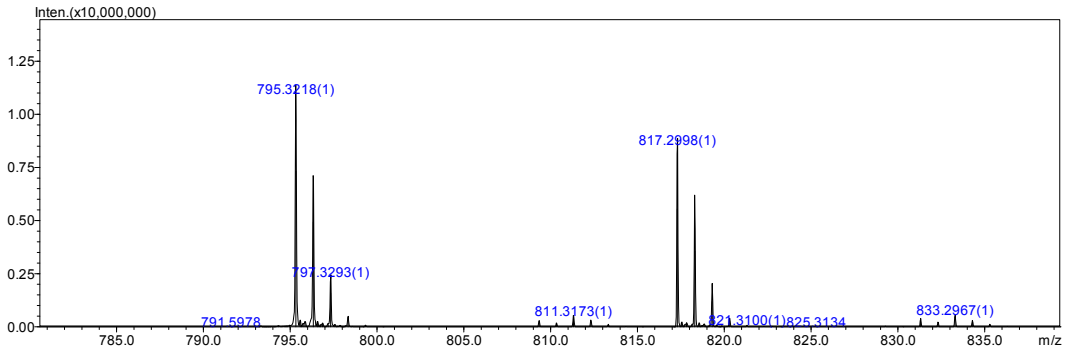


Chemical Formula: $C_{56}H_{39}N_6^+$
Exact Mass: 795.3231

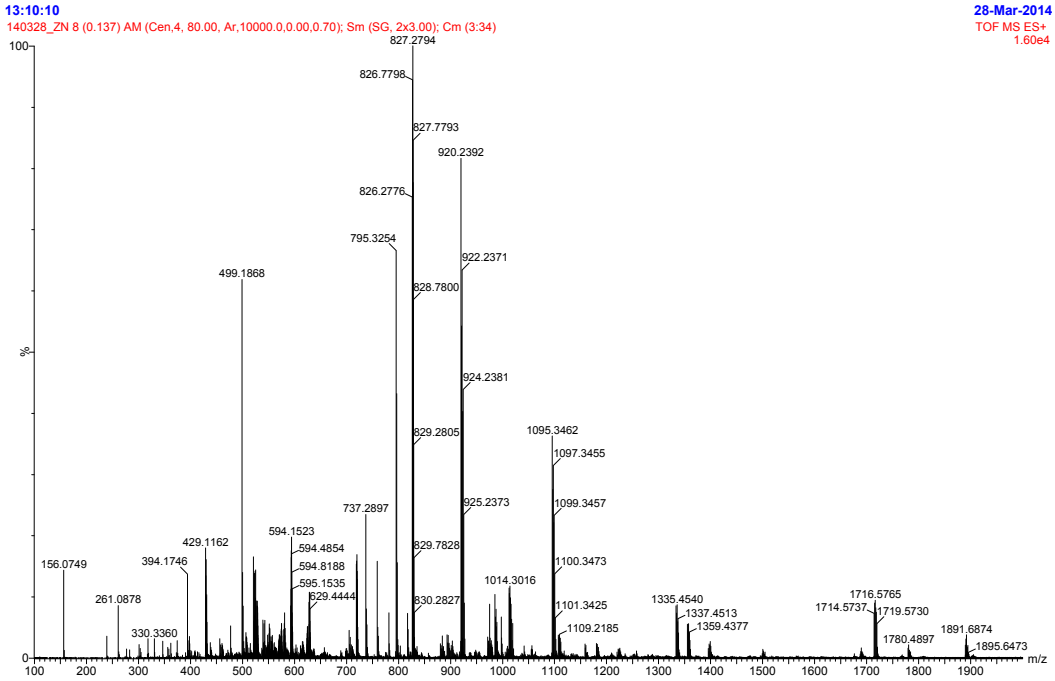


Chemical Formula: $C_{56}H_{38}N_6Na^+$
Exact Mass: 817.3050

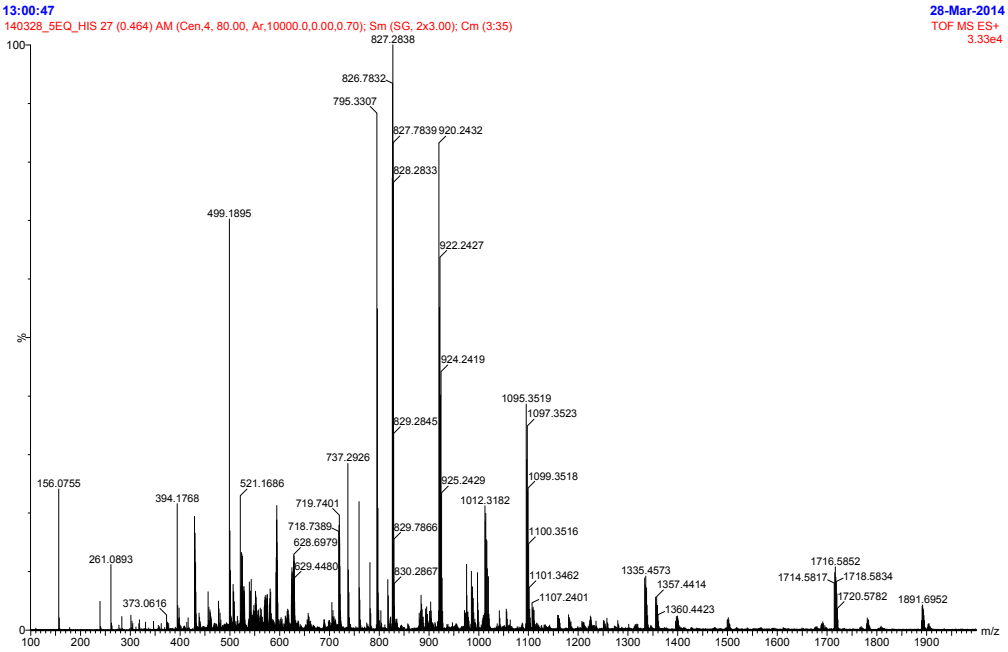




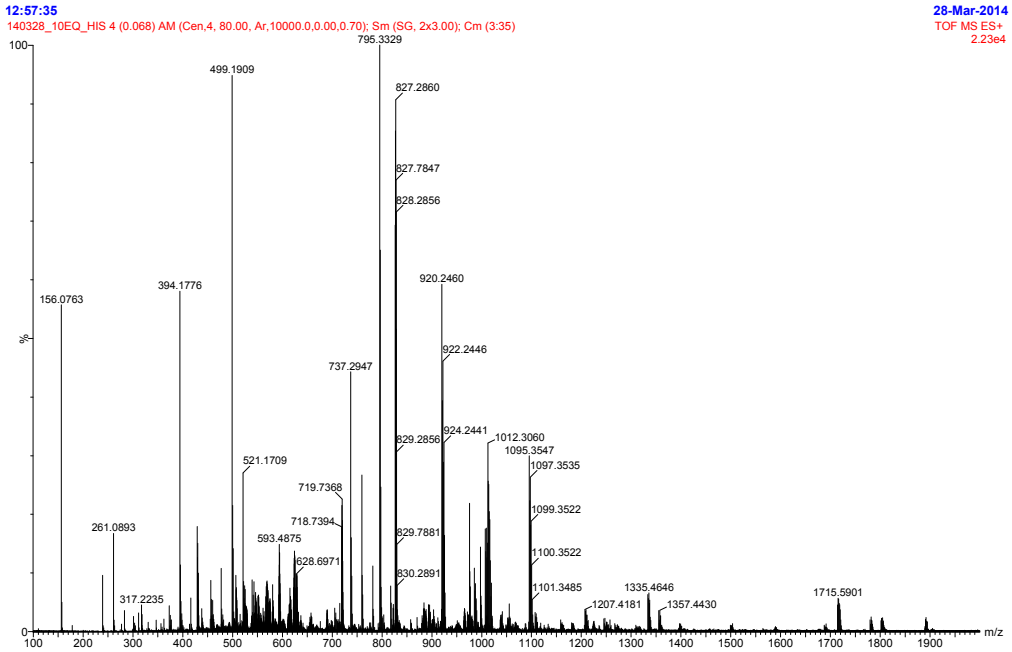
HRMS spectra of complex 4+Zn^{2+} (1.5 equiv) in $CH_3CN:H_2O$ (4:1)



HRMS spectra of complex 4+Zn^{2+} (1.5 equiv) with 5.0 equiv of histidine in $CH_3CN:H_2O$ (4:1)



HRMS spectra of complex 4+Zn^{2+} (1.5 equiv) with 10.0 equiv of histidine in $CH_3CN:H_2O$ (4:1)



HRMS spectra of complex 4+Zn^{2+} (1.5 equiv) with 15.0 equiv of histidine in $CH_3CN:H_2O$ (4:1)