Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supplementary Information

Synthesis, and optical and electrochemical properties of julolidine-structured pyrido[3,4-*b*]indole dye

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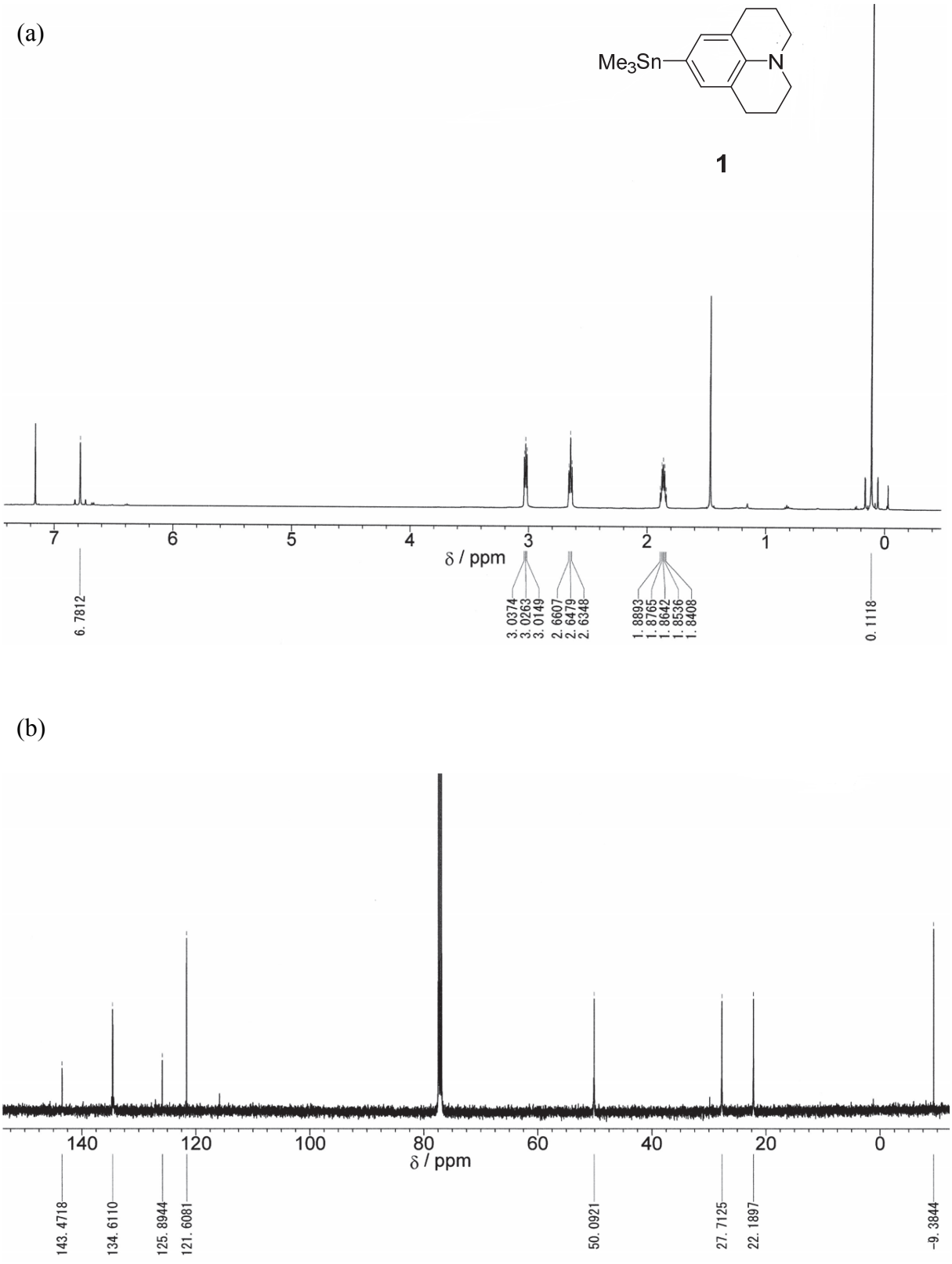
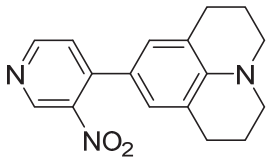


Fig. S1 (a) ^{1}H HMR (400 MHz) and (b) ^{13}C HMR (125 MHz) of **1** in $CDCl_3$.

(a)



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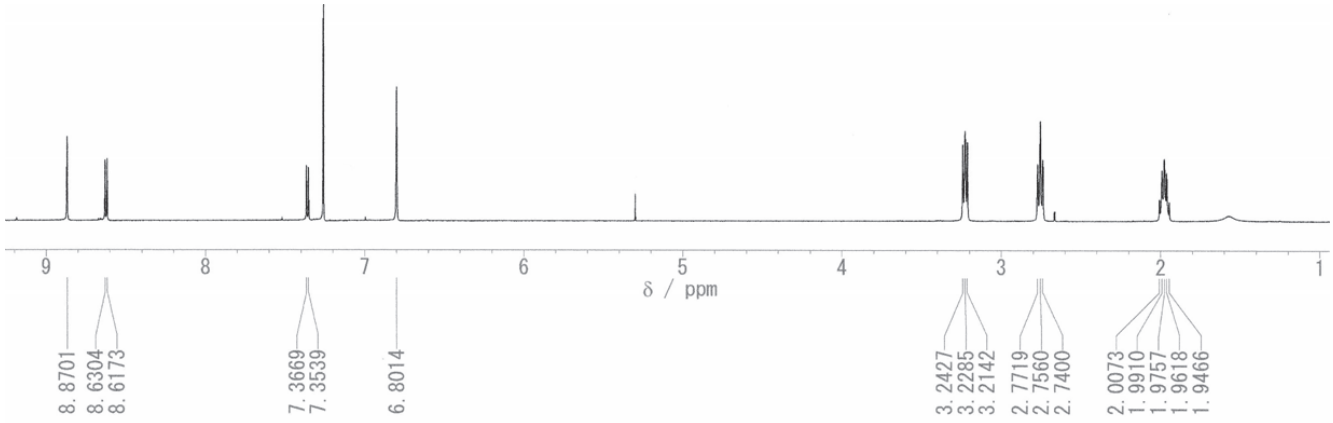

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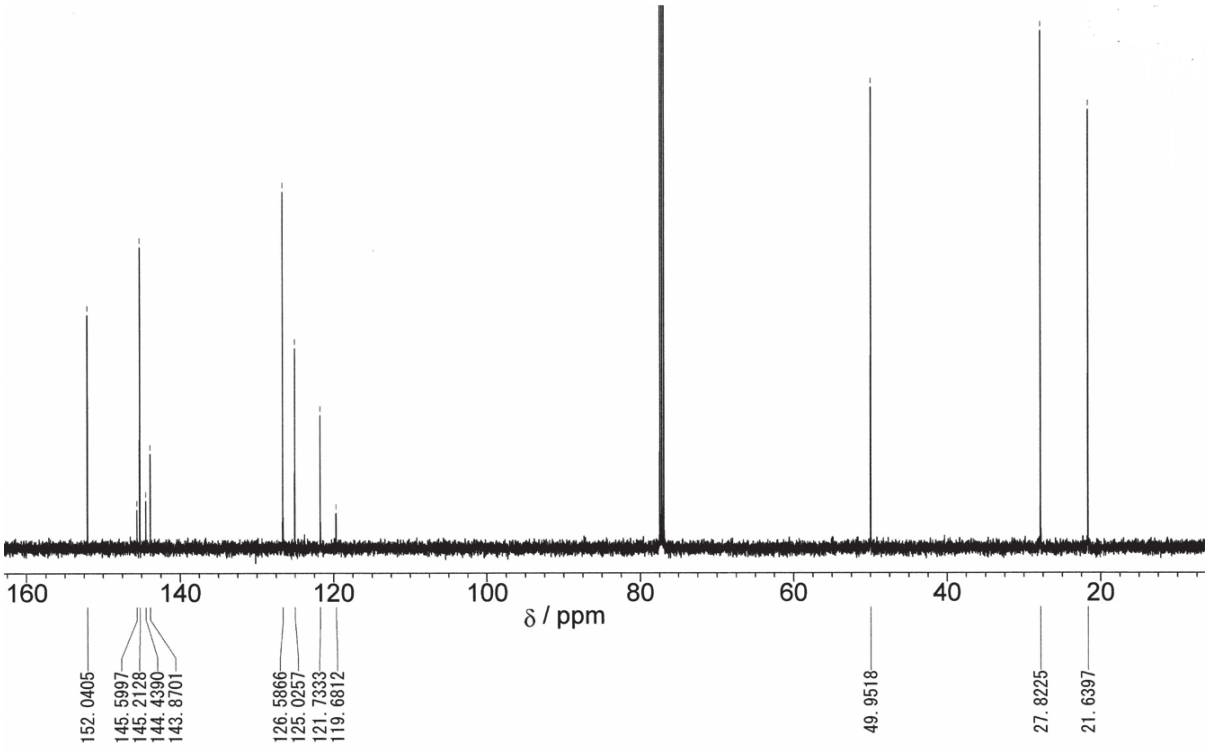
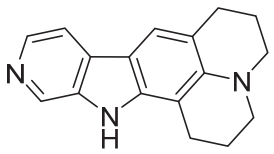


Fig. S2 (a) ^{1}H HMR (400 MHz) and (b) ^{13}C HMR (125 MHz) of **2** in $CDCl_3$.

(a)



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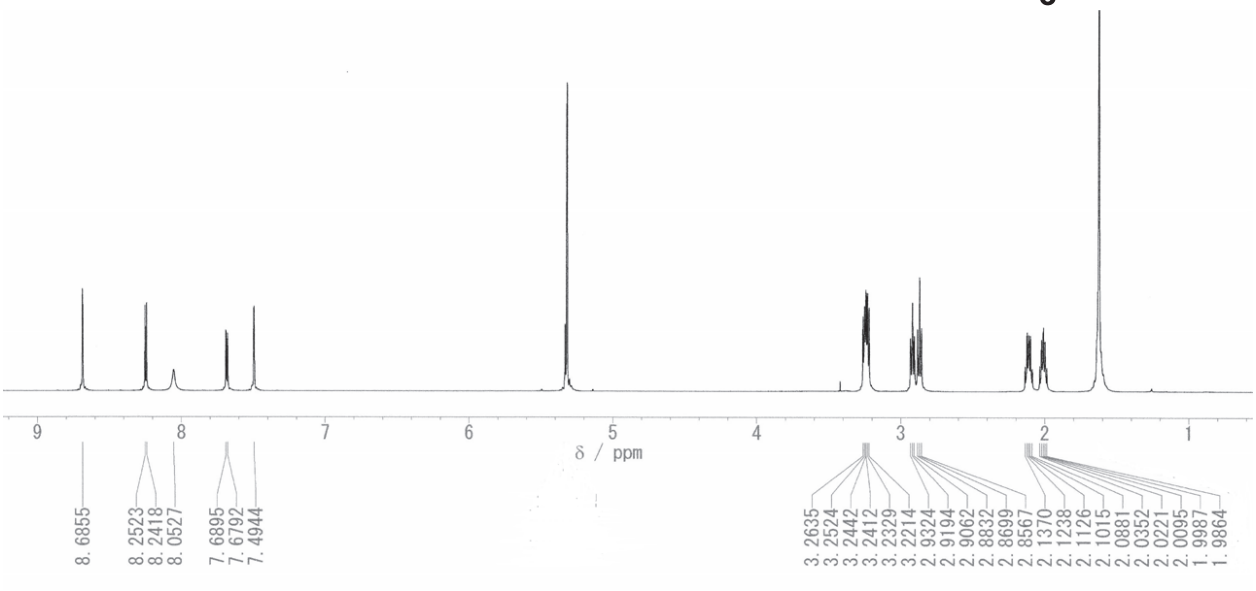


(b)

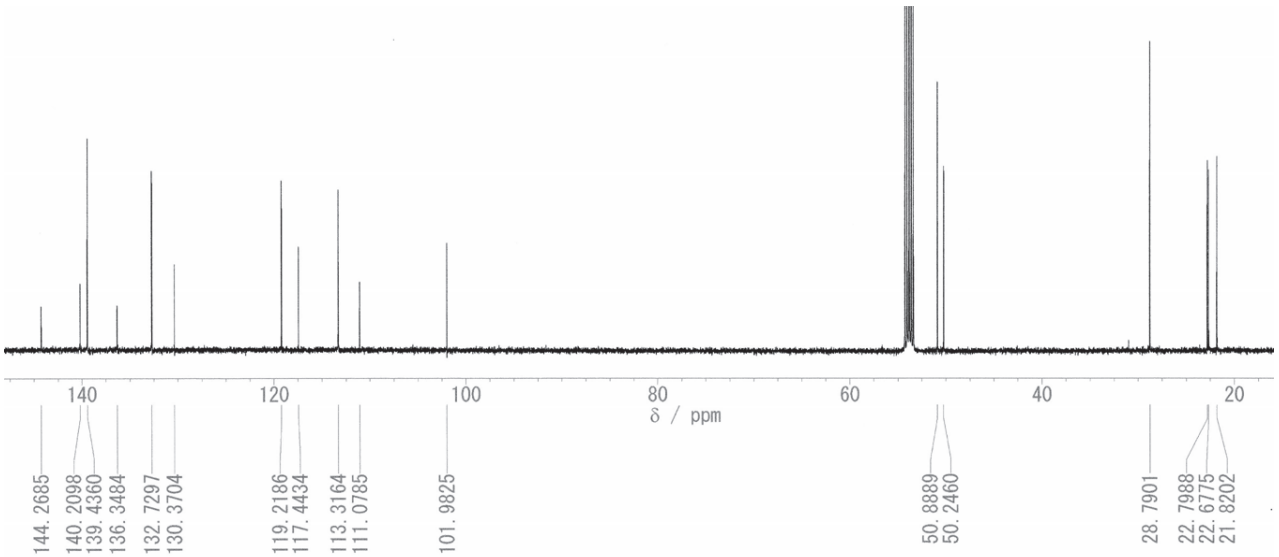


Fig. S3 (a) ^{1}H HMR (500 MHz) and (b) ^{13}C HMR (125 MHz) of **3** in CD_2Cl_2.

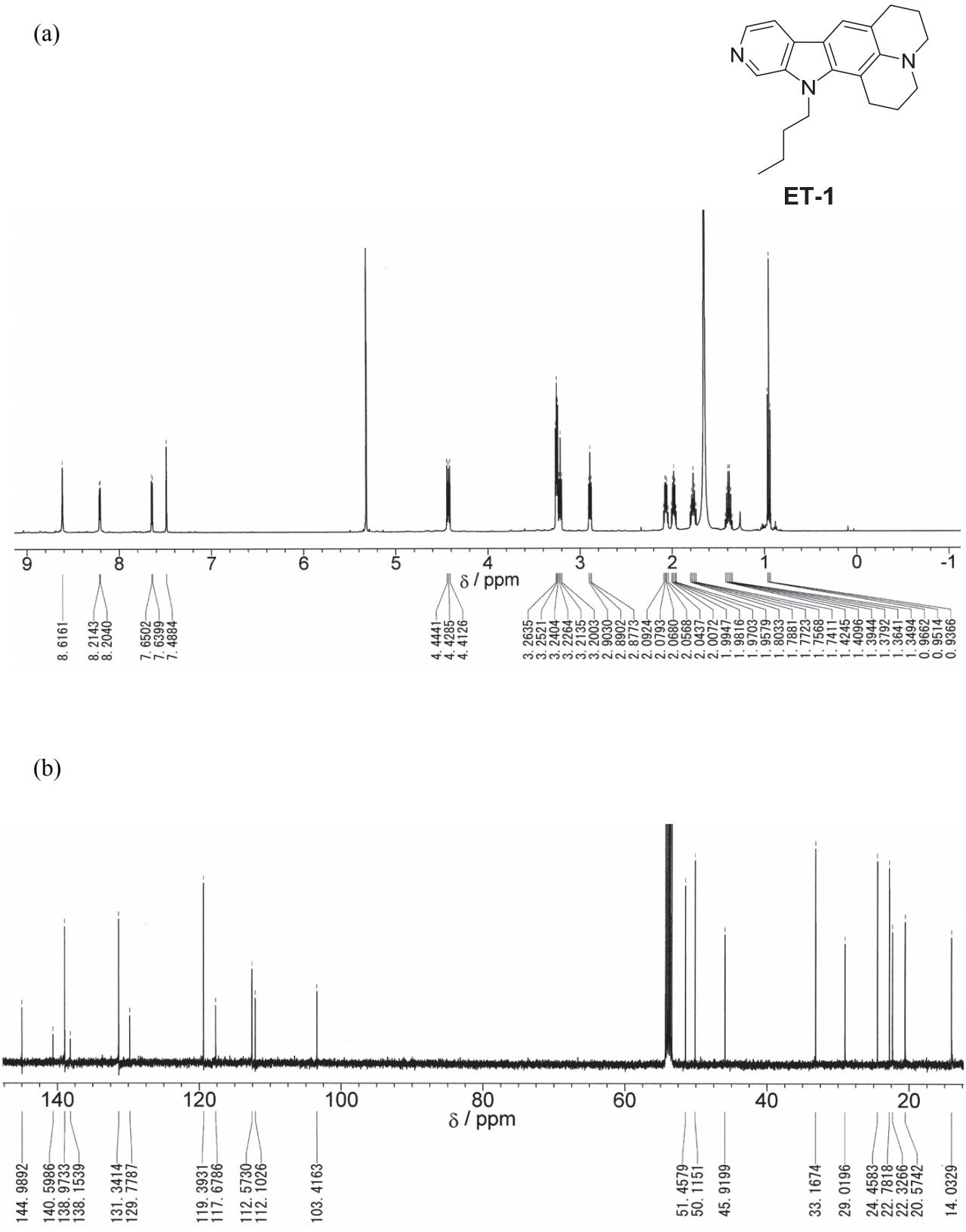


Fig. S4 (a) ^{1}H HMR (500 MHz) and (b) ^{13}C HMR (125 MHz) of **ET-1** in CD_2Cl_2.

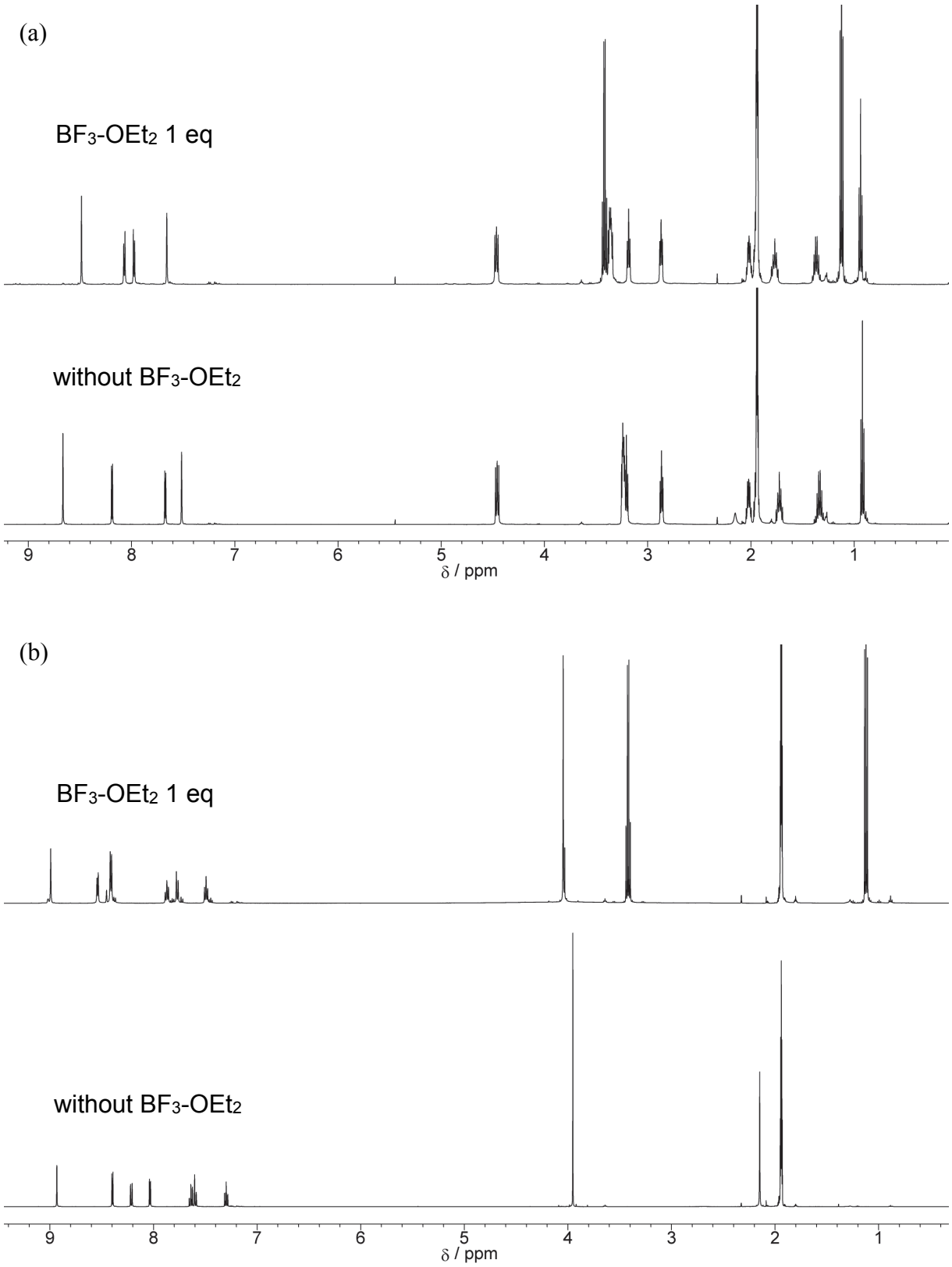
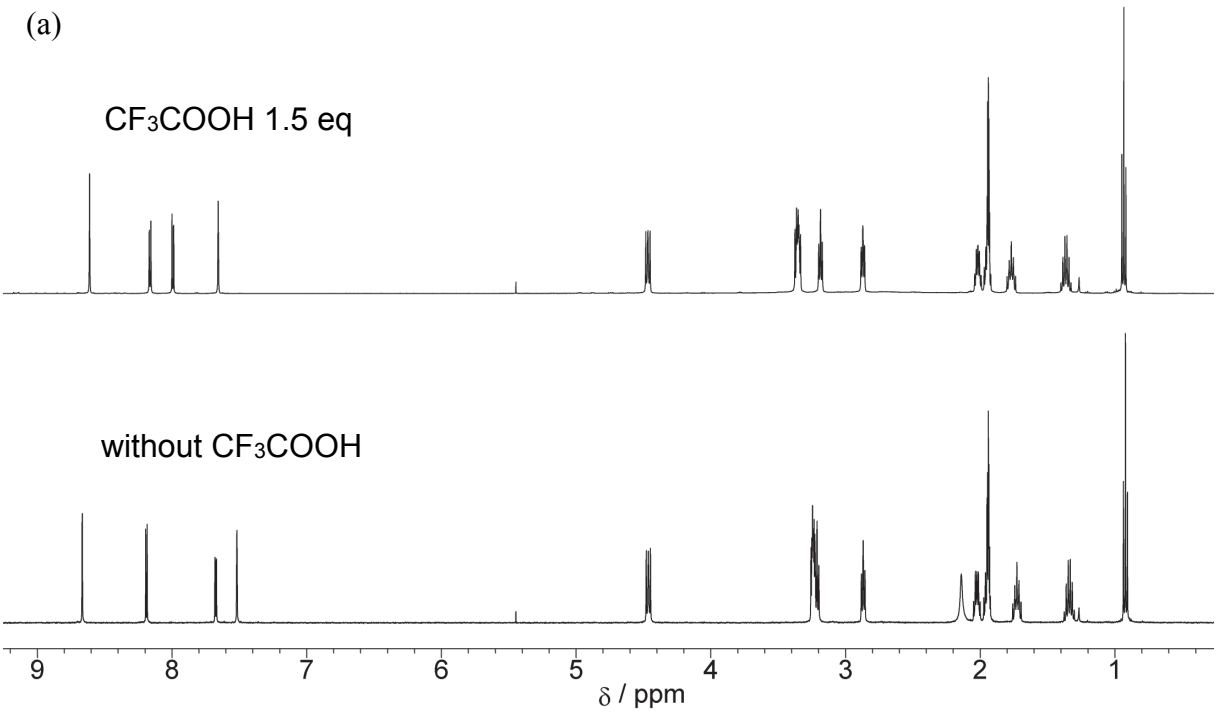


Fig. S5 ^{1}H NMR spectra (500 MHz) of (a) **ET-1** and (b) **9-MP** with and without the addition of 1 eq BF_3-OEt_2 in acetonitrile-d_3.



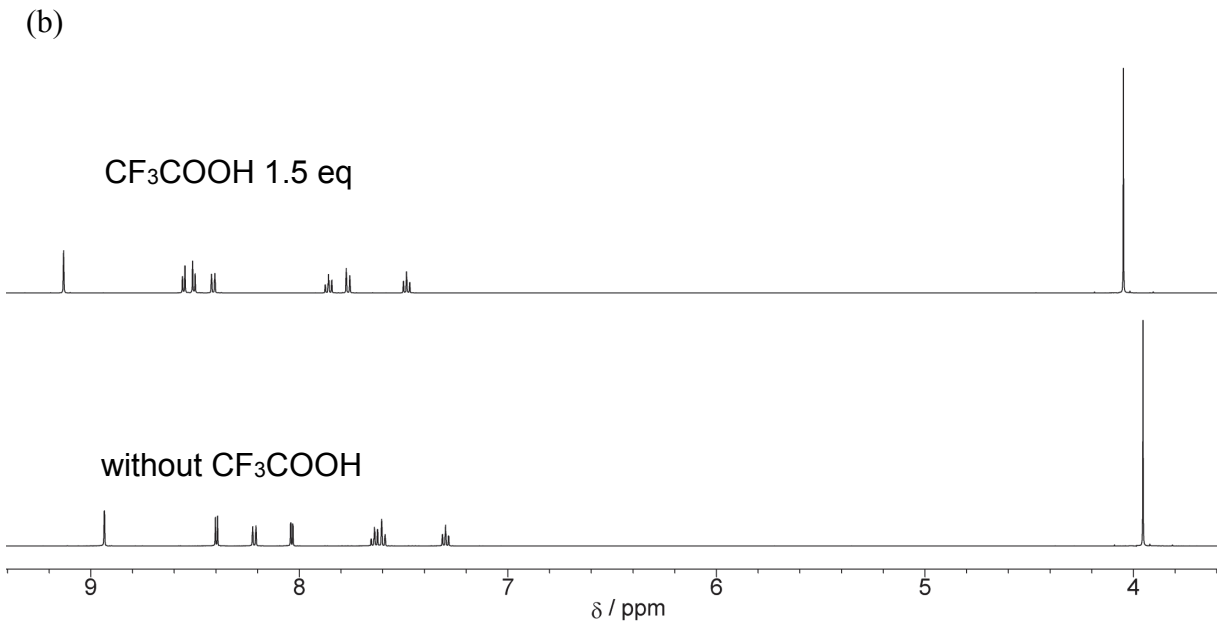


Fig. S6 ^{1}H NMR spectra (500 MHz) of (a) **ET-1** and (b) **9-MP** with and without the addition of 1.5 eq CF_3COOH in acetonitrile-d_3.