

## Synthesis of functional tetrathiafulvalene-terpyridine dyad for Metal Cation Recognition

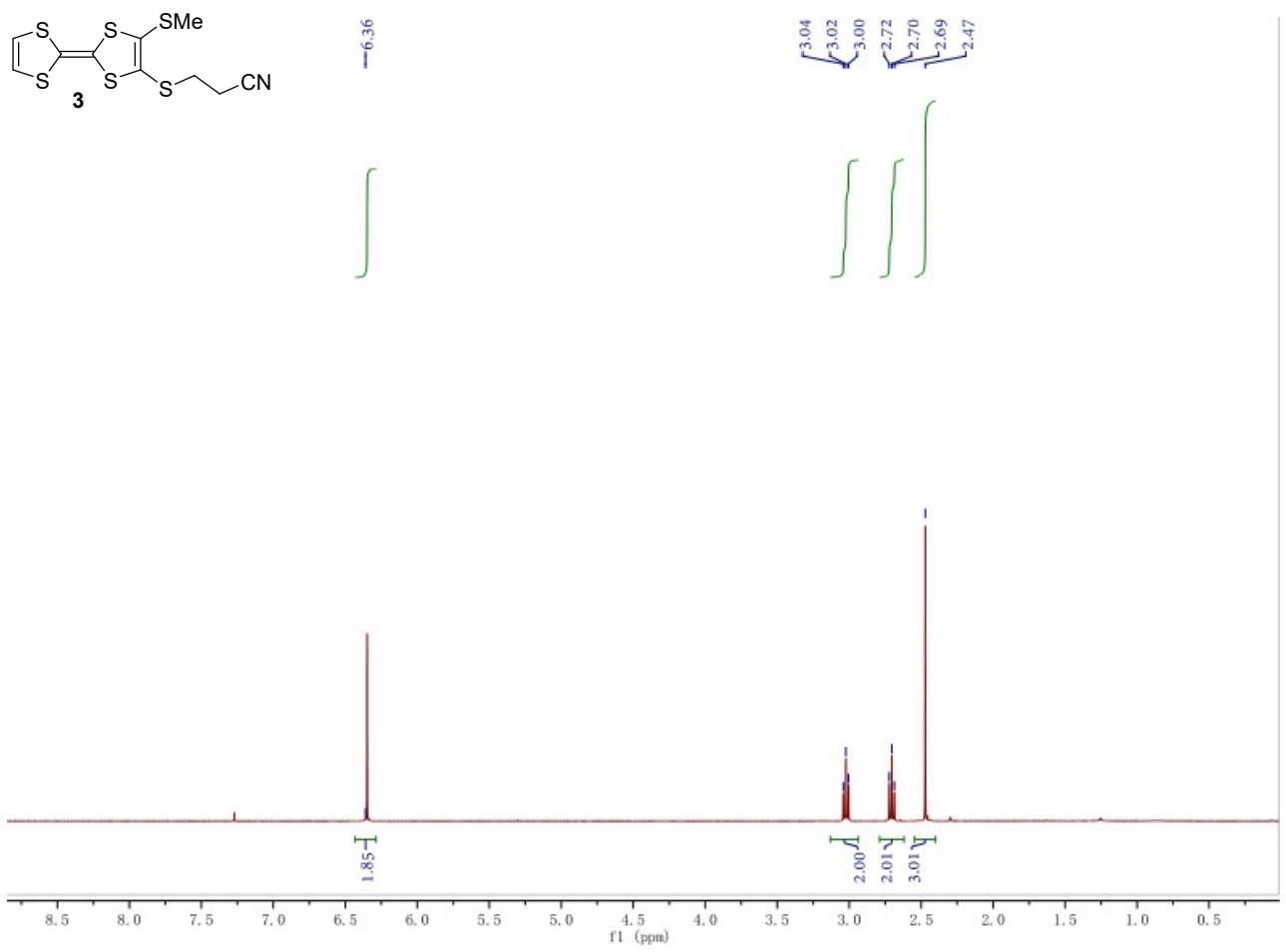
Wenhai Zhang,<sup>a</sup> Thomas Blin,<sup>a</sup> Antoine Busseau,<sup>b</sup> Sagrario Pascual,<sup>a</sup> Abdelkrim El-Ghayoury,<sup>b</sup> Stéphanie Legoupy,<sup>\*,b</sup> Sandie Piogé<sup>\*,a</sup>

<sup>a</sup> Institut des Molécules et Matériaux du Mans, IMMU UMR 6283 CNRS – Le Mans Université, Avenue Olivier Messiaen, Le Mans 72085 Cedex 9, France. E-mail: [sandie.pioge@univ-lemans.fr](mailto:sandie.pioge@univ-lemans.fr)

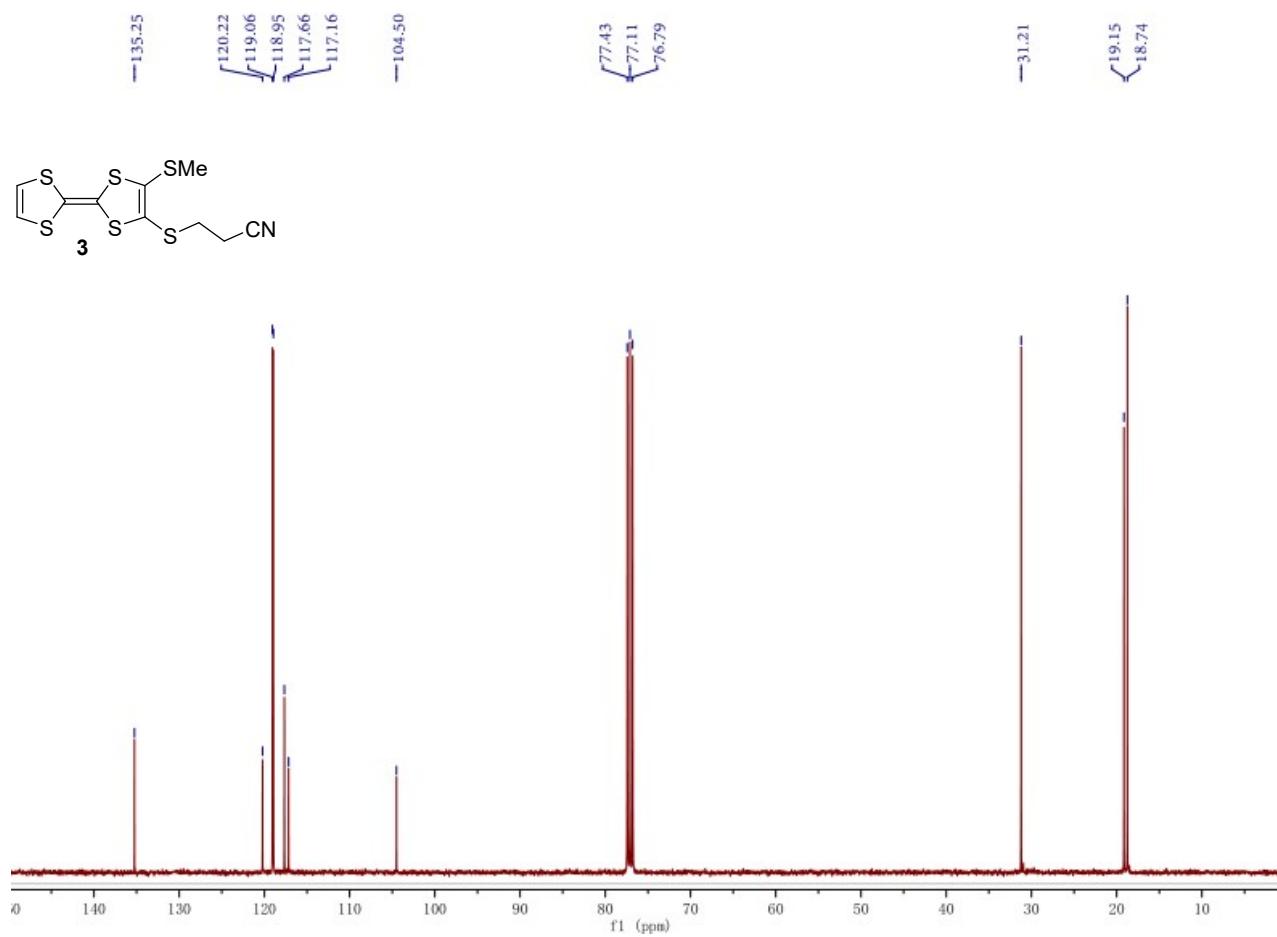
<sup>b</sup> Univ Angers, CNRS, MOLTECH-ANJOU, F-49000 Angers, France. E-mail: [stephanie.legoupy@univ-angers.fr](mailto:stephanie.legoupy@univ-angers.fr)

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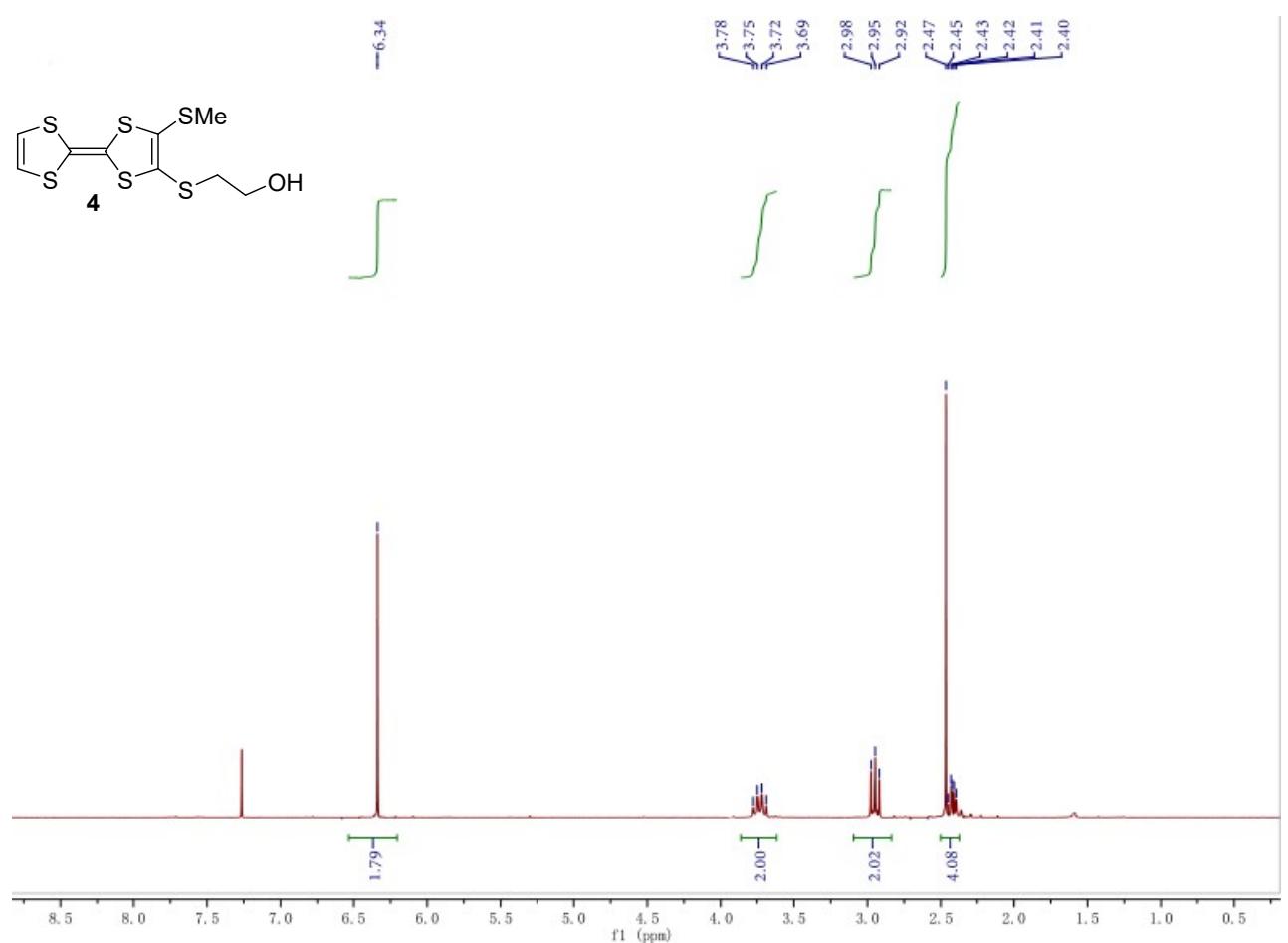
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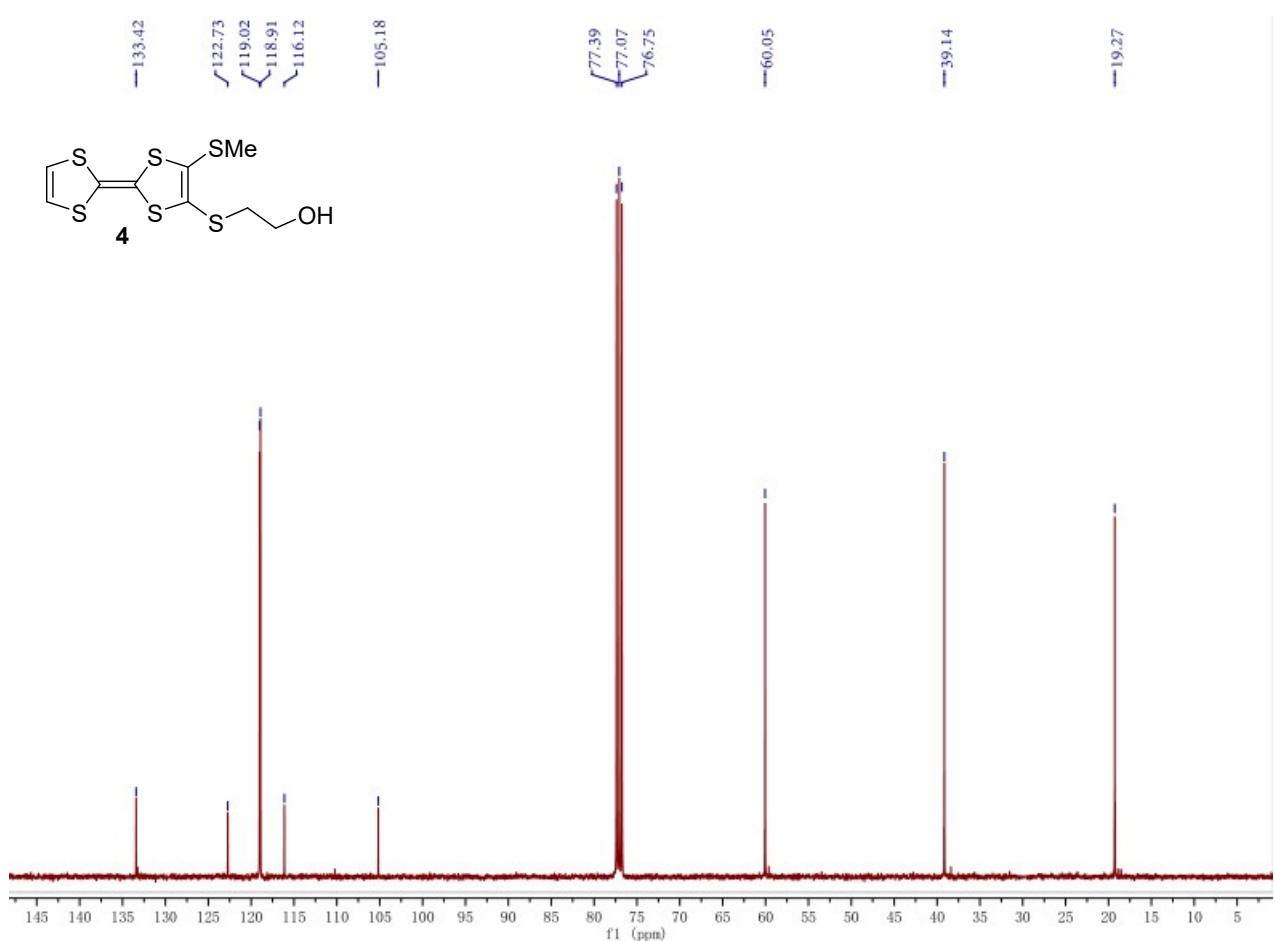
**Figure S1 :**  $^1\text{H}$  NMR spectrum in  $\text{CDCl}_3$  of **3**.



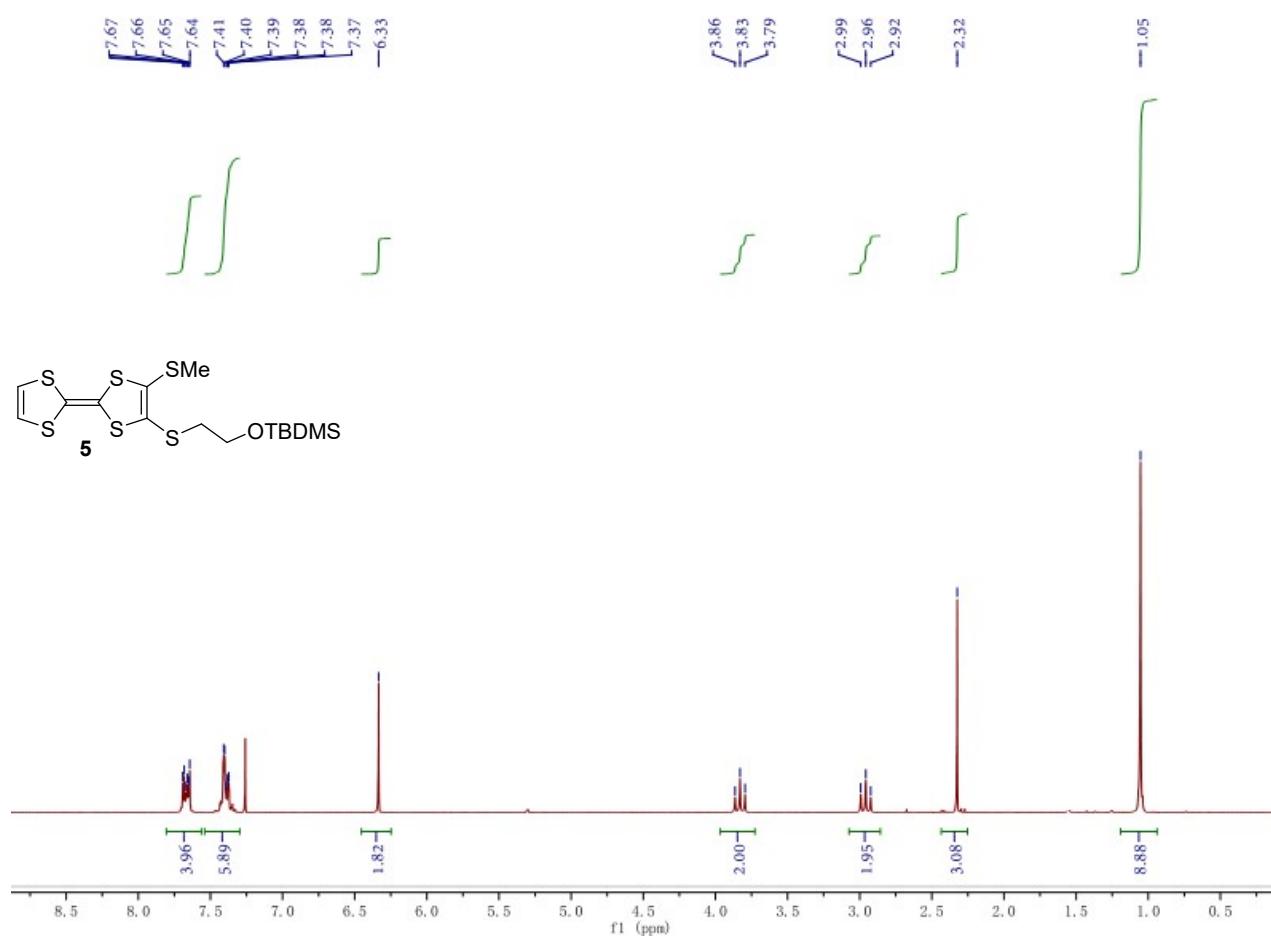
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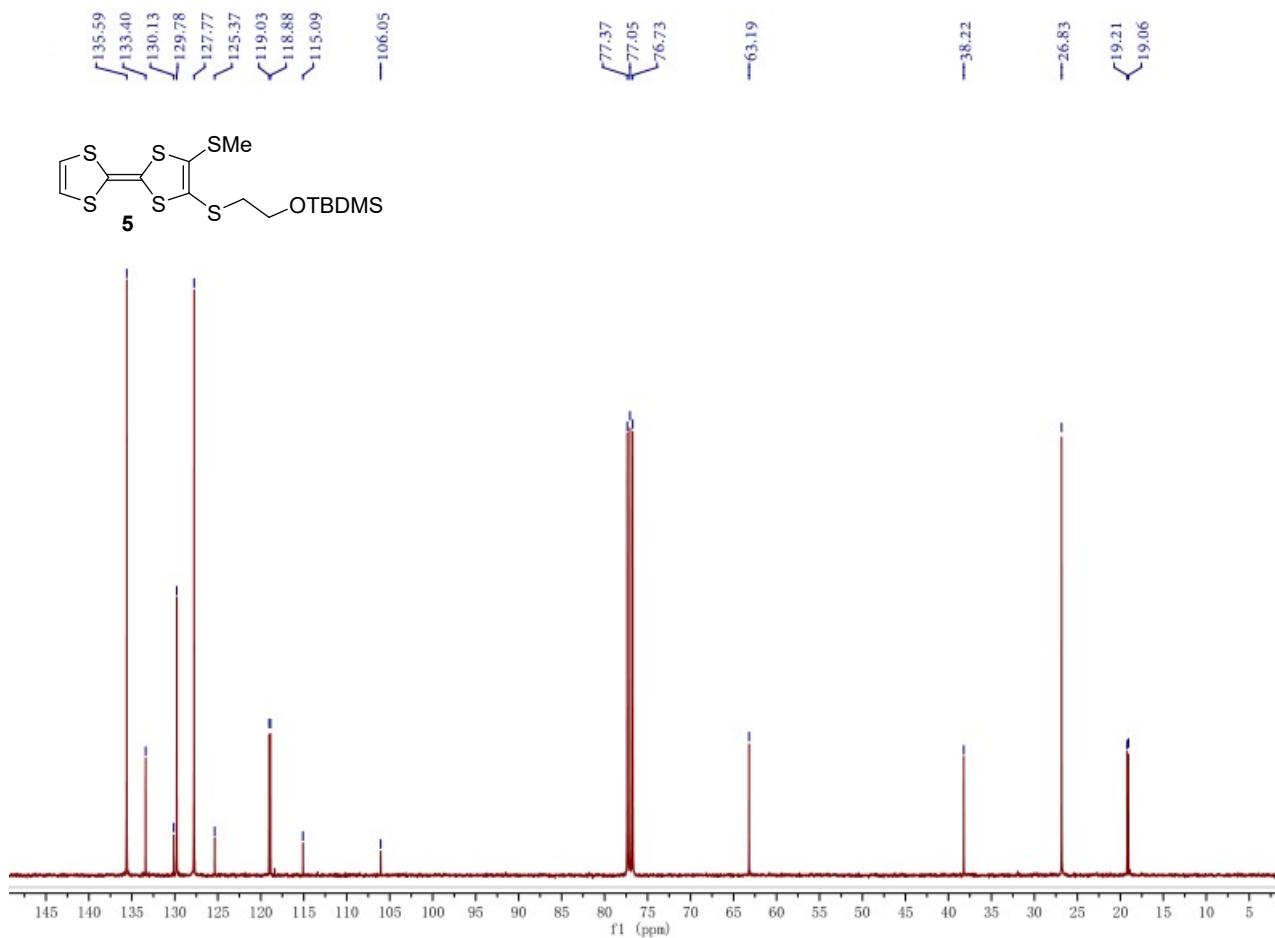


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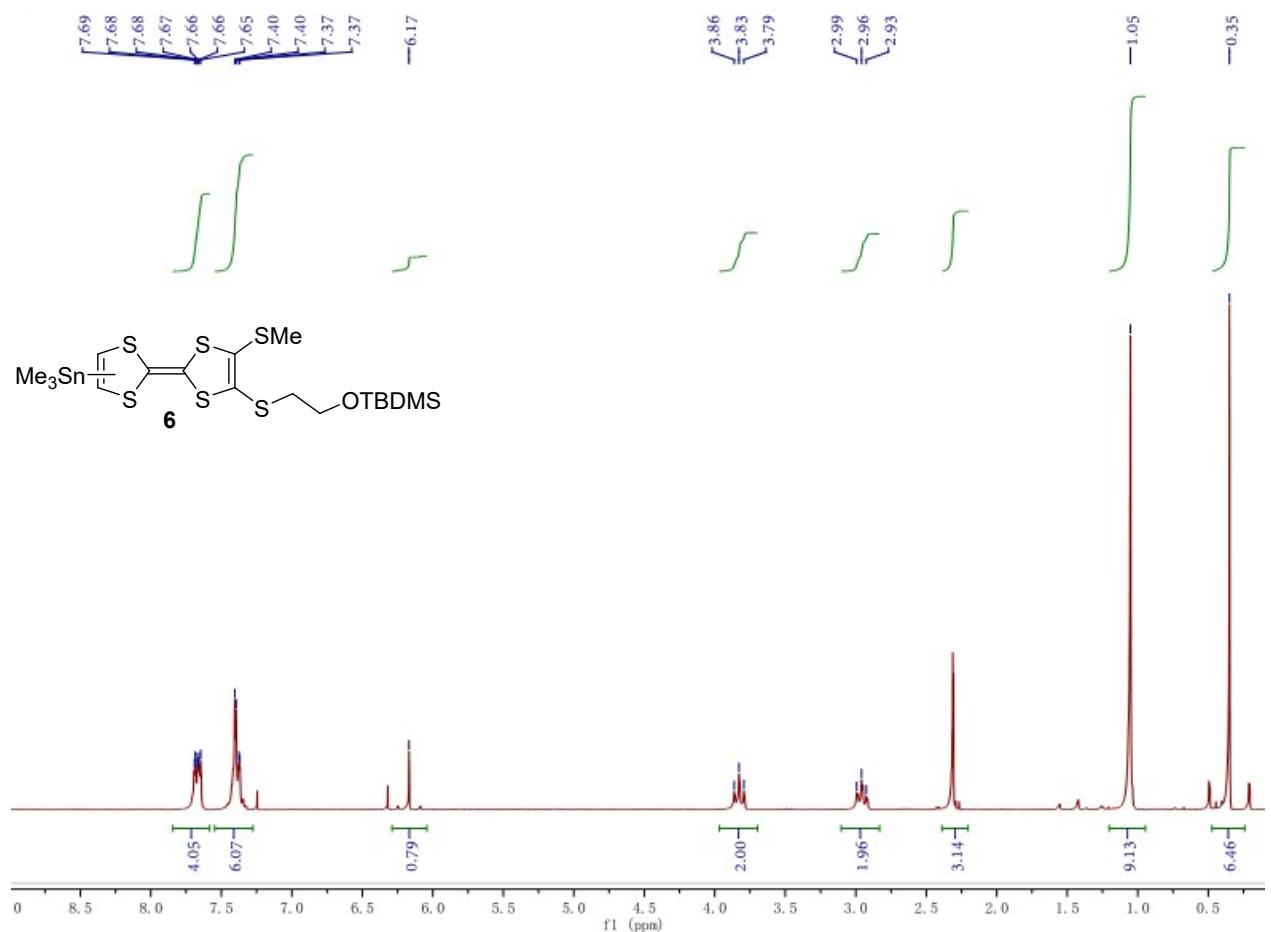


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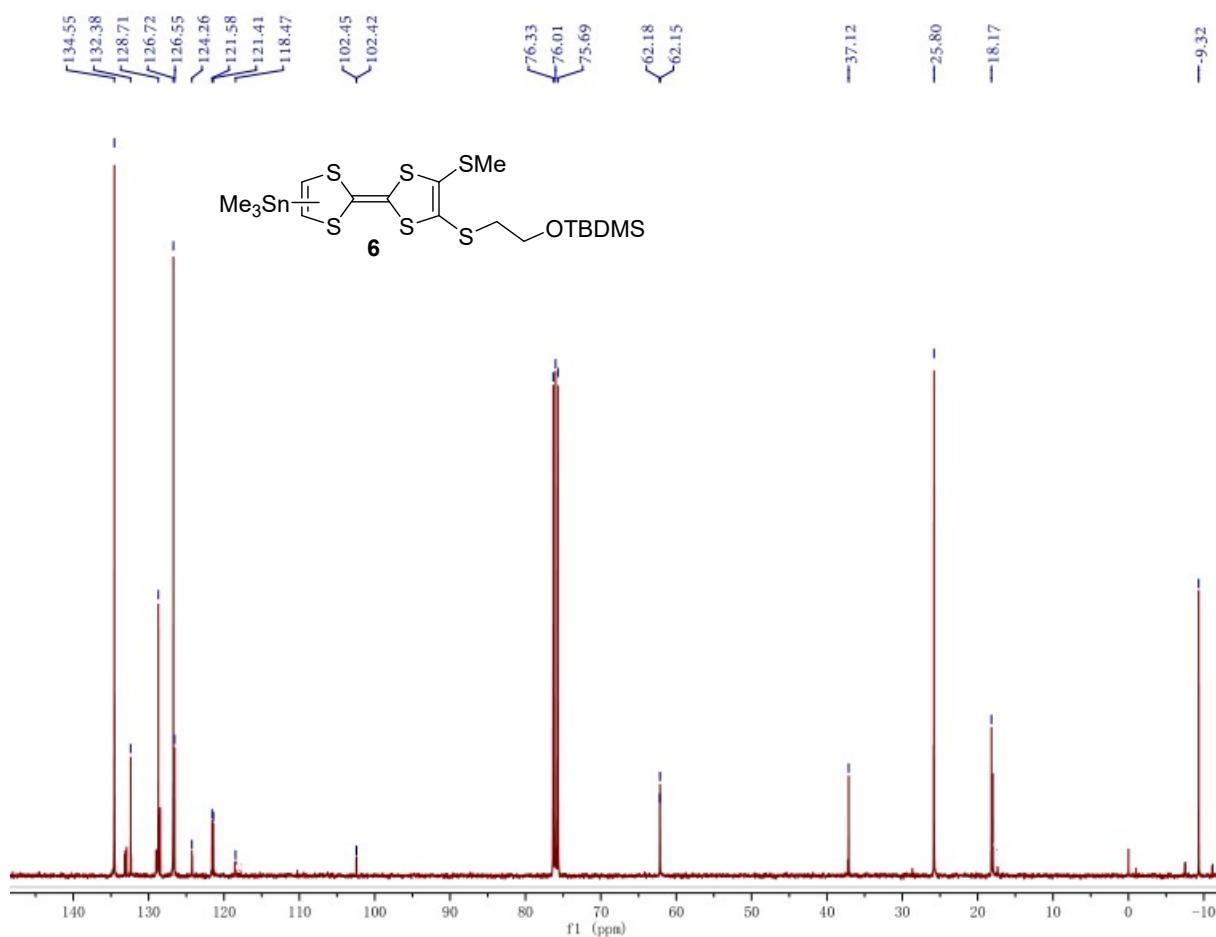




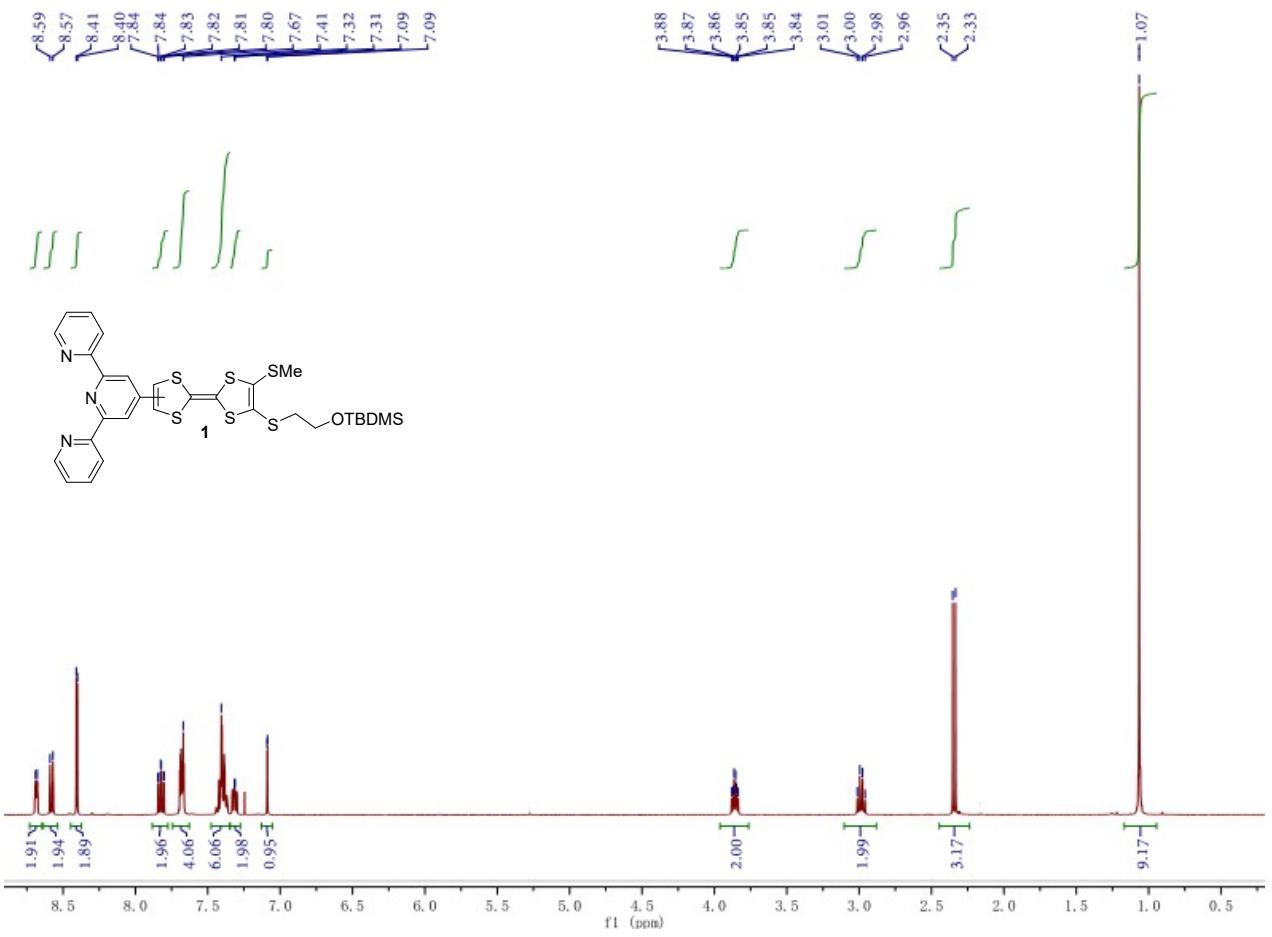
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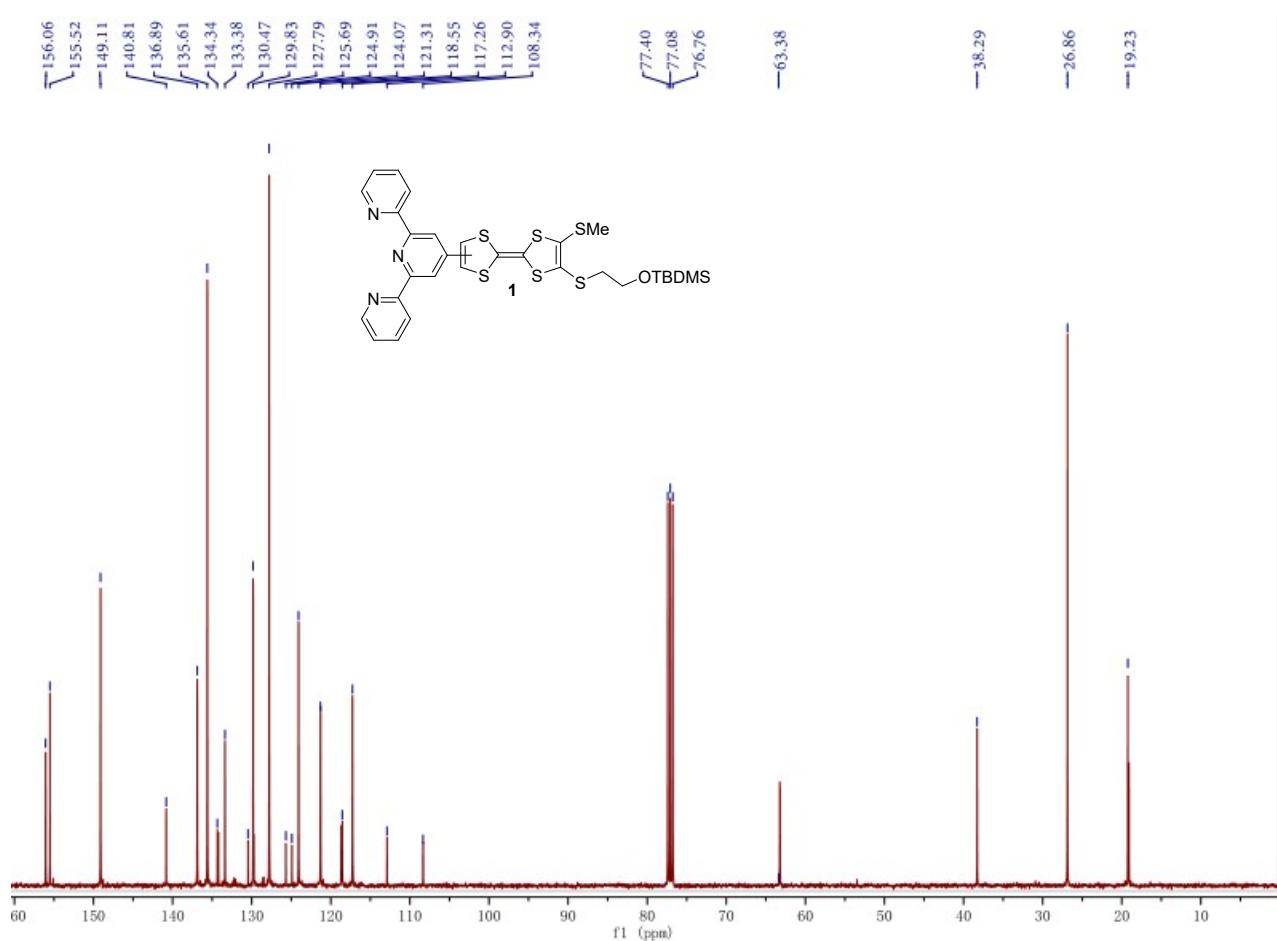
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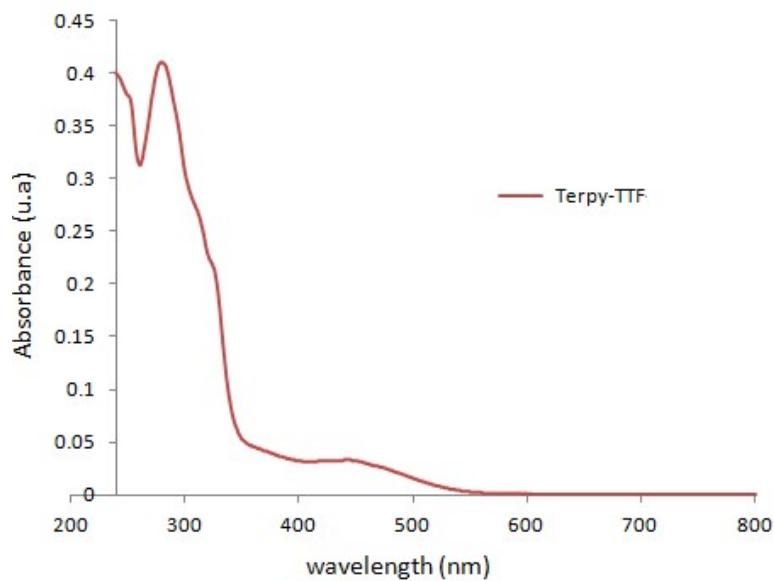


**Figure S8 :**  $^{13}\text{C}$  NMR spectrum in  $\text{CDCl}_3$  of **6**.

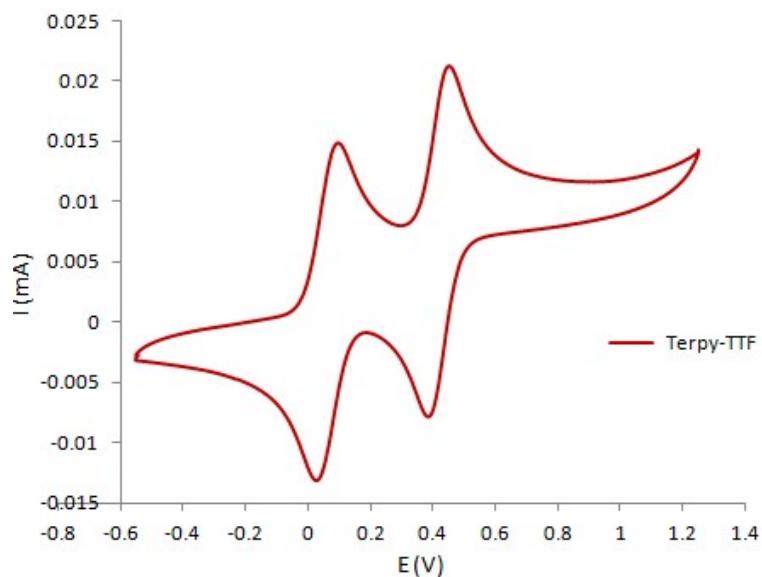


**Figure S9 :** <sup>1</sup>H NMR spectrum in  $\text{CDCl}_3$  of **1**.

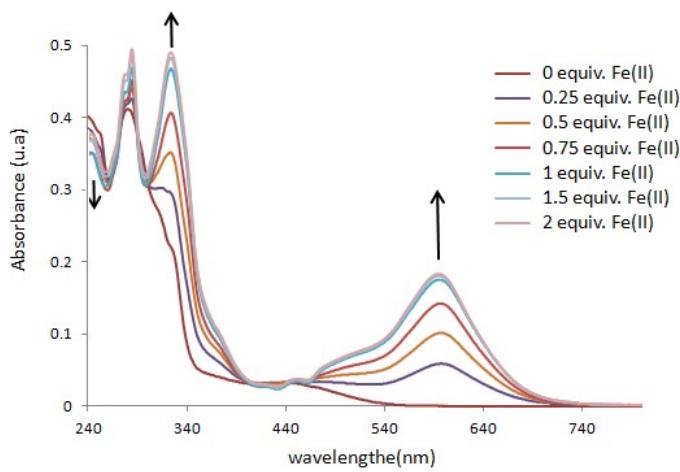




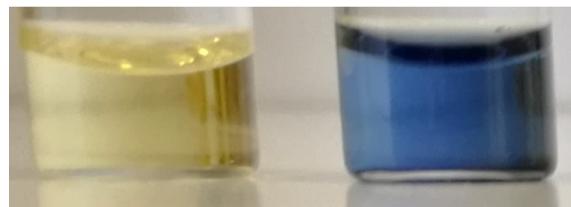
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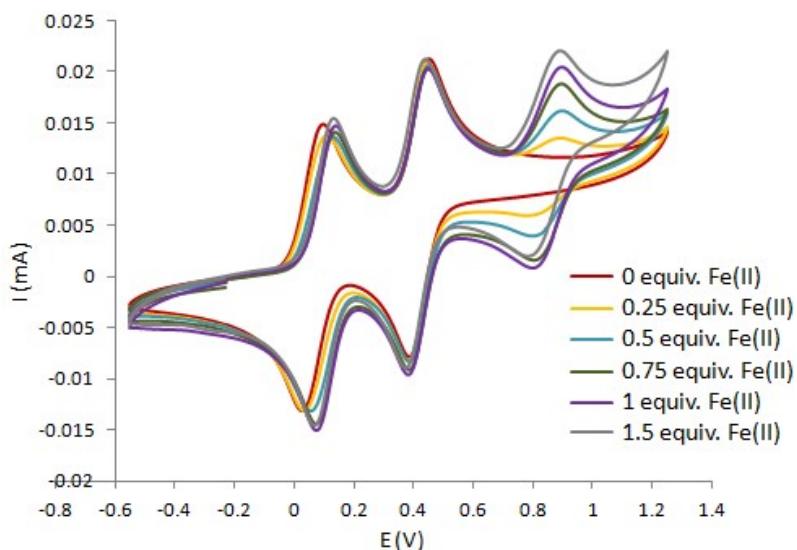
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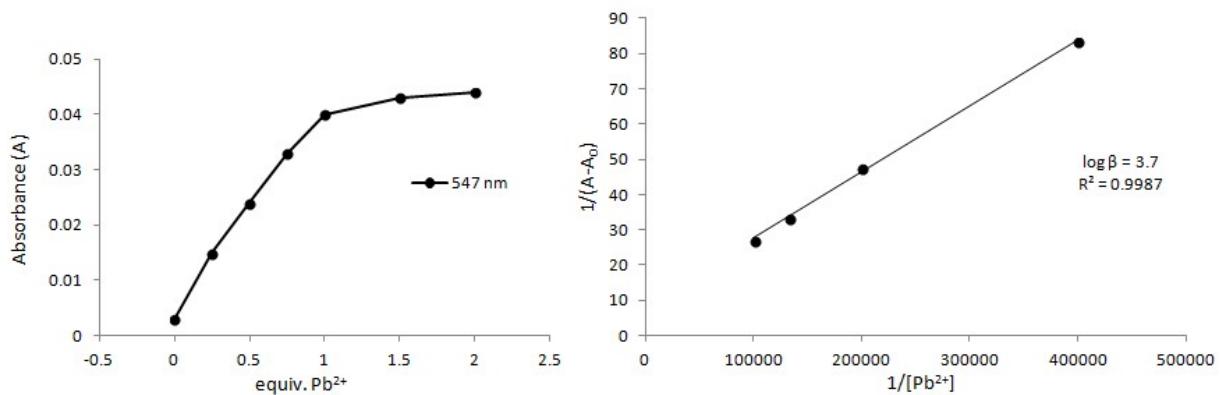
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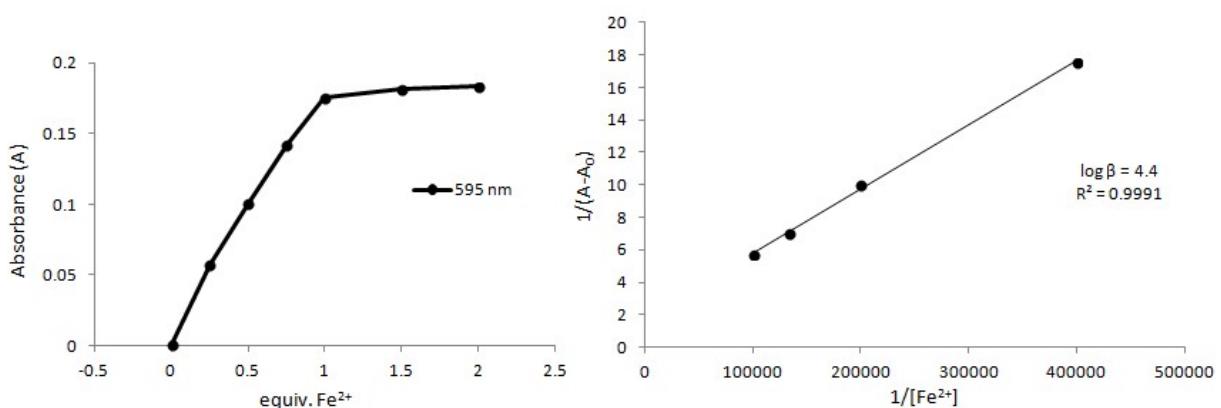
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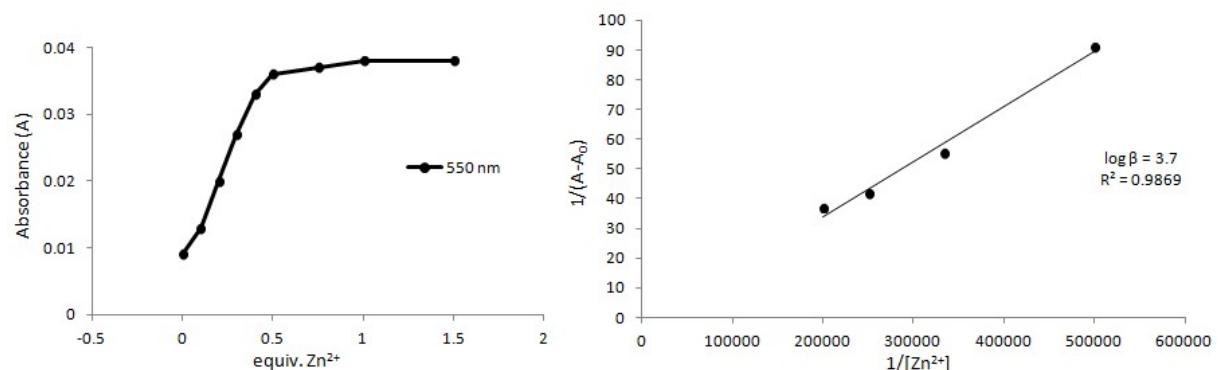
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**Figure S16 :** Further study of UV-Visible titration of dyad **1** ( $10^{-5}$  M) in  $\text{CH}_2\text{Cl}_2/\text{CH}_3\text{CN}$  (1/1, v/v) in presence of  $\text{Pb}(\text{ClO}_4)_2$



**Figure S17 :** Further study of UV-Visible titration of dyad **1** ( $10^{-5}$  M) in  $\text{CH}_2\text{Cl}_2/\text{CH}_3\text{CN}$  (1/1, v/v) in presence of  $\text{Fe}(\text{ClO}_4)_2$



**Figure S18 :** Further study of UV-Visible titration of dyad **1** ( $10^{-5}$  M) in  $\text{CH}_2\text{Cl}_2/\text{CH}_3\text{CN}$  (1/1, v/v) in presence of  $\text{Zn}(\text{ClO}_4)_2$