Electronic Supplementary Material (ESI) for New Journal of Chemistry.

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## New Journal of Chemistry

**Electronic Supplementary Inormation** 

to

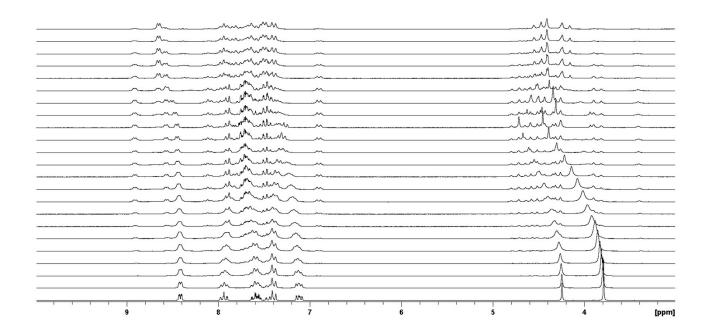
## Cd<sup>II</sup>/Zn<sup>II</sup> discrimination by 2,5-diphenyl[1,3,4]oxadiazole based

## fluorescent chemosensors

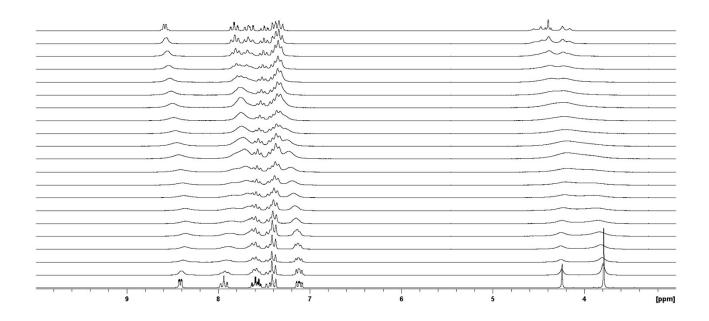
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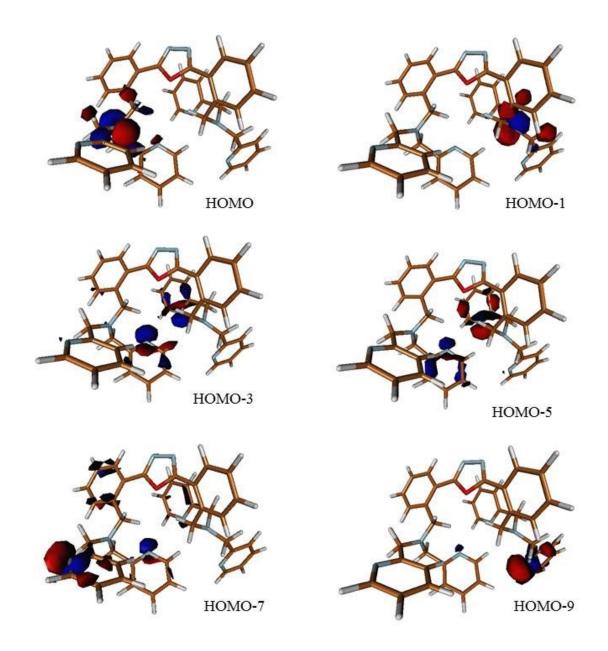
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**Figure S1**. <sup>1</sup>H-NMR titration of **L1** in in CD<sub>3</sub>CN at 298.1 K obtained by adding several amounts of  $Zn(ClO_4)_2$  to a **L1**  $(1.0\cdot10^{-2} \text{ mol}\cdot\text{dm}^{-3})$  solution.



**Figure S2**. <sup>1</sup>H-NMR titration of **L1** in in CD<sub>3</sub>CN at 298.1 K obtained by adding several amounts of Cd(ClO<sub>4</sub>)<sub>2</sub> to a **L1** (1.0·10<sup>-2</sup> mol·dm<sup>-3</sup>) solution.



**Figure S3**. Selected KS-orbital drawings calculated for **L1** at the DFT level. Contour value= 0.05 e.

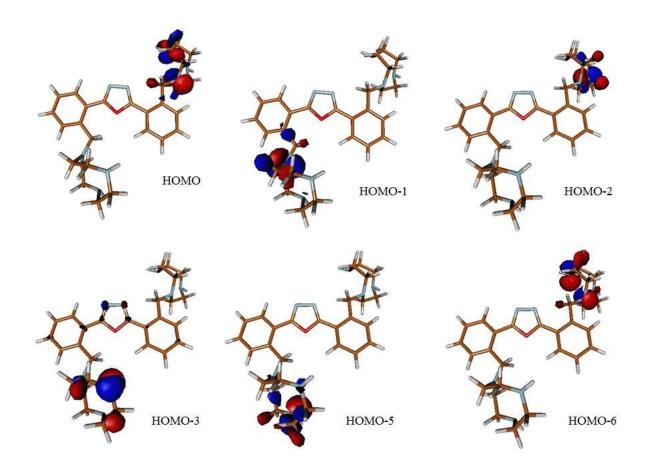


Figure S4. Selected KS-orbital drawings calculated for L2 at the DFT level. Contour value= 0.05 e.