

*Supplementary Information*

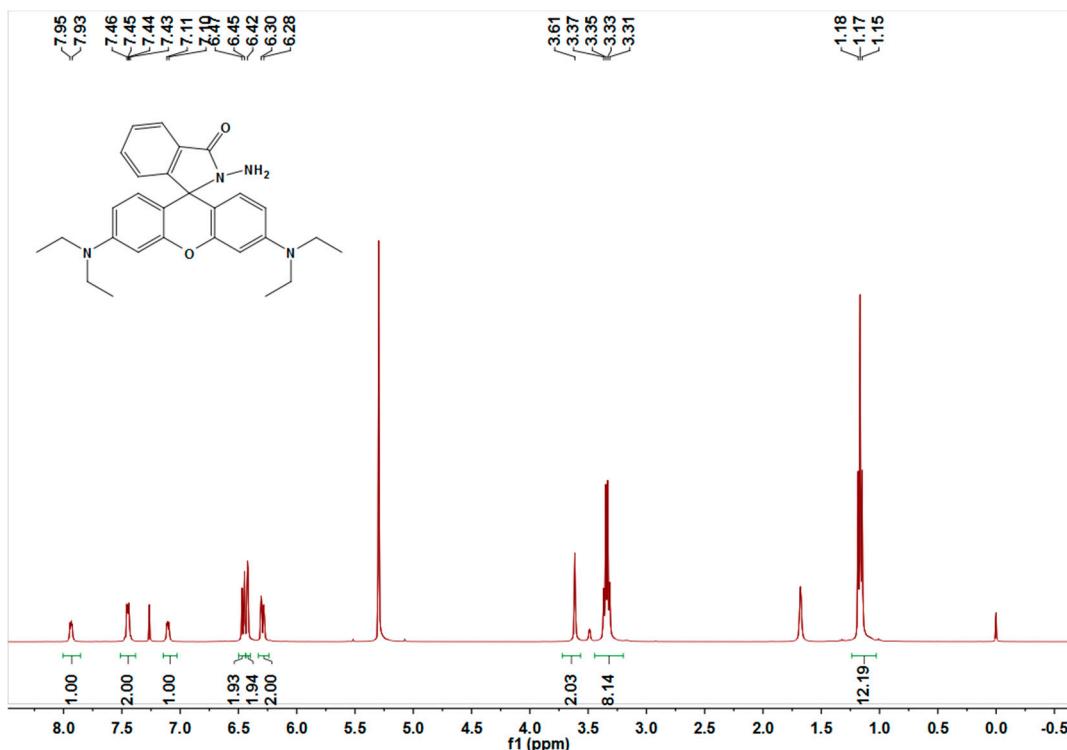
# One Single Molecule as a Multifunctional Fluorescent Probe for Ratiometric Sensing of Fe<sup>3+</sup>, Cr<sup>3+</sup> and Colorimetric Sensing of Cu<sup>2+</sup>. *Sensors* 2015, 15, 49–58

Yanqiu Yang <sup>1</sup>, Kangkang Yu <sup>2</sup>, Liang Yang <sup>1</sup>, Jun Liu <sup>1</sup>, Kun Li <sup>2,\*</sup> and Shunzhong Luo <sup>1,\*</sup>

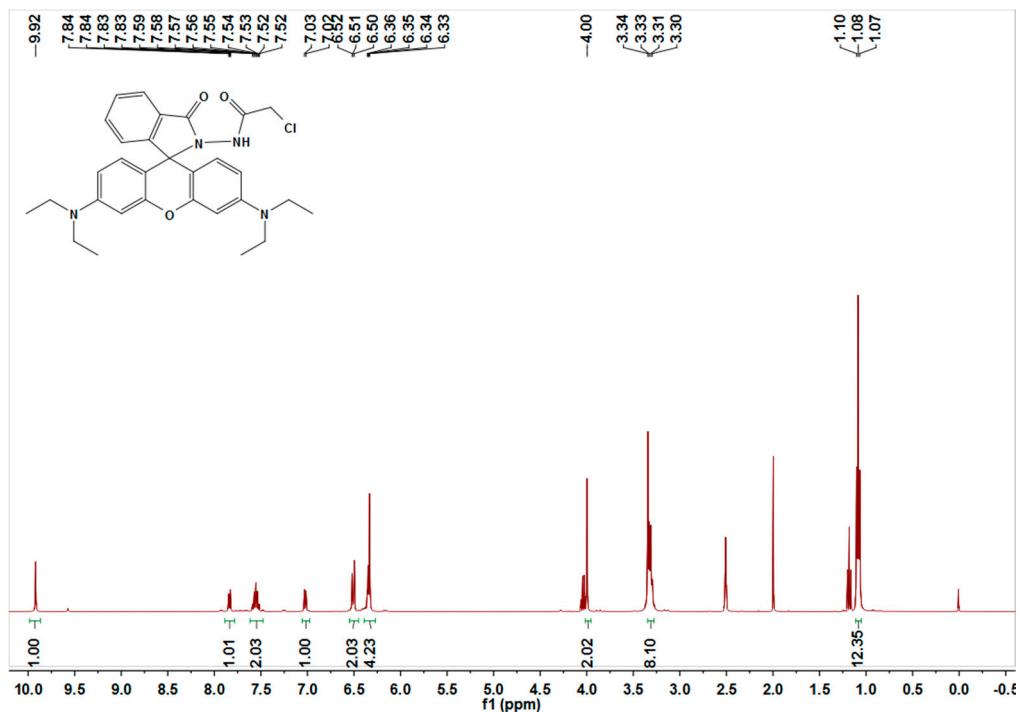
<sup>1</sup> Institute of Nuclear Physics & Chemistry, China Academy of Engineering Physics (CAEP), Mianyang 621900, Sichuan, China; E-Mails: yan.qiu.yang@163.com (Y.Y.); leonesta@163.com (L.Y.); ljkxch@163.com (J.L.)

<sup>2</sup> College of Chemistry, Sichuan University, Chengdu 610064, Sichuan, China; E-Mail: kangkangyu\_1991@163.com

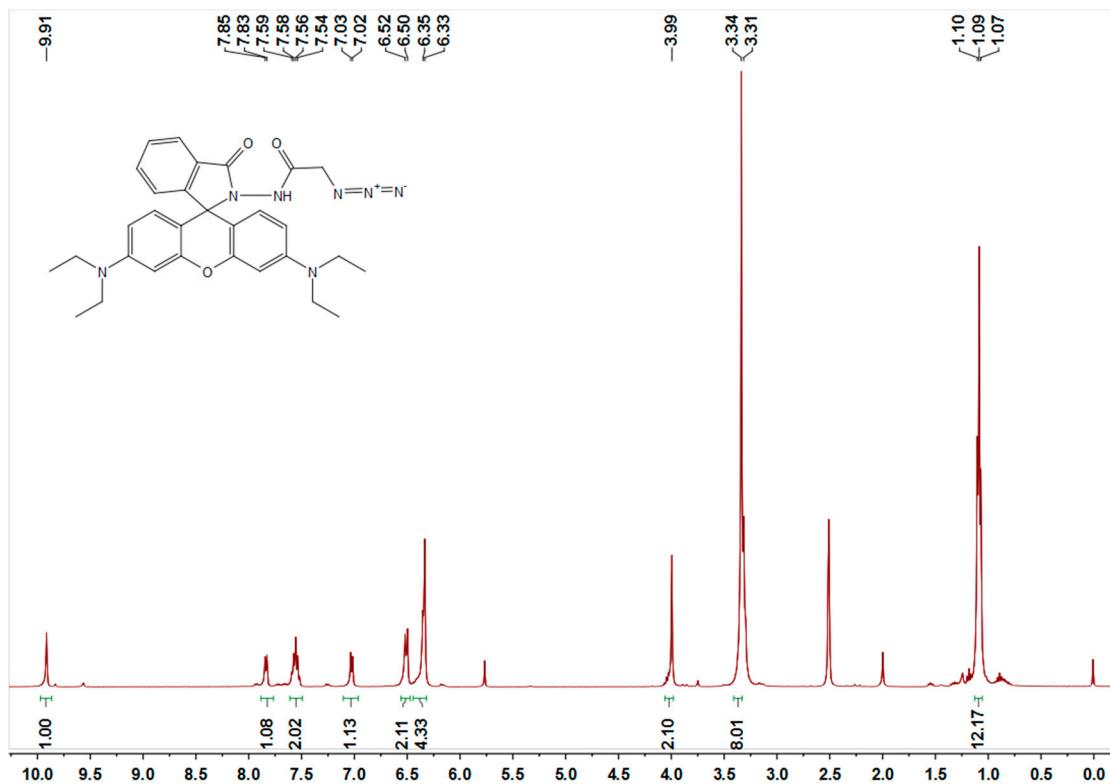
\* Authors to whom correspondence should be addressed; E-Mails: kli@scu.edu.cn (K.L.); luoshzh@caep.ac.cn (S.L.); Tel./Fax: +86-288-5415-880 (K.L.); +86-816-2484-241 (S.L.).



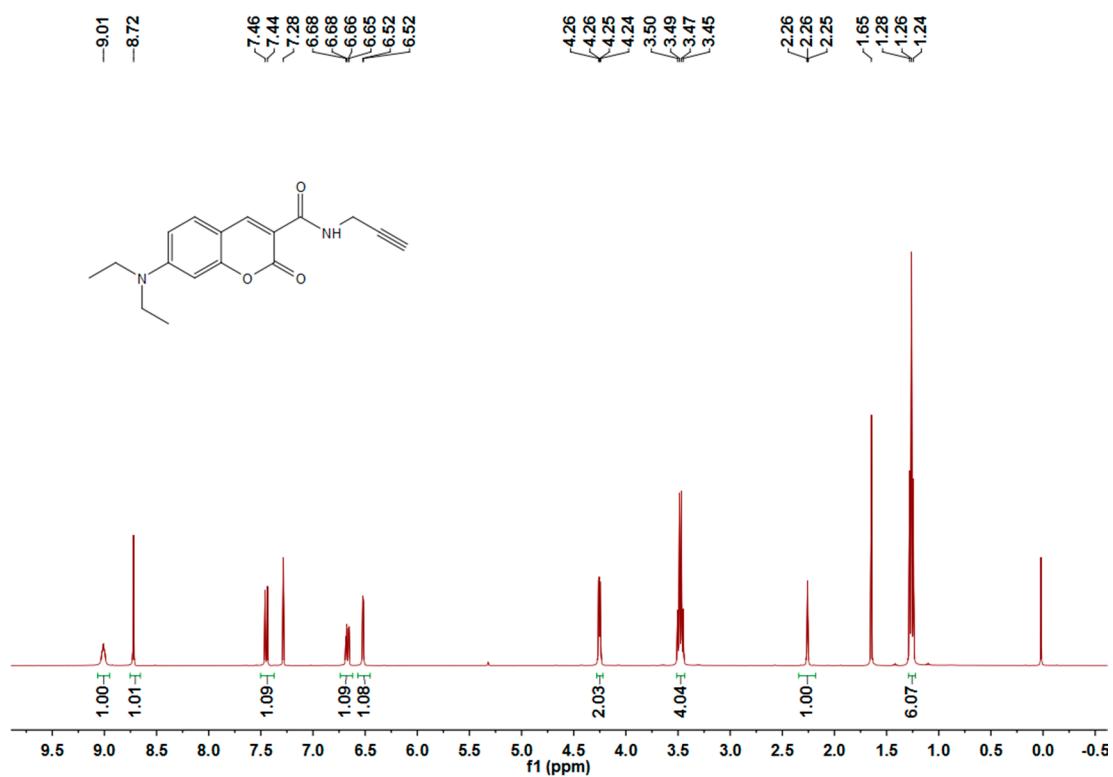
**Figure S1.** <sup>1</sup>H-NMR spectra of Rh-1 in CDCl<sub>3</sub>.



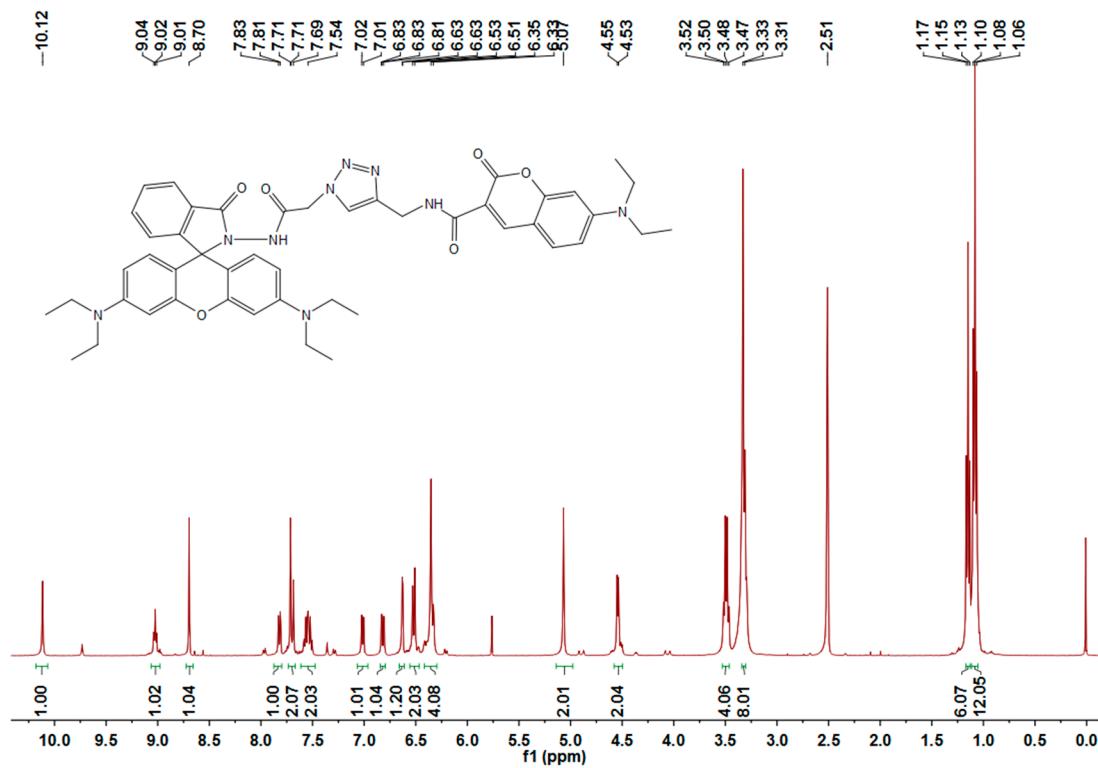
**Figure S2.**  $^1\text{H}$ -NMR spectra of **Rh-2** in  $\text{DMSO-d}_6$ .

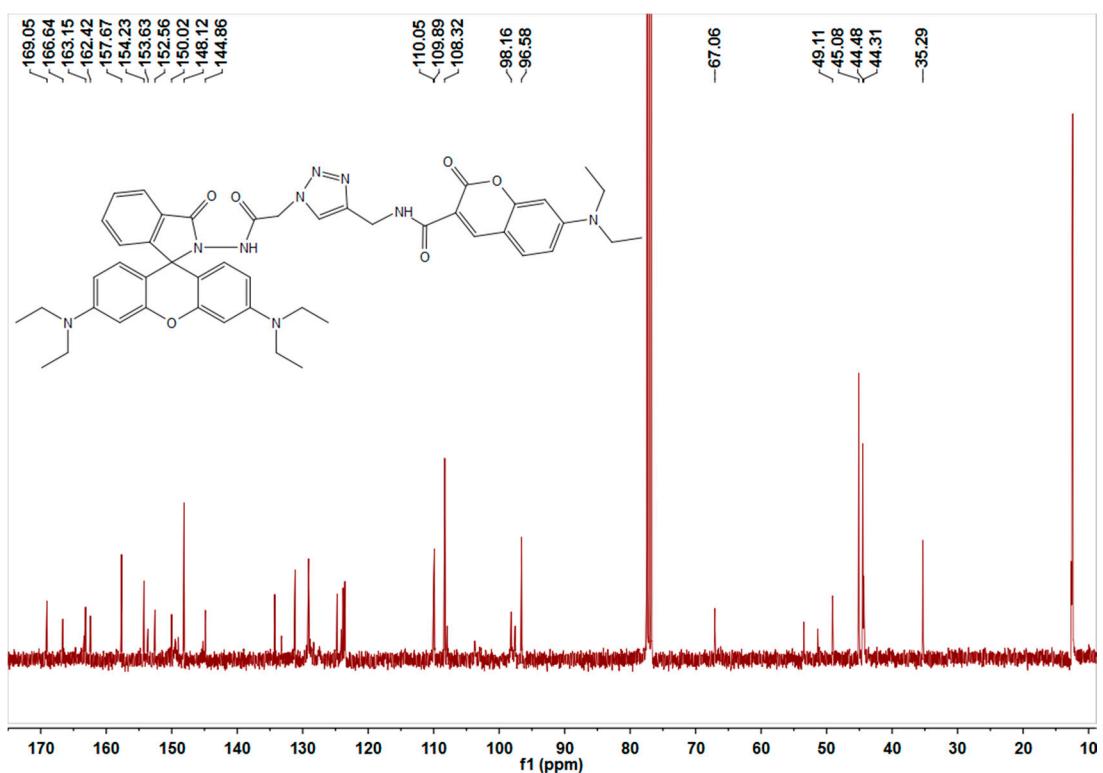


**Figure S3.**  $^1\text{H}$ -NMR spectra of **Rh-3** in  $\text{DMSO-d}_6$ .



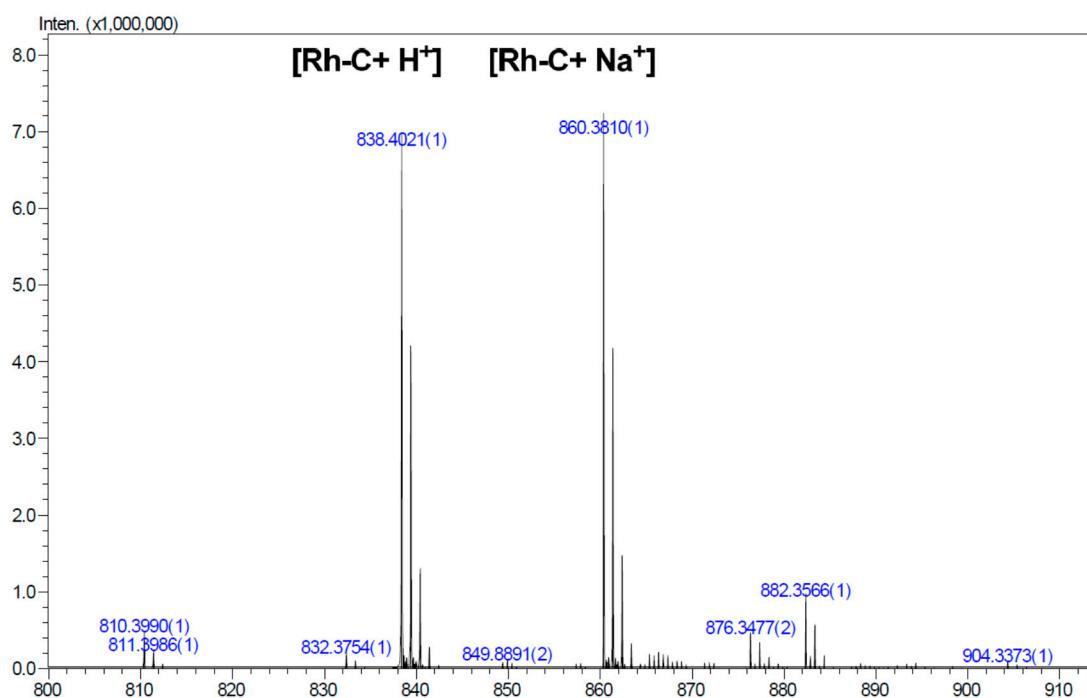
**Figure S4.**  $^1\text{H}$ -NMR spectra of **C-3** in  $\text{CDCl}_3$ .





**Figure S6.**  $^{13}\text{C}$ -NMR spectra of Rh-C in  $\text{CD}_3\text{Cl}$ .

Event#: 1 MS(E+)    Ret. Time : 0.170 -> 0.320 - 1.240 -> 1.476    Scan# : 35 -> 65 - 249 -> 297



**Figure S7.** ESI-MS of Rh-C.