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Chiroptical Fluorescent Sensors for Mercury

Collaborative Project
Pace University

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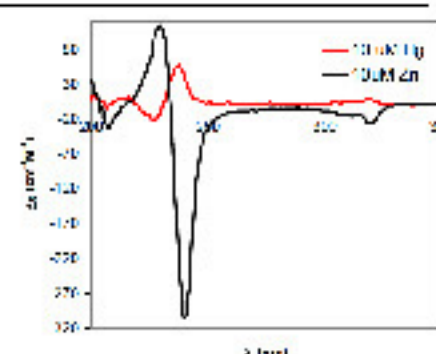
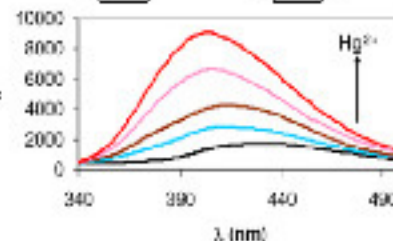
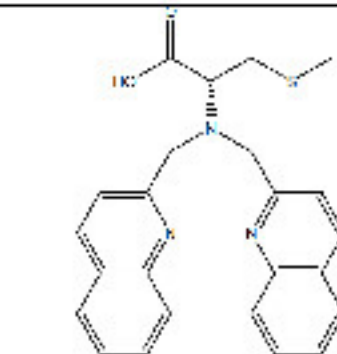
Chiroptical Fluorescent Sensors for Mercury

Participants

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High Mercury Levels Are Found in Tuna Sushi

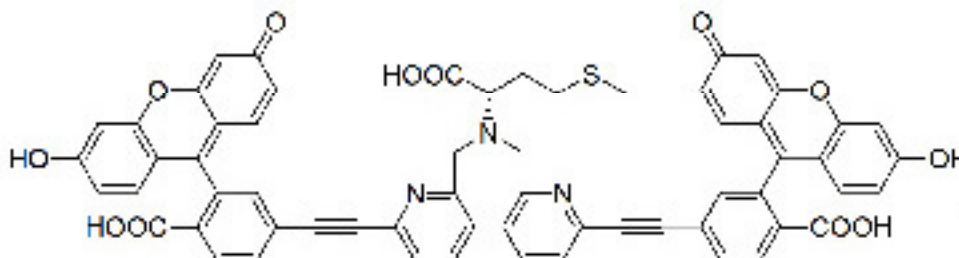


Das, D.; **Dai, Z.**; Holmes, A. E.; Canary, J. W. *Chirality*, **2008**, *20*, 585-591.

Dai, Z.; Canary, J. W. *New J. Chem.* **2007**, *31*, 1708-1718.

Overall Goal/Purpose

To develop selective and sensitive imaging reagents for Mn^{2+} in (forensic) environmental applications.



Specific Research Aims

- 1) High selectivity toward Hg^{2+}
- 2) Robust fluorescence and excellent water-solubility.
- 3) High sensitivity through differential circularly polarized fluorescence excitation
- 4) Further develop the CPE approach
- 5) Monitor of the uptake and release of Hg^{2+} in organs
- 6) Determine the amount of mercury in water bodies and seafood.

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Research Corporation**