

*Supplementary information*

# Functionalized Silver Nano-Sensor for Colorimetric Detection of Hg<sup>2+</sup> Ions: Facile Synthesis and Docking Studies

Kollur Shiva Prasad <sup>1,\*</sup>, Govindaraju Shruthi <sup>2</sup> and Chandan Shivamallu <sup>2,\*</sup>

<sup>1</sup> Chemistry Group, Manipal Centre for Natural Sciences, Manipal Academy of Higher Education, Manipal (MAHE), Udipi 576 104, Karnataka, India

<sup>2</sup> Faculty of Life Sciences, Division of Biotechnology and Bioinformatics, JSS Academy of Higher Education and Research (JSSAHER), Mysuru 570 015, Karnataka, India; shruthigovindaraju@gmail.com

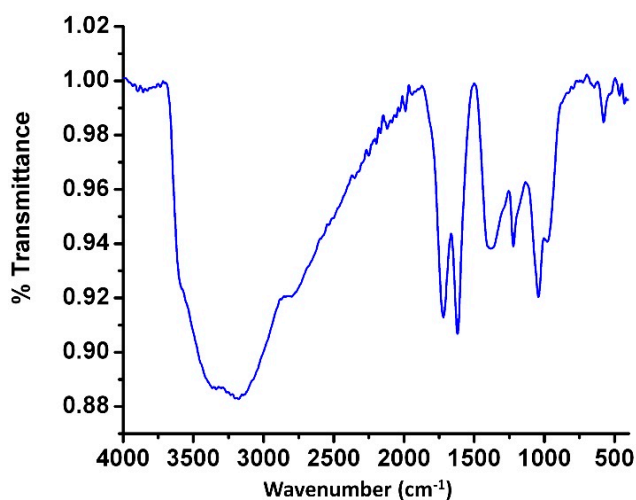
\* Correspondence: shivachemist@gmail.com (K.S.P.); chandans@jssuni.edu.in (C.S.); Tel.: +91-820-292-3655

**Contents:**

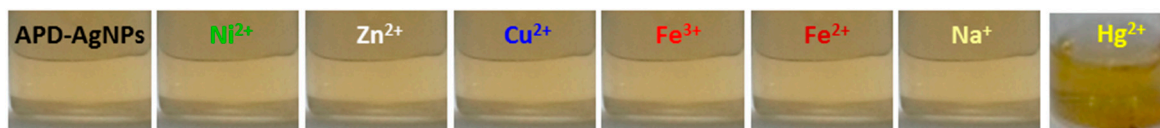
**Figure S1.** FT-IR spectrum of ADP-AgNPs-Hg<sup>2+</sup> complex.

**Figure S2.** Digital image of selectivity of ADP-AgNPs against various metal ions.

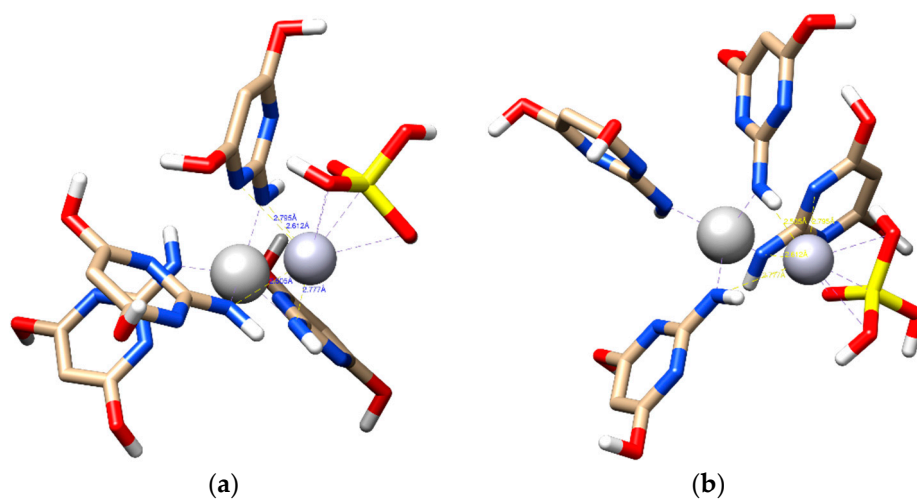
**Figure S3:** Images showing the interaction of Hg<sup>2+</sup> with nitrogen atoms of APD-AgNPs ring in different orientations (**a** and **b**).



**Figure S1.** FT-IR spectrum of ADP-AgNPs-Hg<sup>2+</sup> complex.



**Figure S2.** Digital image of selectivity of ADP-AgNPs against various metal ions.



**Figure S3.** Images showing the interaction of  $\text{Hg}^{2+}$  with nitrogen atoms of APD-AgNPs ring in different orientations (a and b).