

## Supporting Information

# Light-emitting porphyrin-derivative obtained from a subproduct of the cashew nut shell liquid: a promising material for OLED applications

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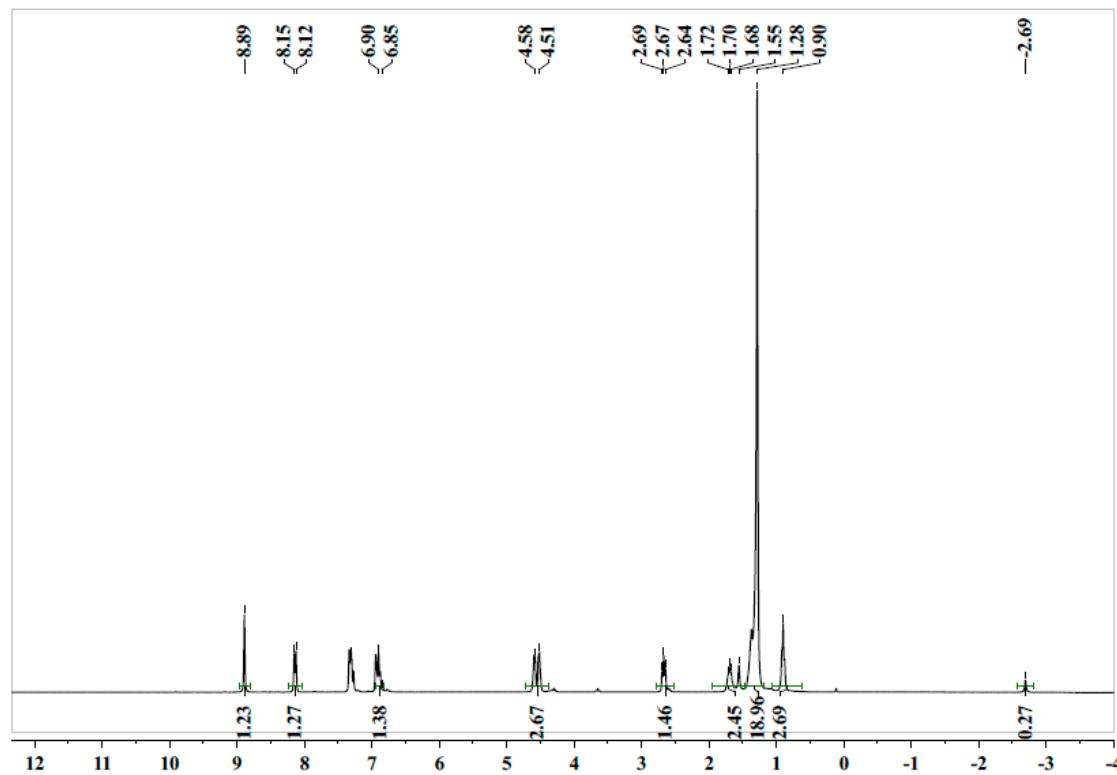
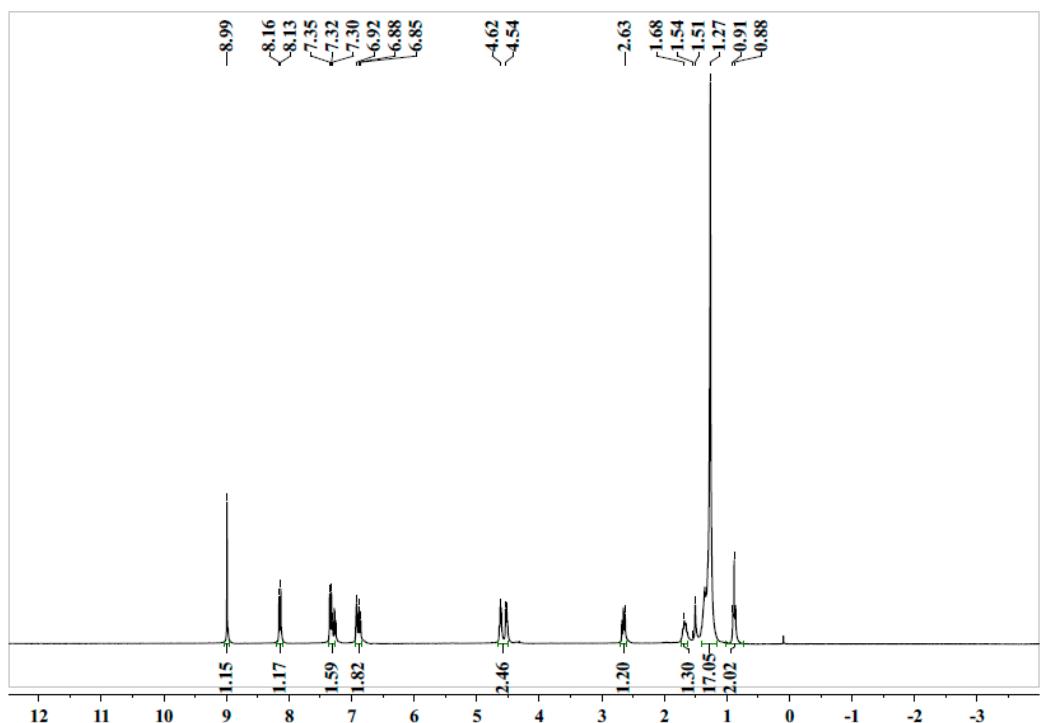
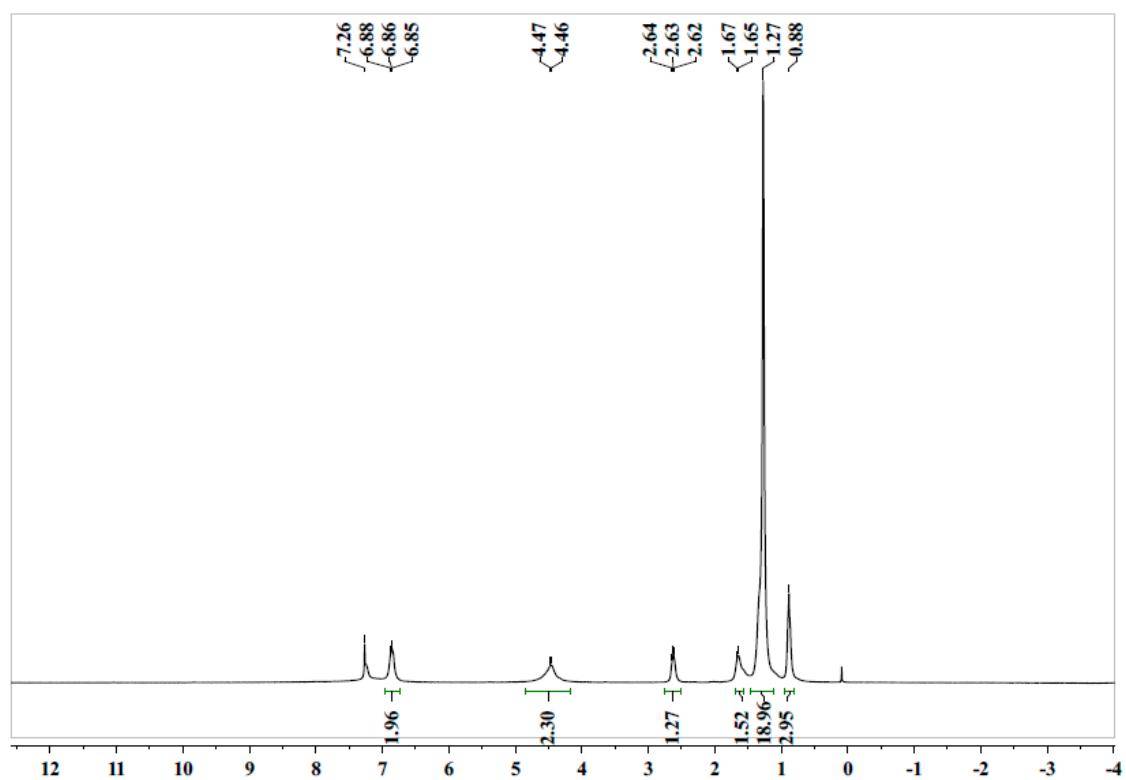


Figure S1. <sup>1</sup>H NMR (CDCl<sub>3</sub>, 500 MHz) spectrum of free base porphyrin (H<sub>2</sub>P).



**Figure S2.**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz) spectrum of zinc porphyrin (ZnP).



**Figure S3.**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz) spectrum of copper porphyrin (CuP).

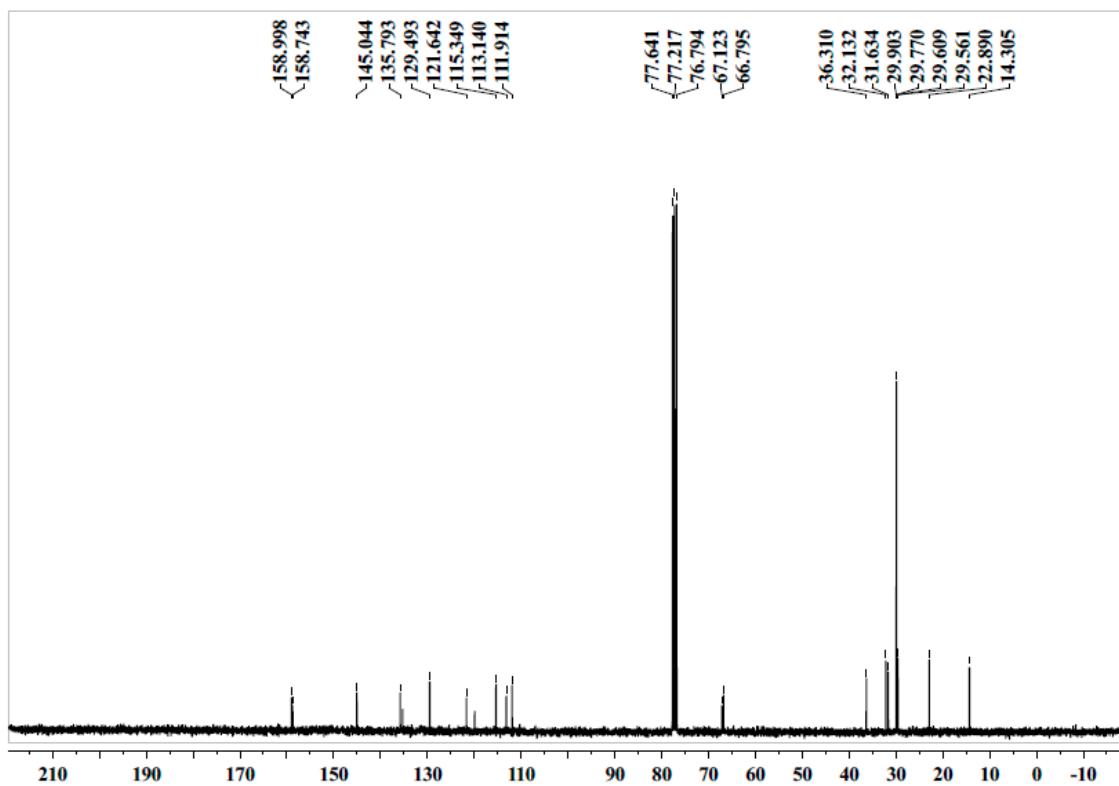


Figure S4. <sup>13</sup>C NMR spectrum of H<sub>2</sub>P (500 MHz, CDCl<sub>3</sub>).

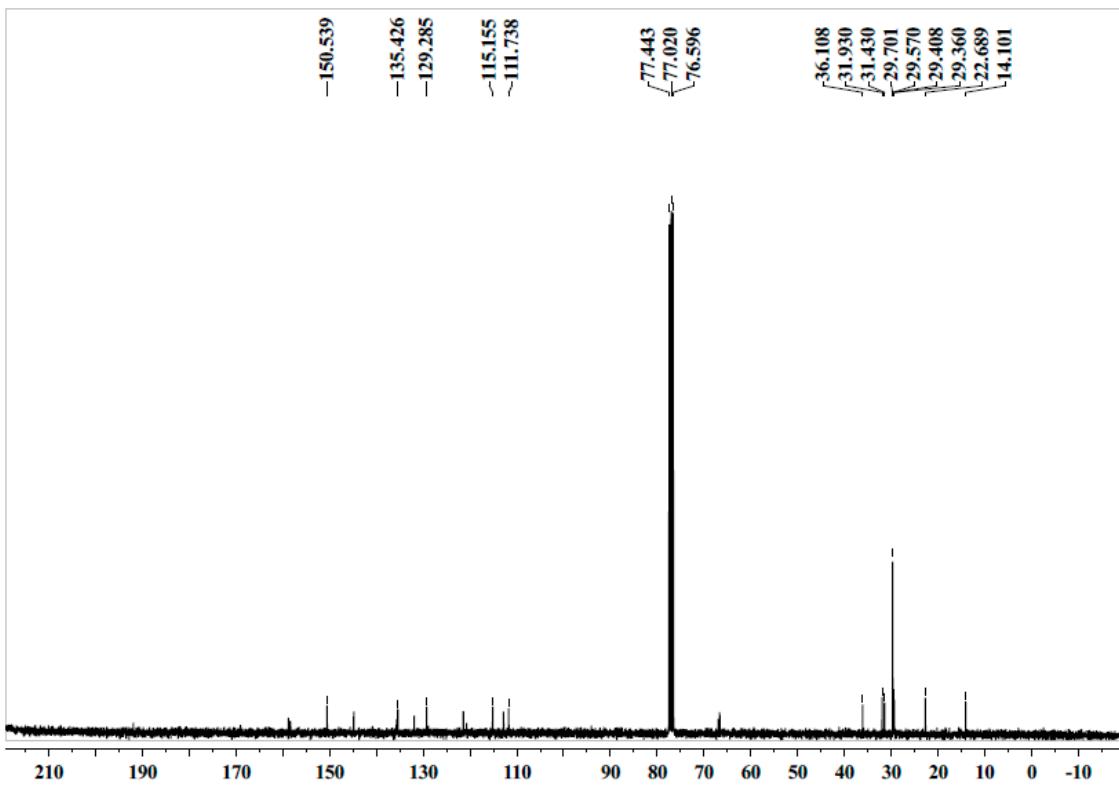
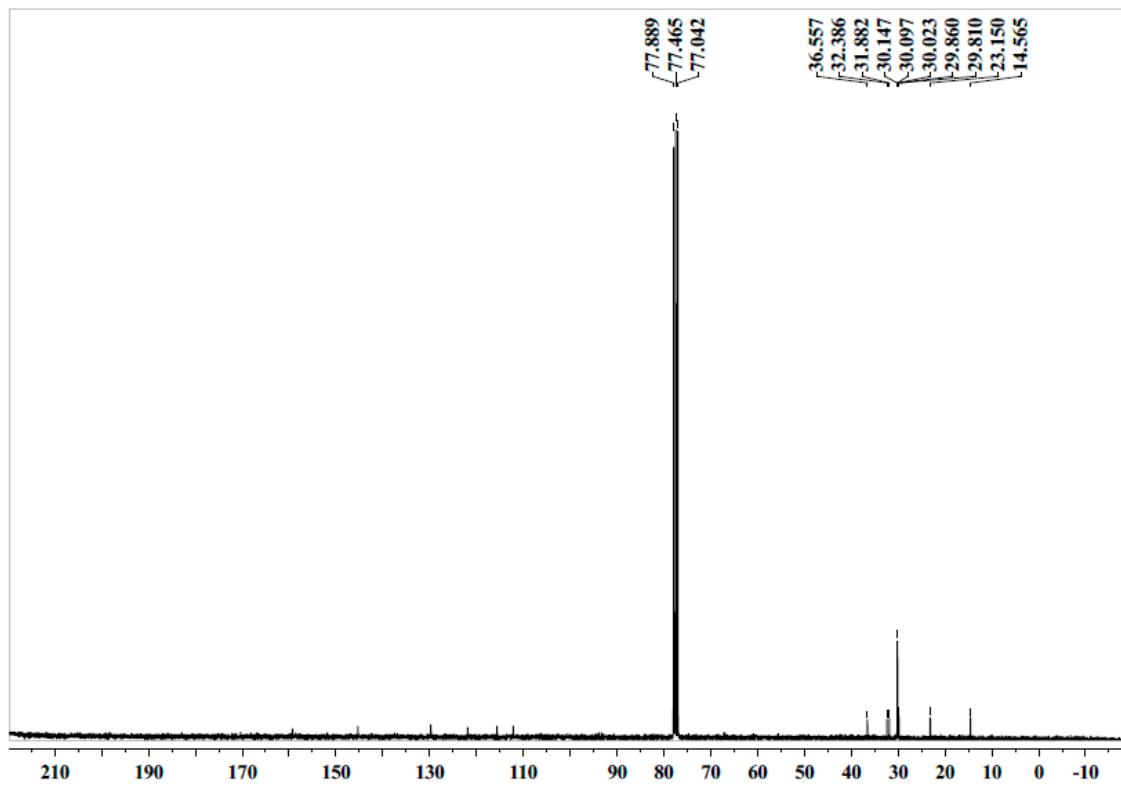
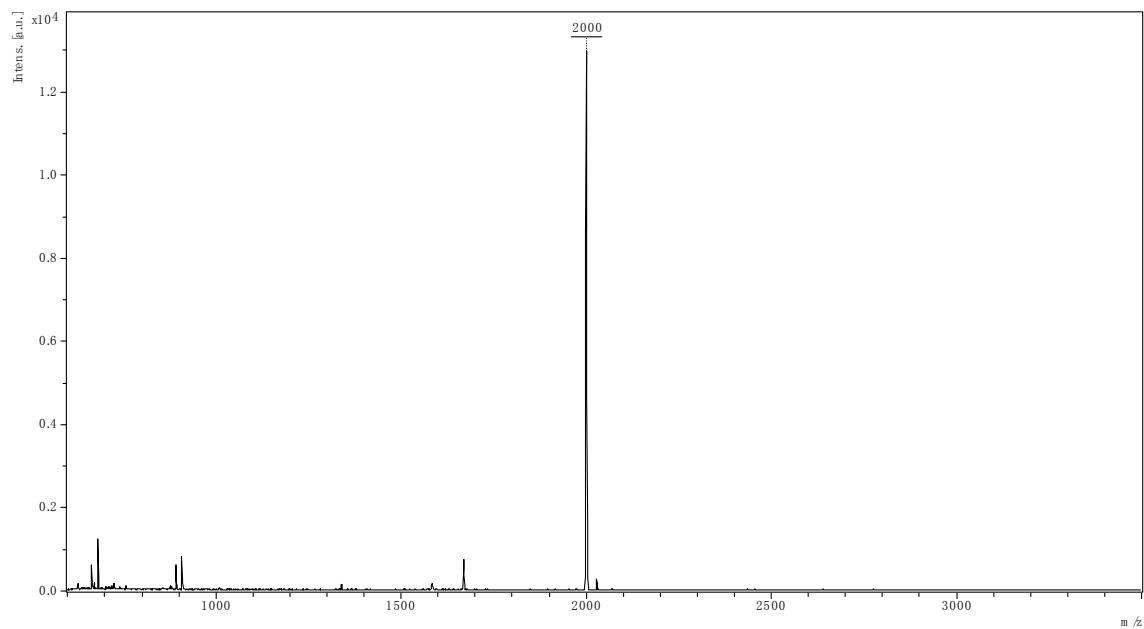


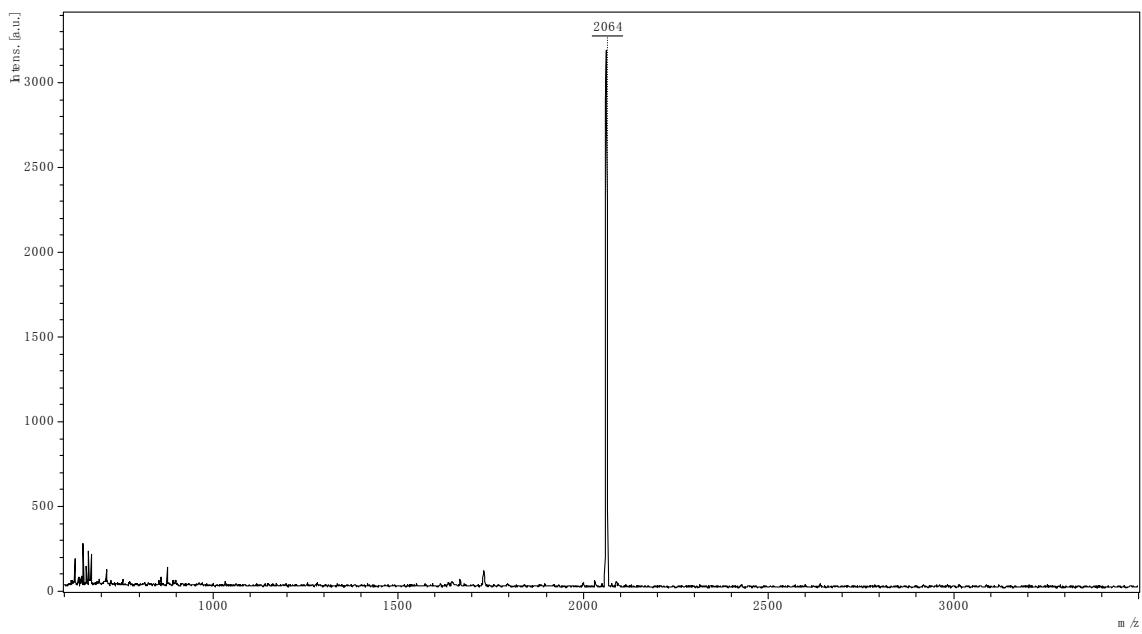
Figure S5. <sup>13</sup>C NMR spectrum of ZnP (500 MHz, CDCl<sub>3</sub>).



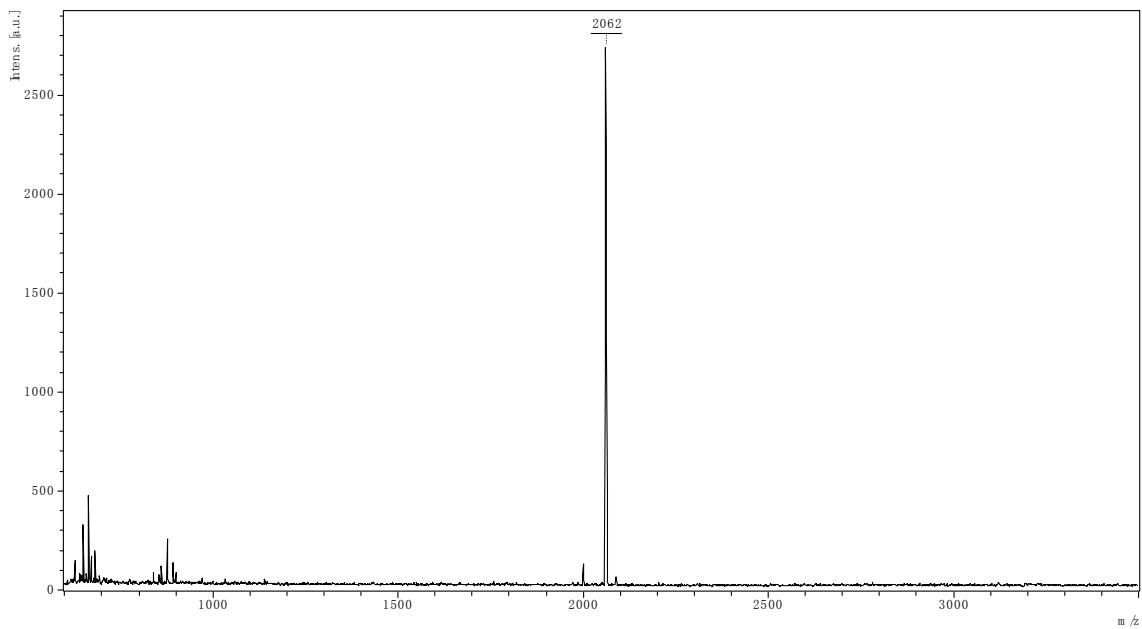
**Figure S6.** <sup>13</sup>C NMR spectrum of CuP (500 MHz, CDCl<sub>3</sub>).



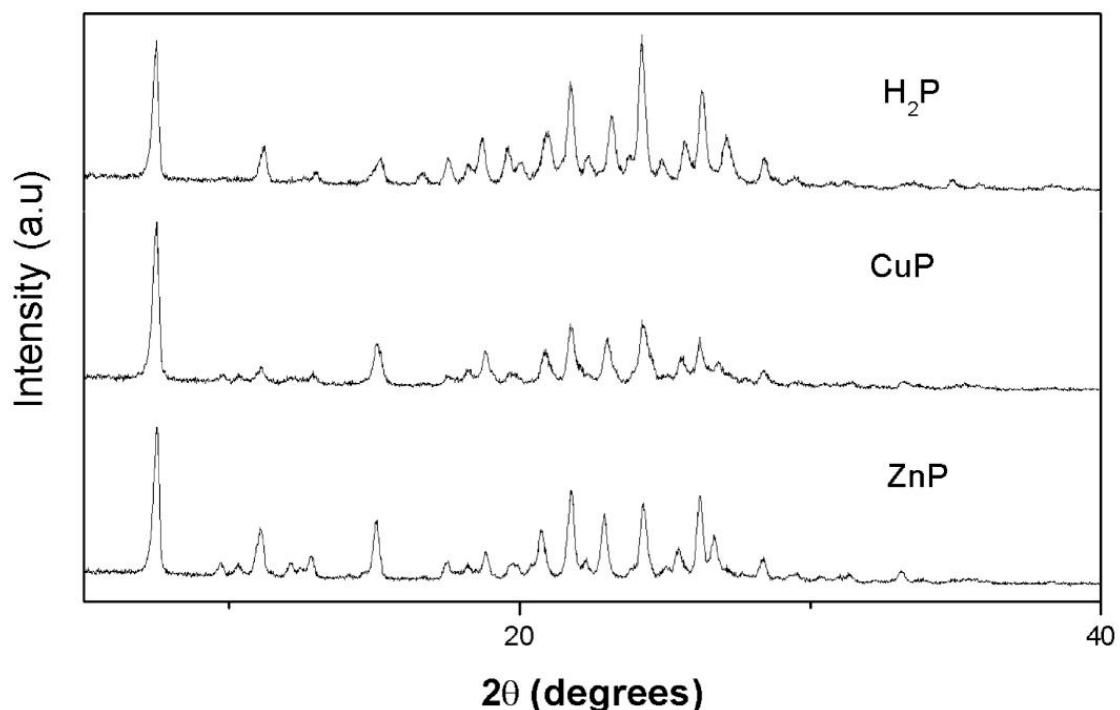
**Figure S7.** MS (MALDI-TOF) of H<sub>2</sub>P  $m/z$ : calcd for 2000.9224 u; found [M+H<sup>+</sup>] 2000.0000 u



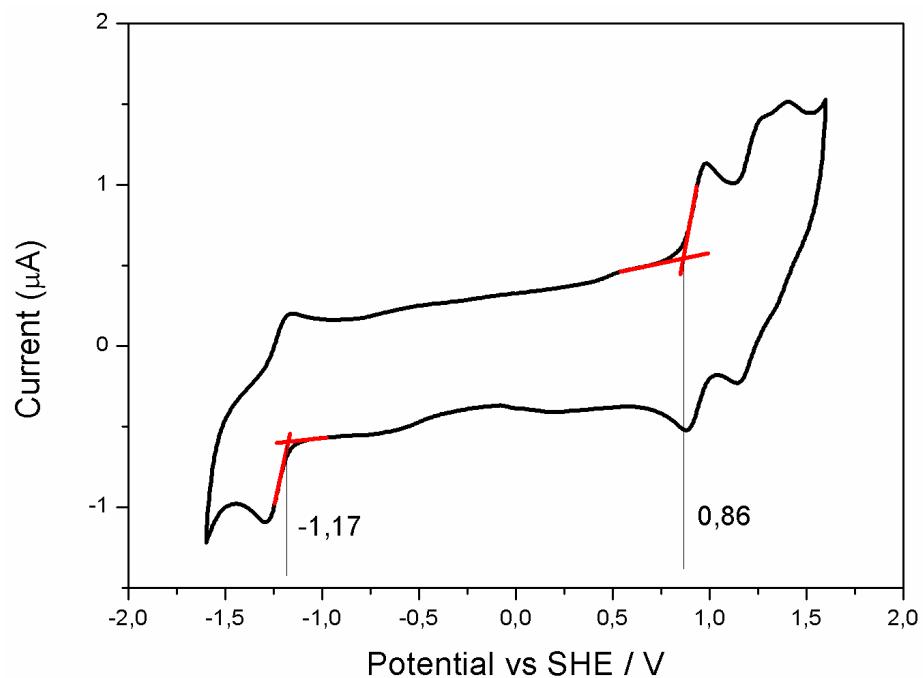
**Figure S8.** MS (MALDI-TOF) of ZnP m/z: calcd for 2064.2966 u; found [M+H<sup>+</sup>] 2064.0000 u



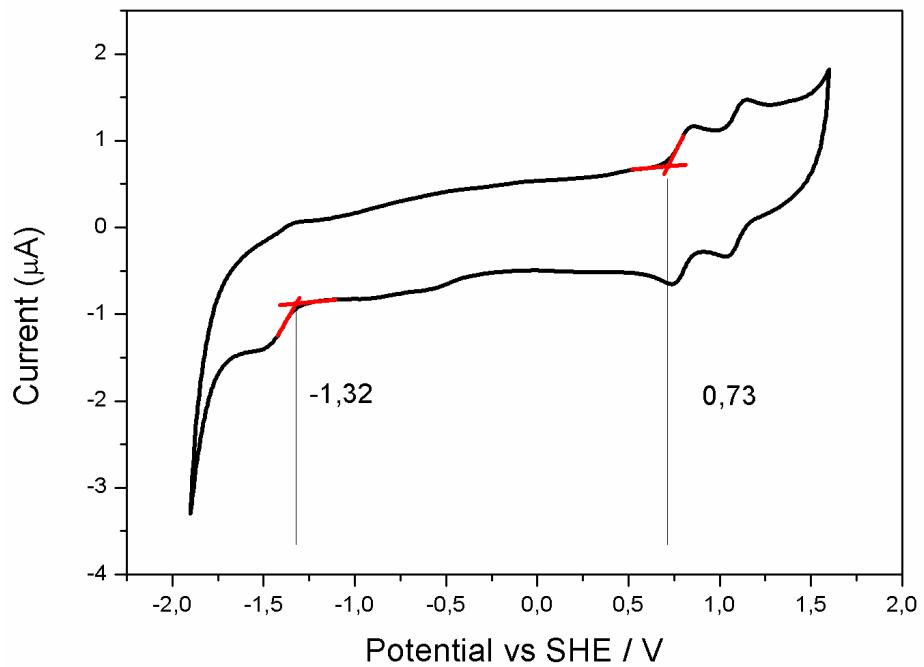
**Figure S9.** MS (MALDI-TOF) of CuP m/z: calcd for 2062.4526 u; found [M+H<sup>+</sup>] 2062.0000 u



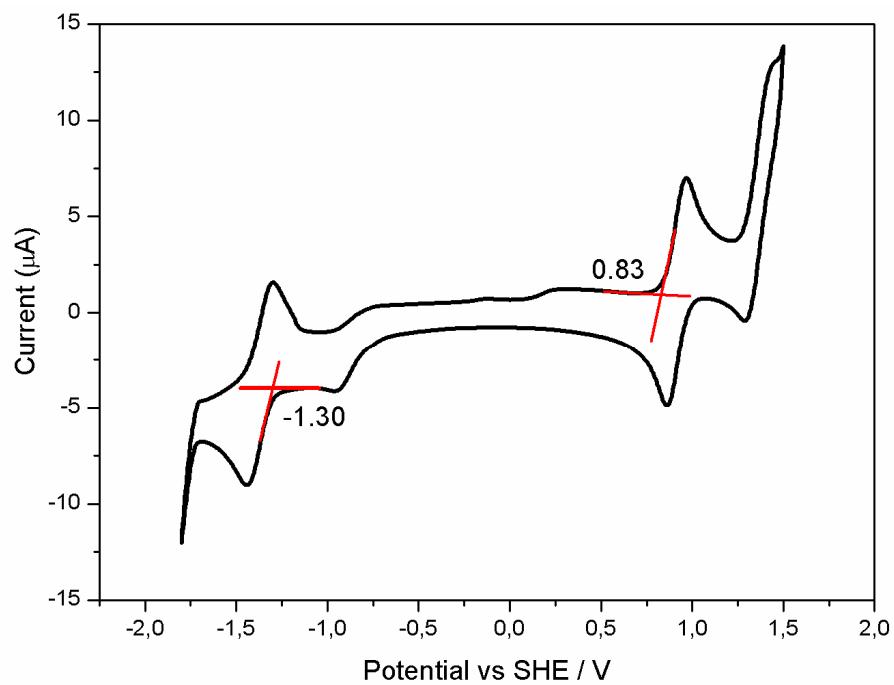
**Figure S10.** X-ray powder diffraction spectra of CuP,  $\text{H}_2\text{P}$  and ZnP compounds.



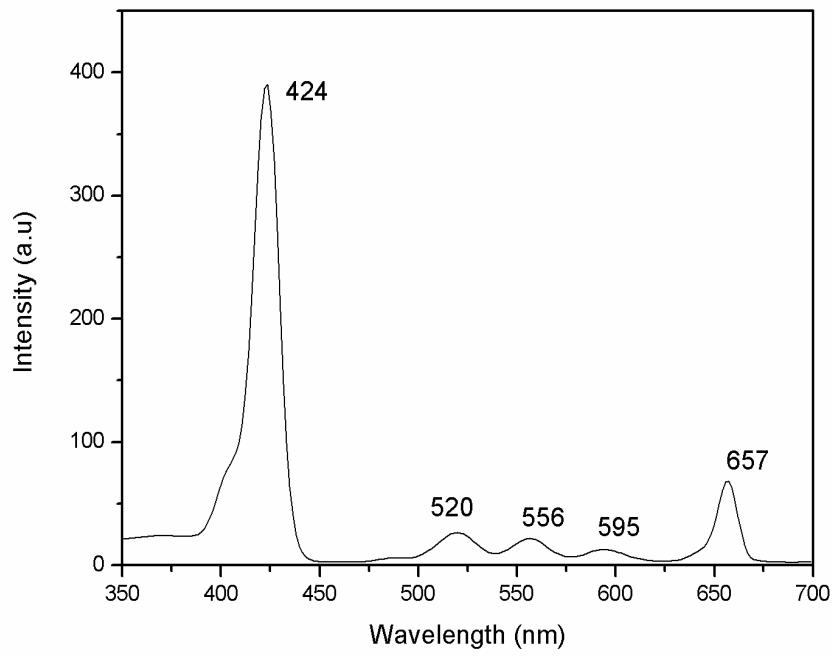
**Figure S11.** Cyclic voltammogram of  $\text{H}_2\text{P}$  in  $\text{CH}_2\text{Cl}_2$ , 50 mM of TBAPF<sub>6</sub>. Scan rate = 50 mV/s.



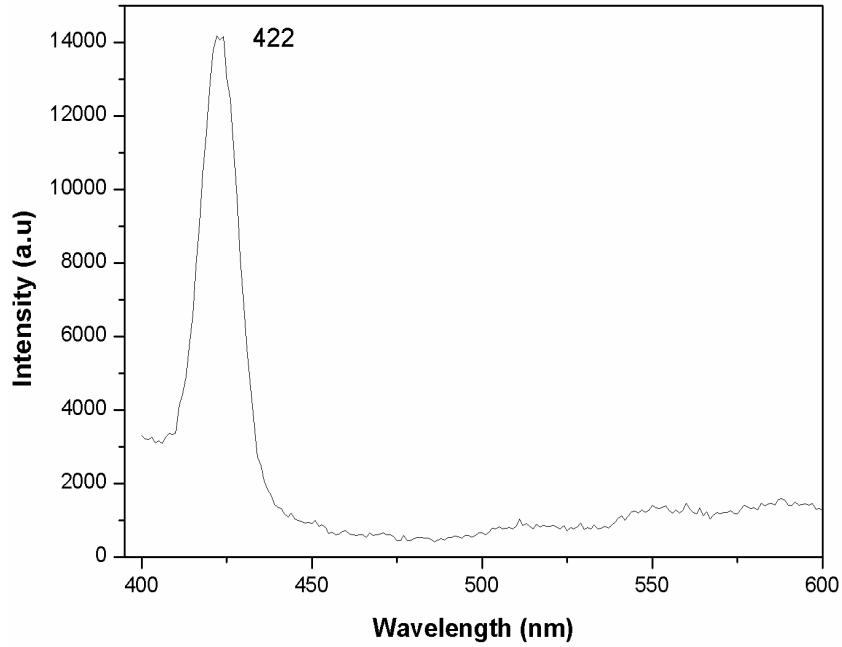
**Figure S12.** Cyclic voltammogram of ZnP in  $\text{CH}_2\text{Cl}_2$ , 50 mM of TBAPF<sub>6</sub>. Scan rate = 50 mV/s.



**Figure S13.** Cyclic voltammogram of CuP in  $\text{CH}_2\text{Cl}_2$ , 50 mM of TBAPF<sub>6</sub>. Scan rate = 50 mV/s.



**Figure S14.** Fluorescence excitation spectrum of H<sub>2</sub>P monitored at 657 nm.



**Figure S15.** Fluorescence excitation spectrum of ZnP monitored at 601 nm.