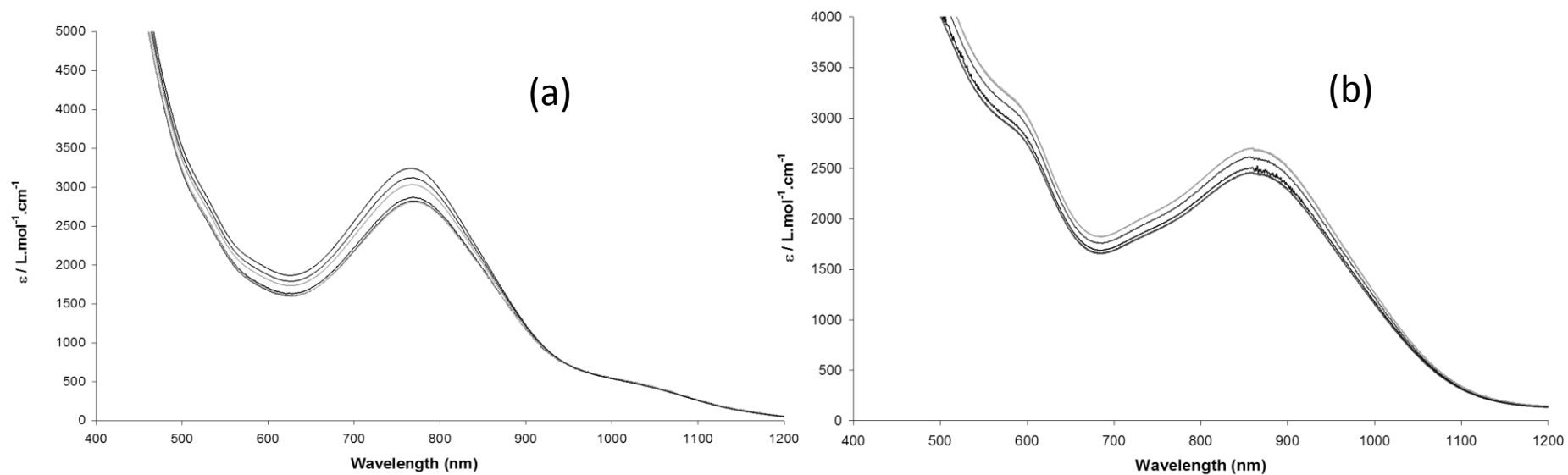


## **{AsW<sub>9</sub>O<sub>33</sub>}-{Mo<sub>3</sub>S<sub>4</sub>} Based Polyoxometalates Including a Metal-Metal bond with Pd or Ni. Synthesis, structure and studies in solution**

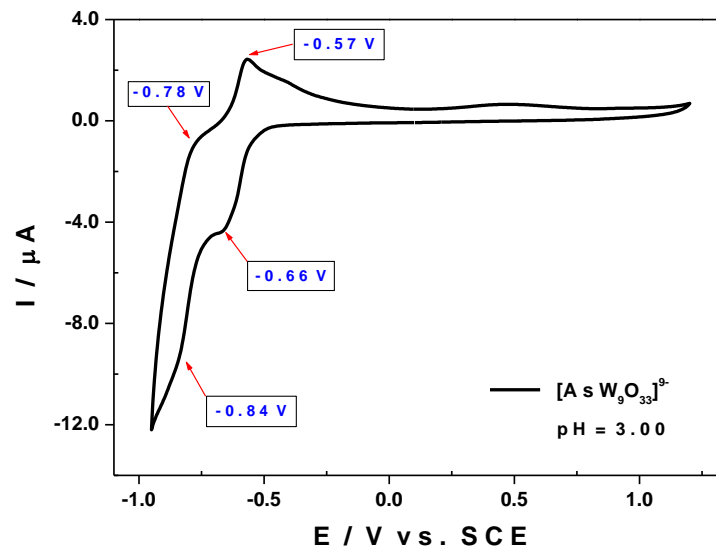
Sylvain Duval, Jérôme Marrot, Corine Simonnet-Jégat, Israël Martyr Mbomékallé,  
Maxim Sokolov and Emmanuel Cadot

University of Versailles Saint Quentin, Institute Lavoisier of Versailles, ILV, UMR CNRS  
8180, 45 Avenue des Etats-Unis, 78035 Versailles Cedex (France)

Supporting Informations

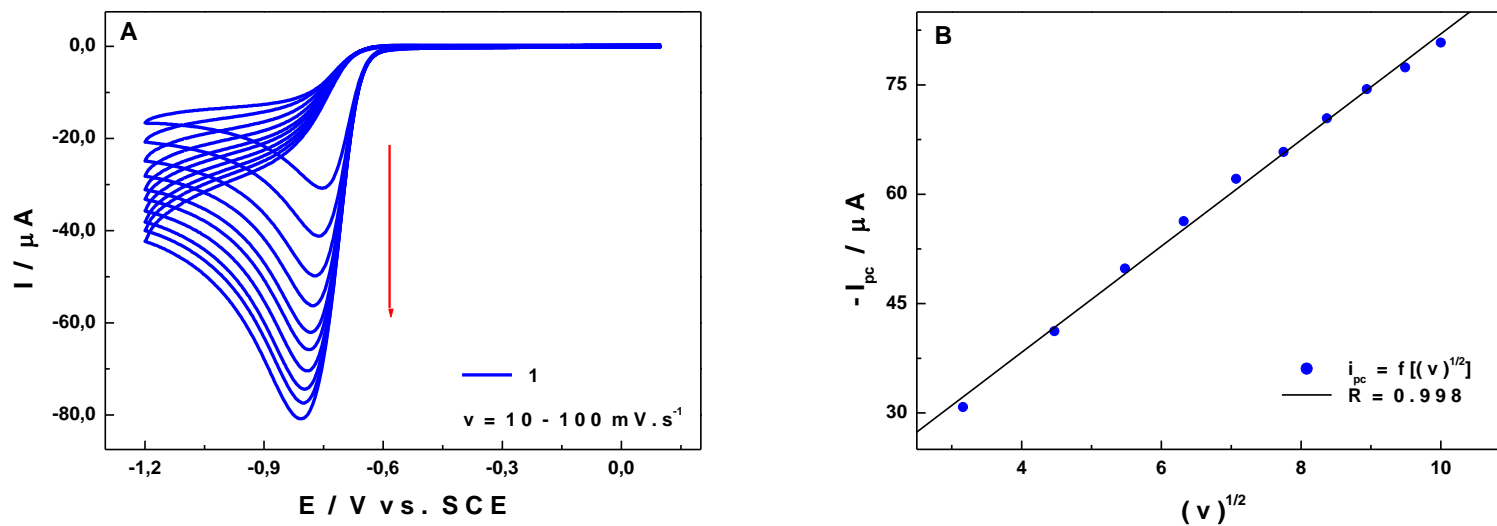


UV-vis spectra of the anions **K-2** (a) and **K-3** (b) at variable concentrations ranging from  $2 \cdot 10^{-3}$  to  $2 \cdot 10^{-4} \text{ mol} \cdot \text{L}^{-1}$

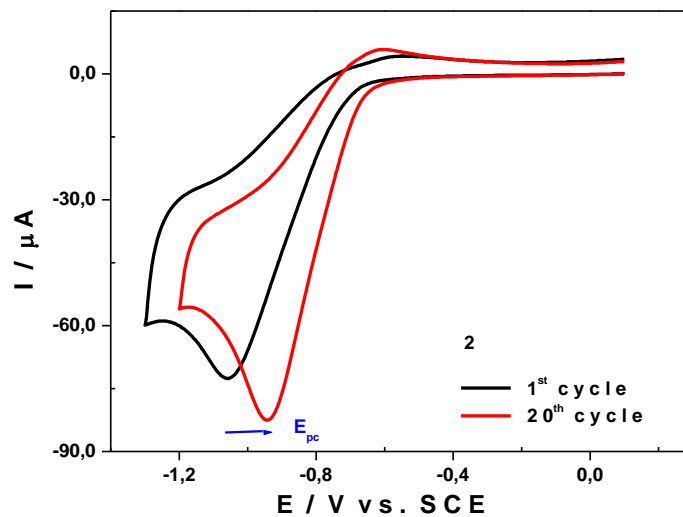


Cyclic voltammogram of  $[\text{AsW}_9\text{O}_{33}]^{9-}$  in  $0.2 \text{ mol.L}^{-1} \text{ Na}_2\text{SO}_4$   $\text{pH} = 3$ . Scan rate of  $10 \text{ mV.s}^{-1}$ ; working electrode glassy carbon. Potentials are quoted against SCE reference electrode. Compound concentration  $0.8 \text{ mM}$ .

Figure S2



(A) Cyclic voltammograms of **1** in 0.2 mol.L<sup>-1</sup> Na<sub>2</sub>SO<sub>4</sub> pH 3 at increasing scan rate from 10 to 100 mV.s<sup>-1</sup>; working electrode glassy carbon. Potentials are quoted against SCE reference electrode.



CVs of **2** recorded in 0.2 mol.L<sup>-1</sup> Na<sub>2</sub>SO<sub>4</sub> pH = 3, 1<sup>st</sup> cycle (black line) 20<sup>th</sup> cycle (red line). Initial potential, +0.1 V; initial scanning direction, negative potentials; scan rate of 100 mV.s<sup>-1</sup>; working electrode glassy carbon. Potentials are quoted against SCE reference electrode.

Figure S4