

**Preconcentration of Ag and Pd ions by using graphite oxide and 2,6
diaminopyridyne from water, anode slime and catalytic converter samples**

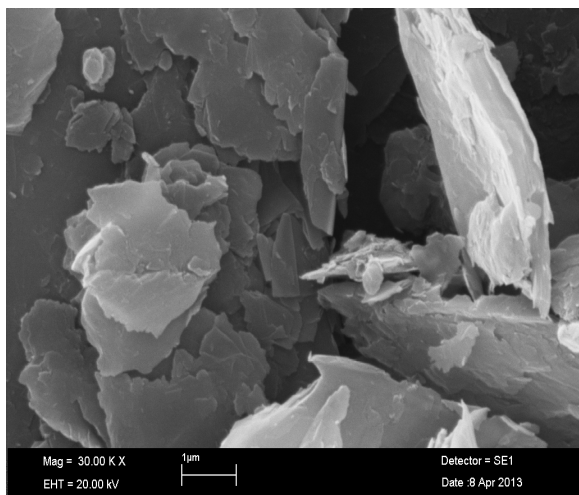
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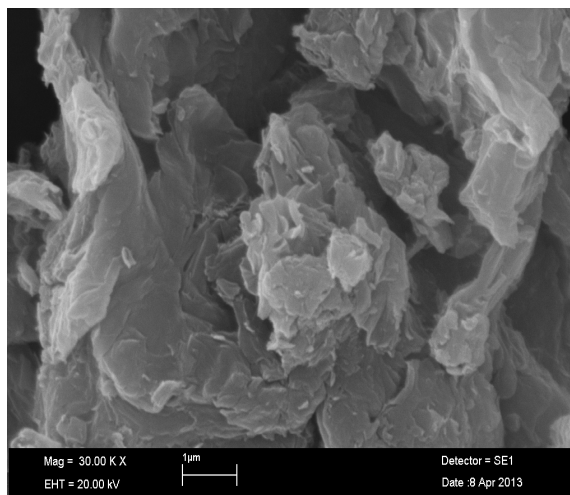
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Synthesis of graphite oxide

Firstly, natural graphite powders were treated by 5% HCl twice, then filtered, washed with distilled water thoroughly, and dried at 110 °C for 24 h. Graphite powder (10 g) was placed in cold (0°C) concentrated H₂SO₄ (230 mL), KMnO₄ (30 g) was added gradually with stirring and cooling. The temperature of the solution was not allowed to go up to 20°C. The mixture was then stirred at 35 ± 3°C for 30 min, distilled water (460 mL) was slowly added to cause an increase in temperature to 98 °C. This temperature was held for 15 min. After this the reaction was terminated by addition of a large amount of ultra high purity water (1.4L) and 30% H₂O₂ solution (100 mL). The mixture was filtered, washed with 5% HCl aqueous solution until sulfate could not be detected with BaCl₂. The reaction product was dried under vacuum at 50 °C for 24h.



(a)



(b)

Fig S1. SEM images of graphite (a) and graphite oxide(b).