

Supporting Information

Environmental Applications of Poly(amic acid)-based Nanomaterials

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Introduction. The purpose of this section is to provide additional information of interest to the reader; A detailed UV-vis absorbance profile of reduction of Cr(VI) ions by poly(amic acid) in the presence and absence of palladium nanoparticles during an exposure time of 14 minutes and a standard calibration curve has been provided.

Table 1: Detailed Cr(VI) reduction profile in the absence and presence of PAA, PdNPs at both ambient and elevated temperatures for water samples. The table also shows the UV-vis. absorbance's values observed experimental setup of the control.

Time (min)	Control	A	B	C
0	0.966	0.966	0.966	0.966
2	0.966	0.148	0.436	0.647
4	0.966	0.0732	0.246	0.4575
6	0.966	0.0567	0.2134	0.4245
8	0.966	0.0438	0.1876	0.3986
10	0.966	0.0363	0.1726	0.3837
14	0.966	0.0249	0.1498	0.3609

A- Cr(VI) + PAA+PdNPs @ 45 Deg. C

B- Cr(VI) + PAA+PdNPs

C- Cr(VI) + PAA

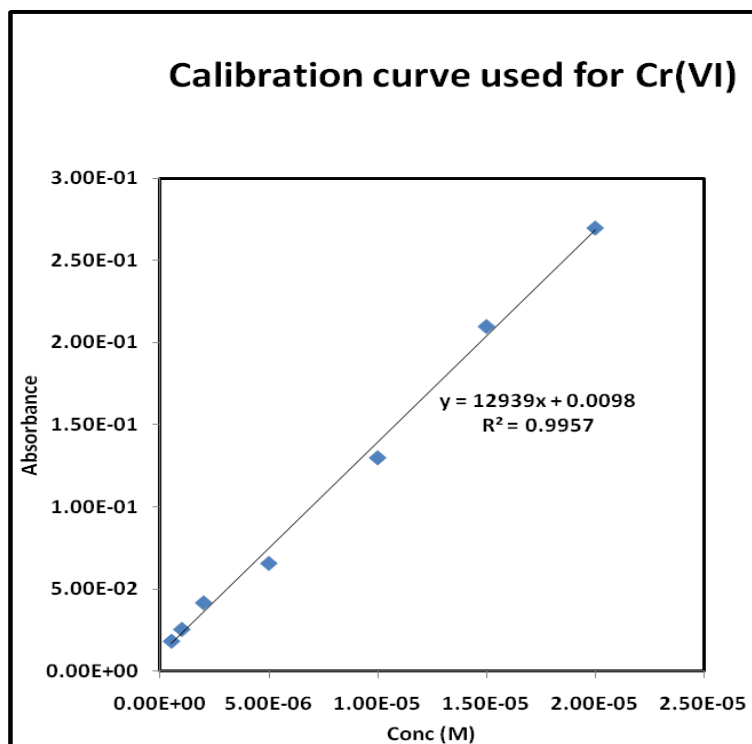


Figure 1. Standard calibration curve for hexavalent Chromium

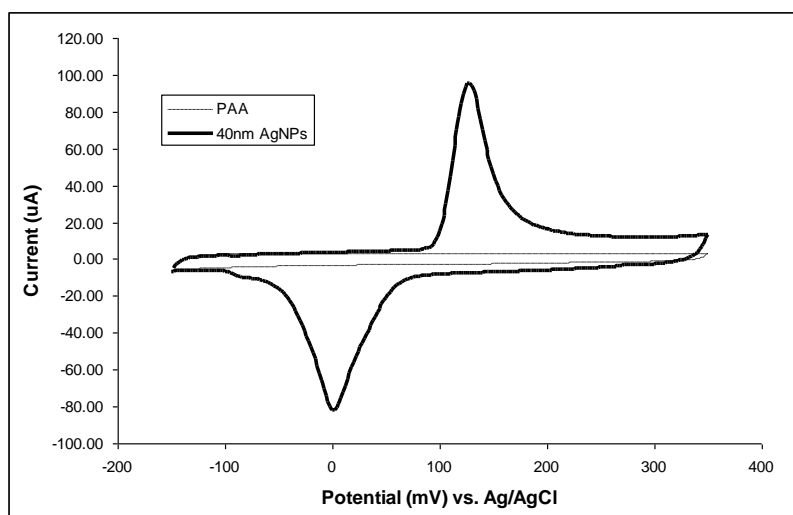


Figure 2: Comparison of CV spectra of blank PAA membrane and standard 40nm AgNPs covered PAA membrane. Experimental conditions: 50 mV/s scan rate and 100 μ A/V sensitivity.