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PEA-P-07

### **Simultaneous determination of trace Amounts of nickel, cadmium, lead and copper by adsorptive cathodic stripping voltammetry**

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A selective and sensitive method for simultaneous determination of nickel, cadmium, lead, and copper by adsorptive differential pulse cathodic stripping voltammetry is presented. The method is based on adsorptive accumulation of the complexes of Ni(II), Cd(II), Pb(II) and Cu(II) ions with 2-aminobenzoic acid onto hanging mercury drop electrode (HMDE), followed by reduction of adsorbed species by differential pulse cathodic stripping voltammetry. Optimal conditions were obtained at pH 7.4, 2-aminobenzoic acid concentration of  $4.5 \times 10^{-4}$  M, accumulation potential of -0.2 V (vs. Ag/AgCl), accumulation time of 65 s, scan rate of 10 mV/s. Under the optimized conditions, a linear calibration curve was established for the concentration of Ni(II), Cd(II), Pb(II) and Cu(II) in the range of 5-250, 10-120, 5-150 and 10-120 ng/mL, respectively, with a detection limit of 1.65 ng/mL Ni(II), 1.78 ng/mL Cd(II), 1.78 ng/mL Pb(II) and 2.05 ng/mL Cu(II). The procedure was successfully applied to the simultaneous determination of both ions in some real samples.

PEA-P-08

### **The qualitative determination of oseltamivir phosphate in Tamiflu® capsule by cyclic voltammetry with simultaneous HPLC determination**

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A gold electrode was applied in the voltammetric determination of oseltamivir phosphate standard in 0.05 M NaHCO<sub>3</sub>. Oseltamivir phosphate as a standard and as a component of Tamiflu® capsule exhibited the identical cyclic voltammogram. The electrochemical method for the qualitative determination of oseltamivir phosphate in Tamiflu® capsule by cyclic voltammetry was developed.