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# Penicillamine-modified sensor for the voltammetric determination of Cd(II) and Pb(II) ions in natural samples

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## ABSTRACT

A new penicillamine-GCE was developed based on the immobilization of D-penicillamine on aryl diazonium salt monolayers anchored to the glassy carbon electrode (GCE) surface and it was applied for the first time to the simultaneous determination of Cd(II) and Pb(II) ions by stripping voltammetric techniques. The detection and quantification limits at levels of  $\mu\text{g L}^{-1}$  suggest that the penicillamine-GCE could be fully suitable for the determination of the considered ions in natural samples.

**Keywords:** chelating agent-modified sensor; electrochemical grafting; metal determination; stripping voltammetry; D-penicillamine

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