

## عنوان مقاله:

Electroanalytical Determination of Isoniazid in Pharmaceutical Formulation and Human Plasma, Using a Poly(Eriochrome Black-T) Modified Pencil Lead Electrode

## محل انتشار:

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## خلاصه مقاله:

In this research, an inexpensive and effective method for determination of Isoniazid (INH) is presented by using a poly (Eriochrome black T) modified pencil lead electrode. The potential of modified electrode in electrochemical sensing of INH was evaluated by cyclic voltammetry and hydrodynamic amperometry methods. The overall number of electrons involved in oxidation of INH was found 4 electrons. The calculated diffusion coefficient for INH was equal to  $9.74 \times 10^{-7}$  cm<sup>2</sup>/s. Calculated limit of detection for method was 66.0 μM and 20.4 μM applying cyclic voltammetry and hydrodynamic amperometry methods, subsequently. The ability of prepared electrode for determination of INH in real sample was evaluated by applying the proposed method to human plasma analysis and the results were compared with the standard method, presented by United State Pharmacopeia. Presented method exhibited a satisfying precision (%RSD=4.64). Also the proposed method showed a good accordance with standard method in confidence level of 95%.

## کلمات کلیدی:

Isoniazid, Eriochrome Black-T, Modified Electrode, Determination

## لینک ثابت مقاله در پایگاه سیویلیکا:

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