

## عنوان مقاله:

Electrochemical synthesis of Polypyrrole-ZnO nanocomposites hybride and corrosion protection of steel

## محل انتشار:

دوازدهمین کنگره ملی مهندسی شیمی ایران (سال: 1387)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

Two different coating consist of polypyrrole (Ppy) and nanocomposites of Ppy-ZnO electrochemically were deposited on mild steel. The corrosion performance of mild steel covered by Ppy and mild steel covered by Ppy-ZnO were studied by electrochemical impedance spectroscopy (EIS) and Tafel method in 3.5% NaCl aqueous solution. Coating with nano-sized ZnO (Ppy-ZnO) powder possessed the higher corrosion resistance rather than Ppy coating, which might have resulted from the lowest diffusion coefficient for the inward migration of aggressive media through the coating in the given system.

## کلمات کلیدی:

corrosion, EIS, Nanocomposite, polypyrrole, ZnO

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/58386>

