Int. J. Electrochem. Sci., 14 **(2019)** 2925 – 2932

International Journal of ELECTROCHEMICAL SCIENCE
www.electrochemsci.org

Electrochemical Characterization of poly(N-methylaniline) Films

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doi: 10.20964/2019.03.78

Received: 25 October 2018 / *Accepted:* 22 December 2018 / *Published:* 7 February 2019

Poly(*N*-methylaniline) (PNMA) films were obtained by cyclic voltammetry on Pt electrode in 0.1 M *N*-methylaniline dissolved in an electrolyte solution of 1.0 M HBF_4. Electrochemical characterization of the polymer films was investigated using electrochemical techniques like cyclic voltammetry and electrochemical impedance spectroscopy (EIS) in HBF_4 solutions. The influence of PNMA layer thickness and applied potential on impedance characteristics were also investigated. The results indicated that the electroactive behaviors of the films mainly depend on the polymer thickness and applied potentials.

Keywords: Poly(N-methylaniline); Electrochemical characterization; Impedance spectroscopy; Electrolyte effect

FULL TEXT