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New Copper(II) and Nickel(II) Complexes of 4-Morpholinoaceto- phenone Thiosemicarbazone: Structural, Electrochemical and Antimicrobial Studies

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摘要 4-Morpholinoacetophenone thiosemicarbazone, MAPT, and its nickel(II) and copper(II) complexes have been prepared and characterized by elemental analysis, magnetic susceptibility, spectral methods (FT-IR, ¹H NMR) and cyclic voltammetry. Electrochemical behaviors of the complexes have been studied by cyclic voltammetry in DMF media showing metal centered reduction processes for both of them. The redox properties, nature of the electrode processes and the stability of the complexes were discussed. [Cu(MAPT)₂]Cl₂ complex shows Cu(II)/Cu(I) couple and quasi-reversible wave associated with the Cu(III)/Cu(II) process. The reduction/oxidation potential values depend on the structures of complexes. Also, the antimicrobial activities of these complexes were determined against *S. aureus*, *E. coli* and *B. subtilis*.

关键词 [thiosemicarbazone](#) [metal complexes](#) [spectra](#) [cyclic voltammetry](#) [antimicrobial activity](#)

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Key words [thiosemicarbazone](#) [metal complexes](#) [spectra](#) [cyclic voltammetry](#) [antimicrobial activity](#)

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