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Electrochemiluminescence Detection of Melamine with Electropolymerized Poly(sulfosalicylic acid)/Ru(bpy)$_3^{2+}$ Modified Electrode

Nian Lu[1], *Wen-chang Wang*[2], *Xiao-hui Chen*[3], *Zhi-dong Chen*[4,*]

[1] School of Petrochemical Engineering, Changzhou University, China.
[2] School of Petrochemical Engineering, Changzhou University, China
[3] School of Chemistry and Material Engineering, Changzhou Vocational Institute of Engineering, China.
[4] School of Materials Science and Engineering, Changzhou University, China.
[*]E-mail: zdchen@cczu.edu.cn

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In this paper, a PSA/Ru(bpy)$_3^{2+}$ modified electrode was prepared by electrochemical polymerization and used as the working electrode in ECL detection of melamine. Under the optimal conditions, the sensor shows a wide linear range of 1.0×10^{-7} ~1.0×10^{-5} mol/L, detection limit of 2.5×10^{-8} mol/L with good reproducibility and stability. The method is expected to be a new method for the detection of melamine, which is simple and convenient.

Keywords: ECL; Poly-sulfosalicylic acid; Ru(bpy)$_3^{2+}$; melamine

FULL TEXT