

**Ru(III)-Based Compounds with Sulfur Donor Ligands: synthesis, characterization,
electrochemical behavior and anticancer activity.**

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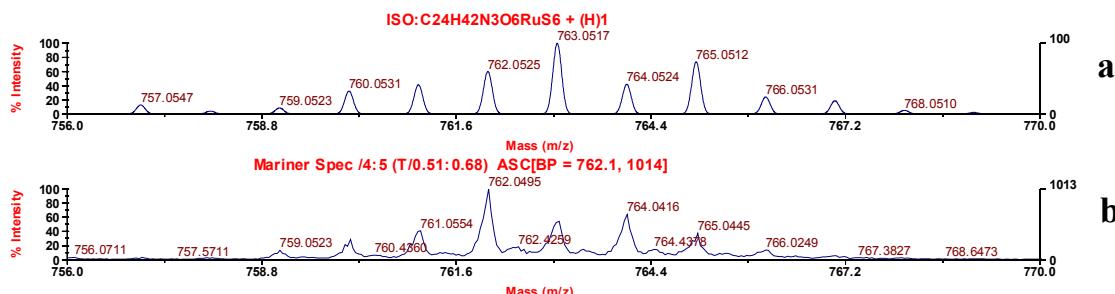


Figure S1: ESI-MS spectra (ion positive-mode) of $[Ru(TSDT)_3]$ simulated (a) experimental (b).

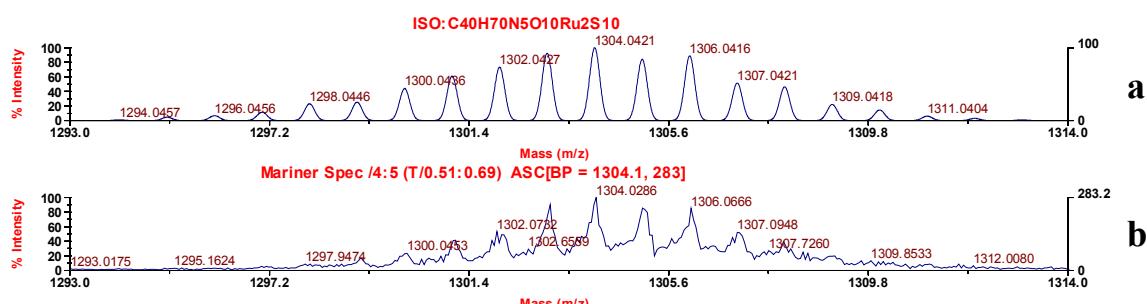


Figure S2: ESI-MS spectra (ion positive-mode) of $[Ru_2(TSDT)_5]^+$ simulated (a) experimental (b).

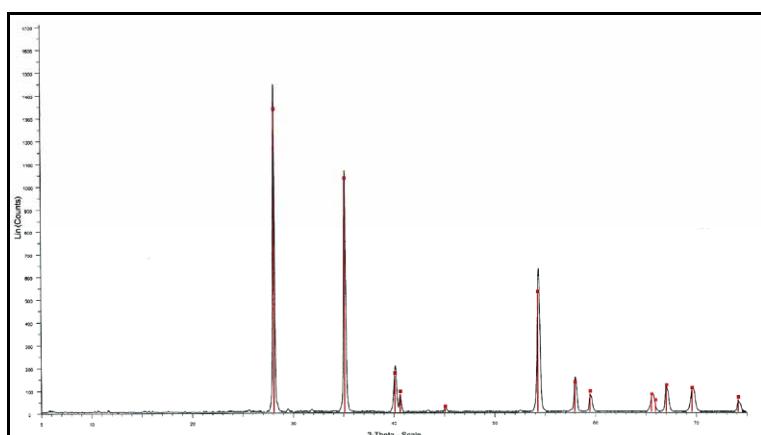


Figure S3: XRD spectrum of the final product after thermal degradation in air of the residual powder of $[Ru(ESDT)_3]$ (-) and RuO₂ (-, data base).

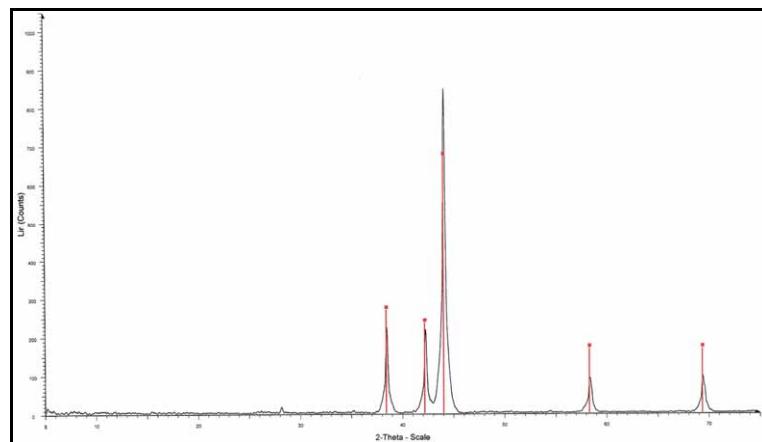


Figure S4: XRD spectrum of the final product after thermal degradation in nitrogen of the residual powder of $[\text{Ru}(\text{ESDT})_3]$ (-) and Ru (-, data base).

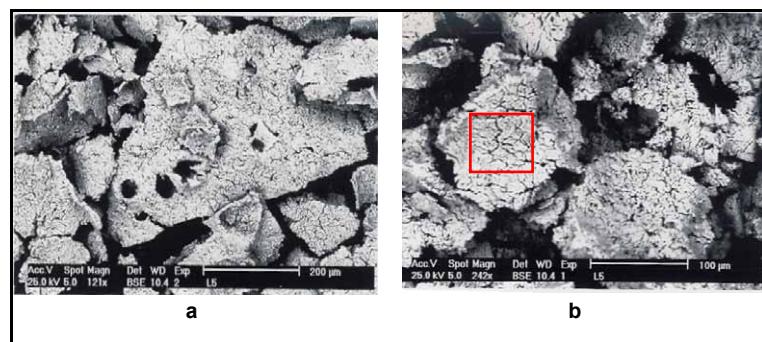


Figure S5: SEM images of the final product after thermal degradation in air of $[\text{Ru}(\text{ESDT})_3]$ (121x (a) and 242x (b)).

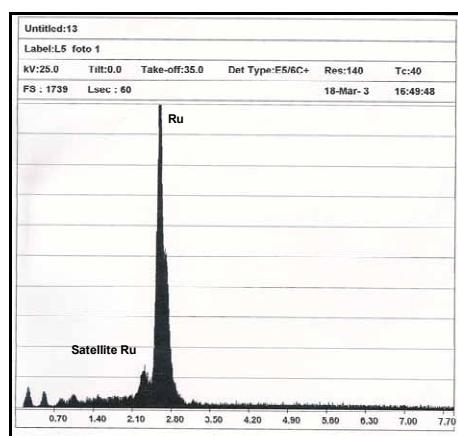


Figure S6: SEM spectrum of the red portion (see above).

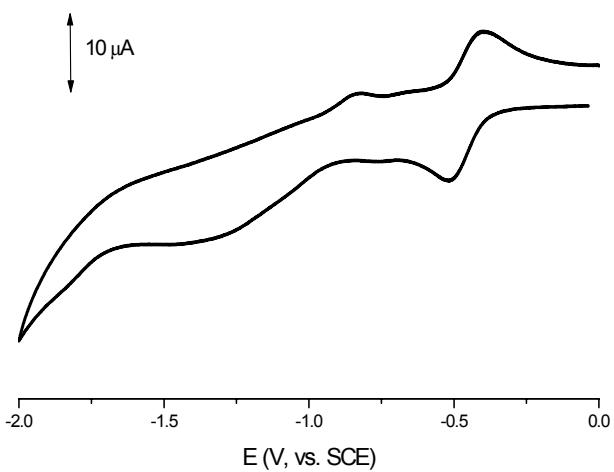


Figure S7: Cyclic voltammetric response recorded at a platinum electrode in CH_2Cl_2 solution of $[\text{Ru}_2(\text{TSDT})_5]\text{Cl}$ ($1.0 \times 10^{-3} \text{ mol}\cdot\text{dm}^{-3}$). $[\text{NBu}_4][\text{PF}_6]$ ($0.2 \text{ mol}\cdot\text{dm}^{-3}$) supporting electrolyte. Scan rate 0.2 Vs^{-1} .