Electronic Supporting Information

Selective oxidation of thiourea with H₂O₂ catalyzed by [Ru³⁺(edta)(H₂O)]⁻: Kinetic and mechanistic studies

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Figure S1. Reactivity of Compound 0, [Ru³⁺(edta)(OOH)]²⁻, towards TU. [Ru³⁺(edta)] = 0.1 mM, [H₂O₂] = 20 mM at pH 3.9 (2 mM acetate buffer) and 25 °C. TU (40 mM) was added after 2 sec.
Figure S2. Reactivity of Compound I, [Ru\(^{V}\)(edta)O)]\(^{+}\), towards TU. [Ru\(^{III}\)(edta)] = 0.1 mM, [H\(_2\)O\(_2\)] = 0.2 mM at pH 3.9 (2 mM acetate buffer) an 25 °C. TU (40 mM) was added after 2 min.
Figure S3. Results of HPLC studies for the oxidation of TU by the Ru(edta)/H₂O₂ system. (a) Reaction mixture was analyzed just after disappearance of the red colour (after 800 sec) and b) after 1 h. [Ru(edta)(H₂O)⁺] = 2 x 10⁻⁵ M, [TU] = 2 x 10⁻³ M, [H₂O₂] = 2 x 10⁻² M, pH = 4.8 adjusted by (NaOH/HCl).
Figure S4. Kinetic traces recorded during oxidation of TU by the Ru(edta)/H₂O₂ system at (a) pH = 1.6 and (b) pH = 9.2. [Ru(edta)] = 0.2 mM, [TU] = 0.4 mM, [H₂O₂] = 20 mM.