

Electronic Supplementary Data

Phenoxazinone synthase activity of a mononuclear cobalt(III) complex

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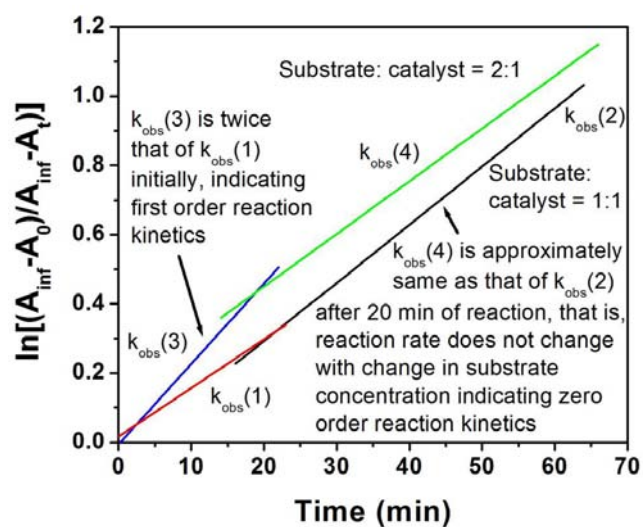


Fig. S1 – k_{obs} plot indicating the order of reaction.

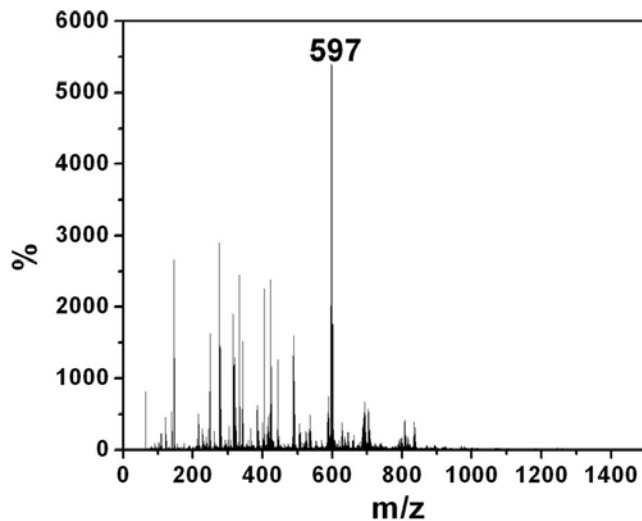


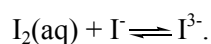
Fig. S2 – ESI-MS spectrum indicating the formation of a relatively stable intermediate which is a complex-substrate adduct.

Spectrophotometric detection of H₂O₂ in the oxidation reaction

Reaction mixtures were prepared as in the kinetic experiments. After 1 h of reaction an equal volume of water was added and the organic part (APX) formed was extracted three times with dichloromethane. The aqueous layer was acidified with H₂SO₄ to pH = 2 to stop further oxidation, and 1 mL of a 10% solution of KI and three drops of 3% solution of ammonium molybdate were added. In the presence of hydrogen peroxide occurs the reaction



and with an excess of iodide ions, the triiodide ion is formed according to the reaction



The formation of I₃⁻ was monitored spectrophotometrically due to the development of the characteristic I₃⁻ band ($\lambda = 350 \text{ nm}$, $\epsilon = 26000 \text{ M}^{-1} \text{ cm}^{-1}$).

