**Supporting Information**


**Reaction of [Ru$^{III}$(edta)(H$_2$O)]$^-$ with H$_2$O$_2$ in aqueous solution. Kinetic and mechanistic investigation**
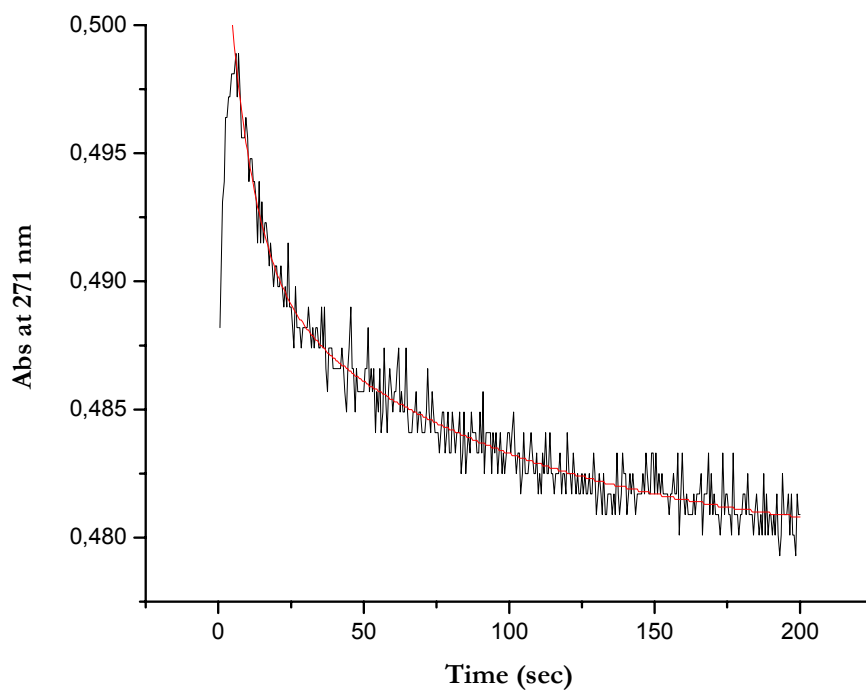
Debabrata Chatterjee,* Anannya Mitra and Rudi van Eldik*
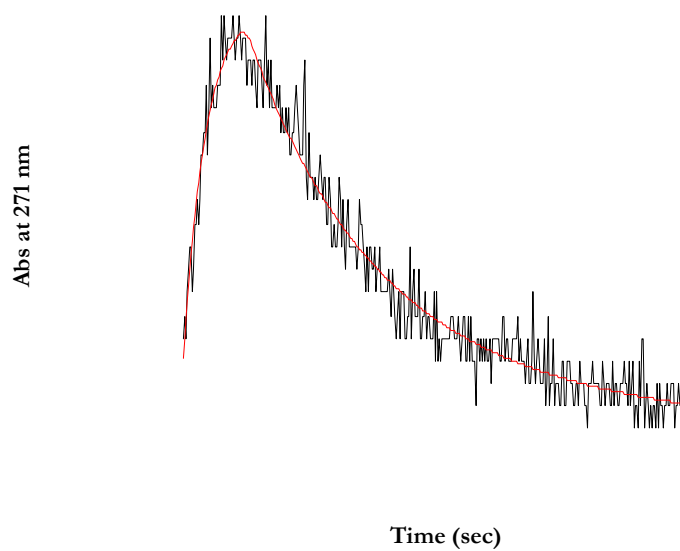
**Kinetic traces at 271 nm**


Experimental conditions: [Ru$^{III}$(edta)] = 5 x 10$^{-5}$ M, [H$_2$O$_2$] = 0.015 M, Temp. = 4.5 °C, pH = 5.1





$k_{obs} = 0.34$ s$^{-1}$

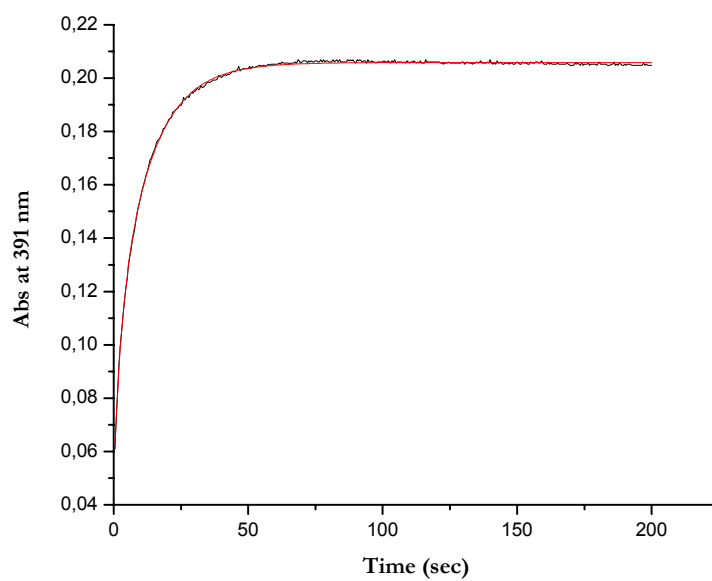Two-exponential fit: $k_{fast} = 0.086$ s$^{-1}$ and $k_{slow} = 0.007$ s$^{-1}$



Two-exponential fit: $k_{fast} = 0.36$ s$^{-1}$ and $k_{slow} = 0.091$ s$^{-1}$

## Kinetic traces at 391 nm

Experimental conditions: $[Ru^{III}(edta)] = 5 \times 10^{-5}$ M, $[H_2O_2] = 0.015$ M, Temp. = 4.5 °C, pH = 5.1
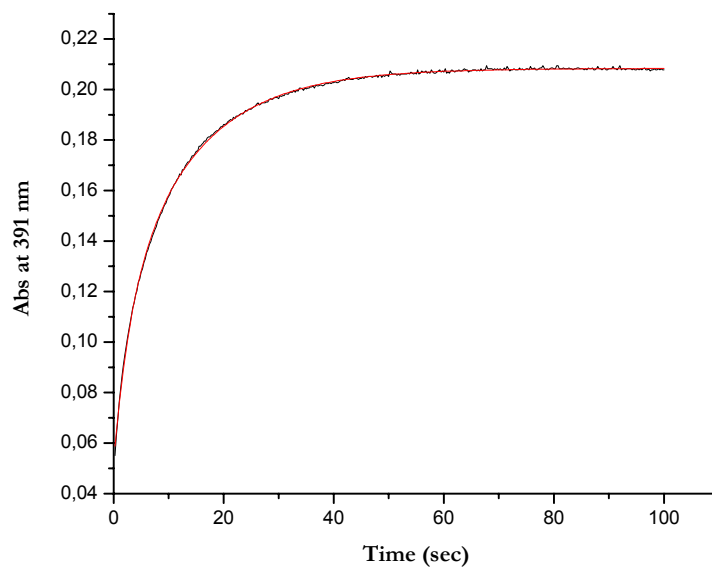


Two-exponential fit: $k_{fast} = 0.33$ s$^{-1}$ and $k_{slow} = 0.075$ s$^{-1}$



Two-exponential fit: $k_{fast} = 0.34$ s$^{-1}$ and $k_{slow} = 0.080$ s$^{-1}$