

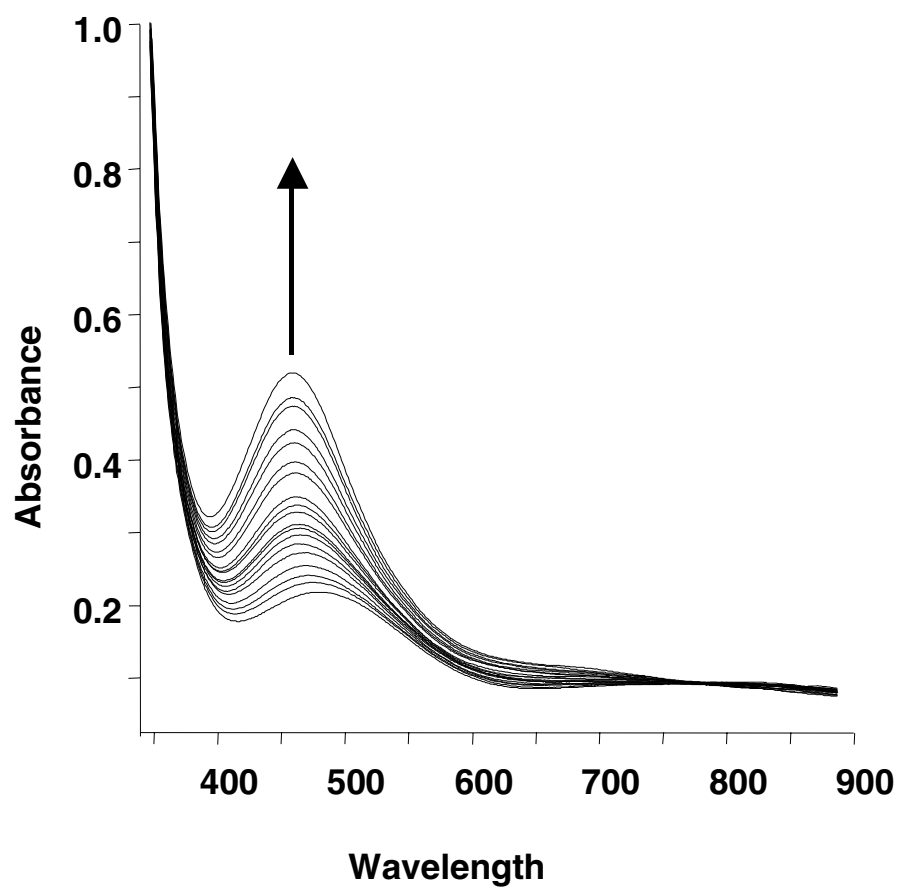
# Substrate Binding in Catechol Oxidase Activity : Biomimetic Approach

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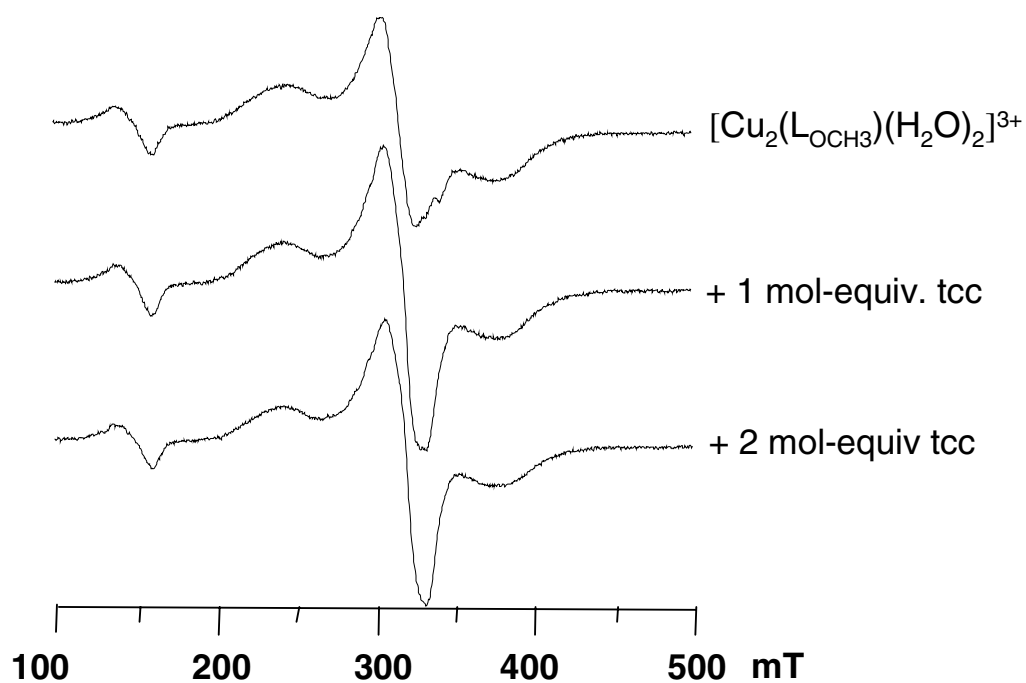
- Figure S1** Evolution of the UV-Visible spectrum of  $[\text{Cu}_2(\text{L}_{\text{OCH}_3})(\text{H}_2\text{O})_2]^{3+}$  (0.5 mM in acetone) upon progressive addition of tcc at 25 ° C. Upper spectrum obtained after addition of 2 mol-equiv of substrate.
- Figure S2** Evolution of the EPR (77 K) spectrum of  $[\text{Cu}_2(\text{L}_{\text{OCH}_3})(\text{H}_2\text{O})_2]^{3+}$  (3 mM in acetone) upon progressive addition of tcc.
- Figure S3** Kinetic of the fixation of the second mol-equiv. of tcc on  $[\text{Cu}_2(\text{L}_{\text{OCH}_3})(\text{H}_2\text{O})_2]^{3+}$  (25°C in acetone) followed at 460 nm.

**Figure S1**



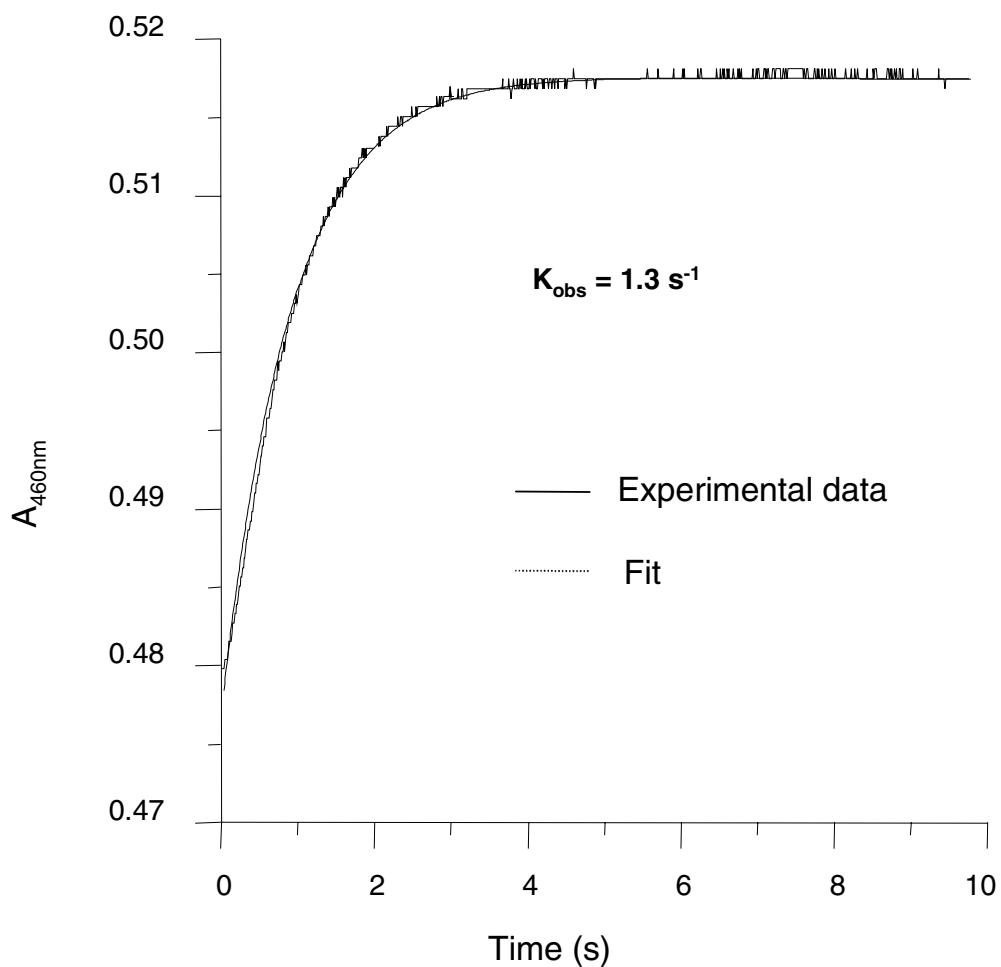
Evolution of the UV-Visible spectrum of  $[\text{Cu}_2(\text{L}_{\text{OCH}_3})(\text{H}_2\text{O})_2]^{3+}$  (0.5 mM in acetone) upon progressive addition of tcc at 25 ° C. Upper spectrum obtained after addition of 2 mol-equiv of substrate

**Figure S2**



Evolution of the EPR (77 K) spectrum of  $[\text{Cu}_2(\text{L}_{\text{OCH}_3})(\text{H}_2\text{O})_2]^{3+}$  (3 mM in acetone) upon progressive addition of tcc.

**Figure S3**



Kinetic of the fixation of the second mol-equiv. of tcc on  $[\text{Cu}_2(\text{L}_{\text{OCH}_3})(\text{H}_2\text{O})_2]^{3+}$  (25°C in acetone) followed at 460 nm. The corresponding curve is described by the following equation :

$$A = A_e \quad A_t = A_e \exp(-k_{obs} \times t)$$

Where  $A_e$  is the absorbance at the equilibrium and  $A_t$  the absorbance at the  $t$  instant