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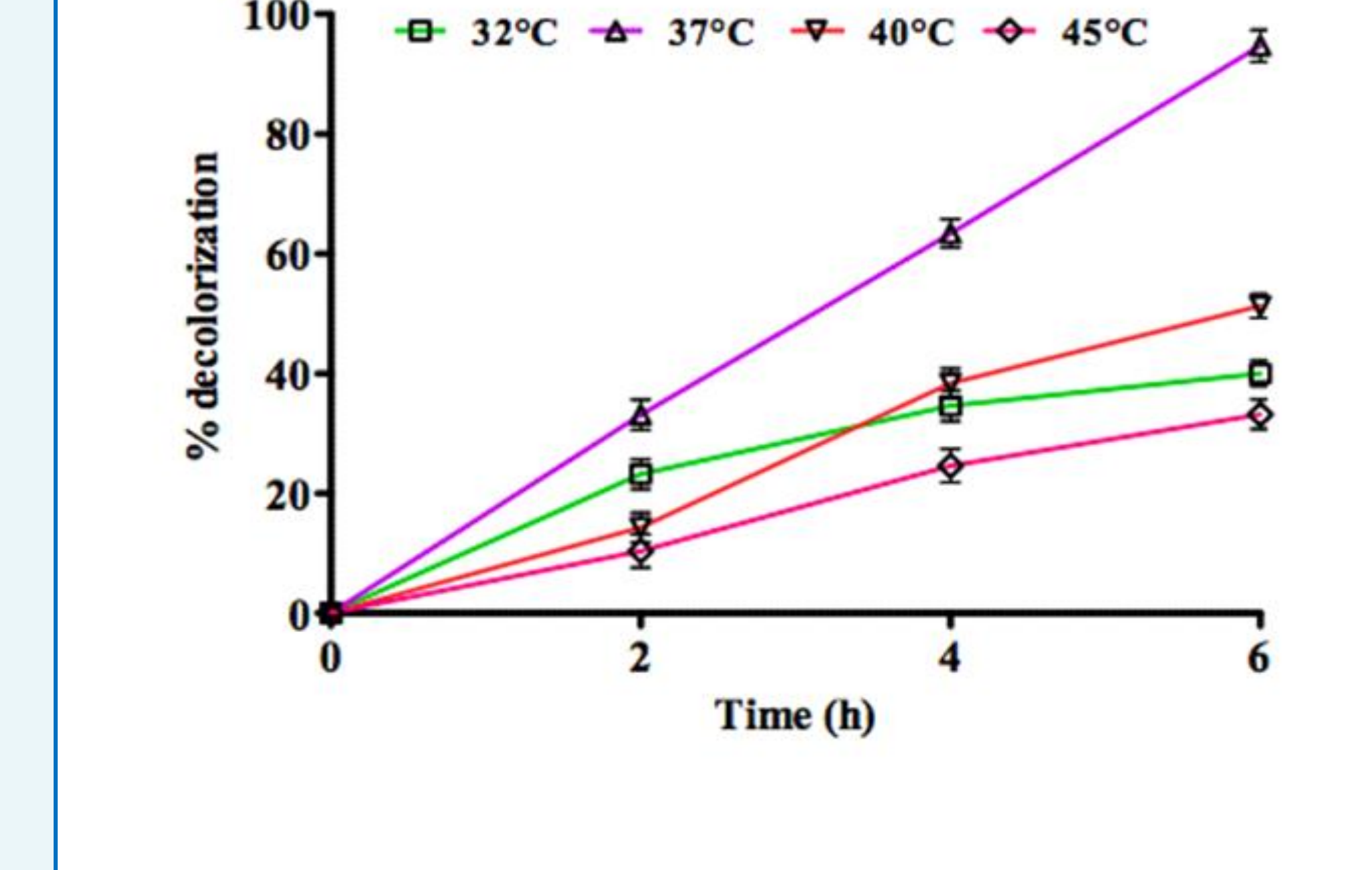
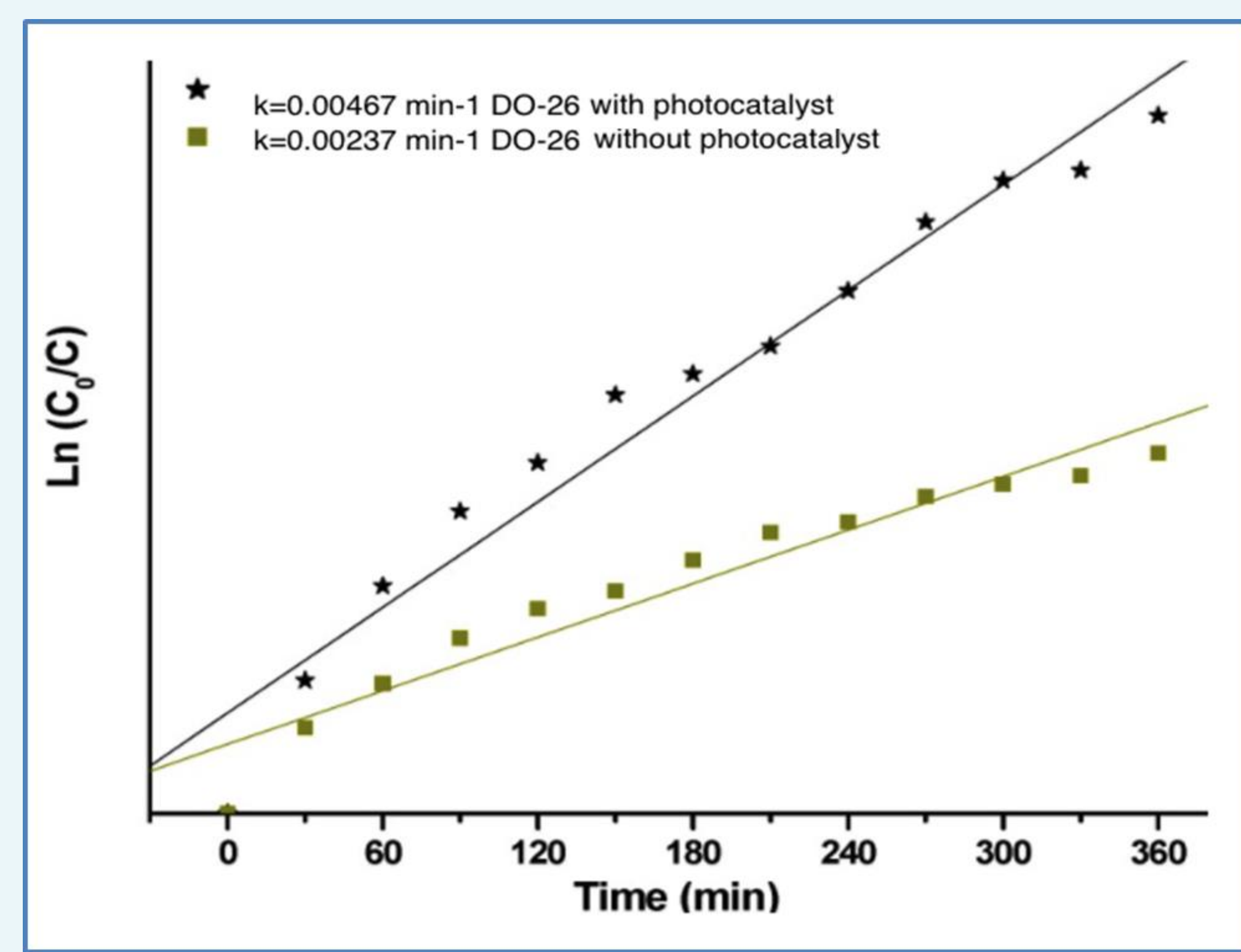
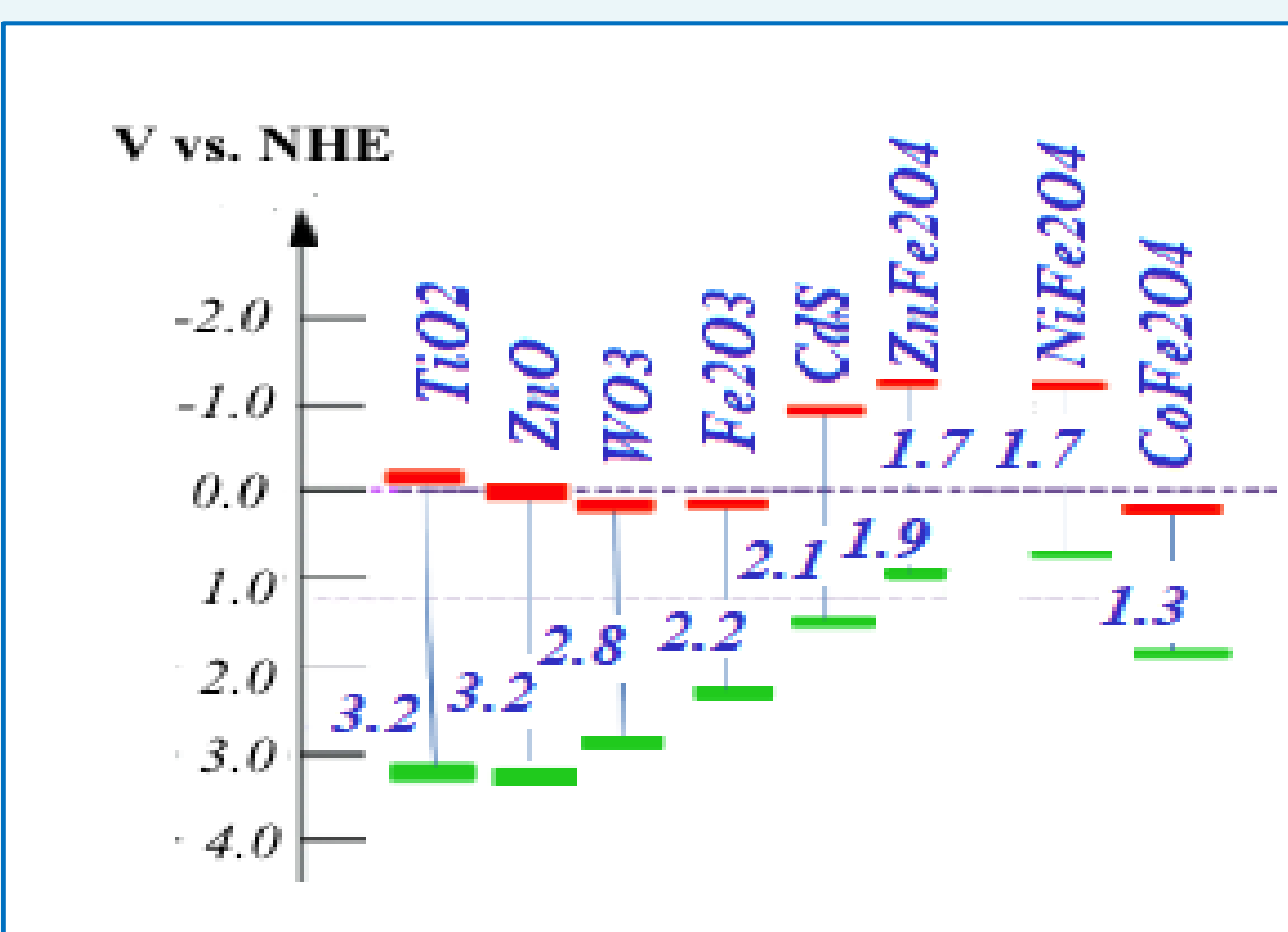
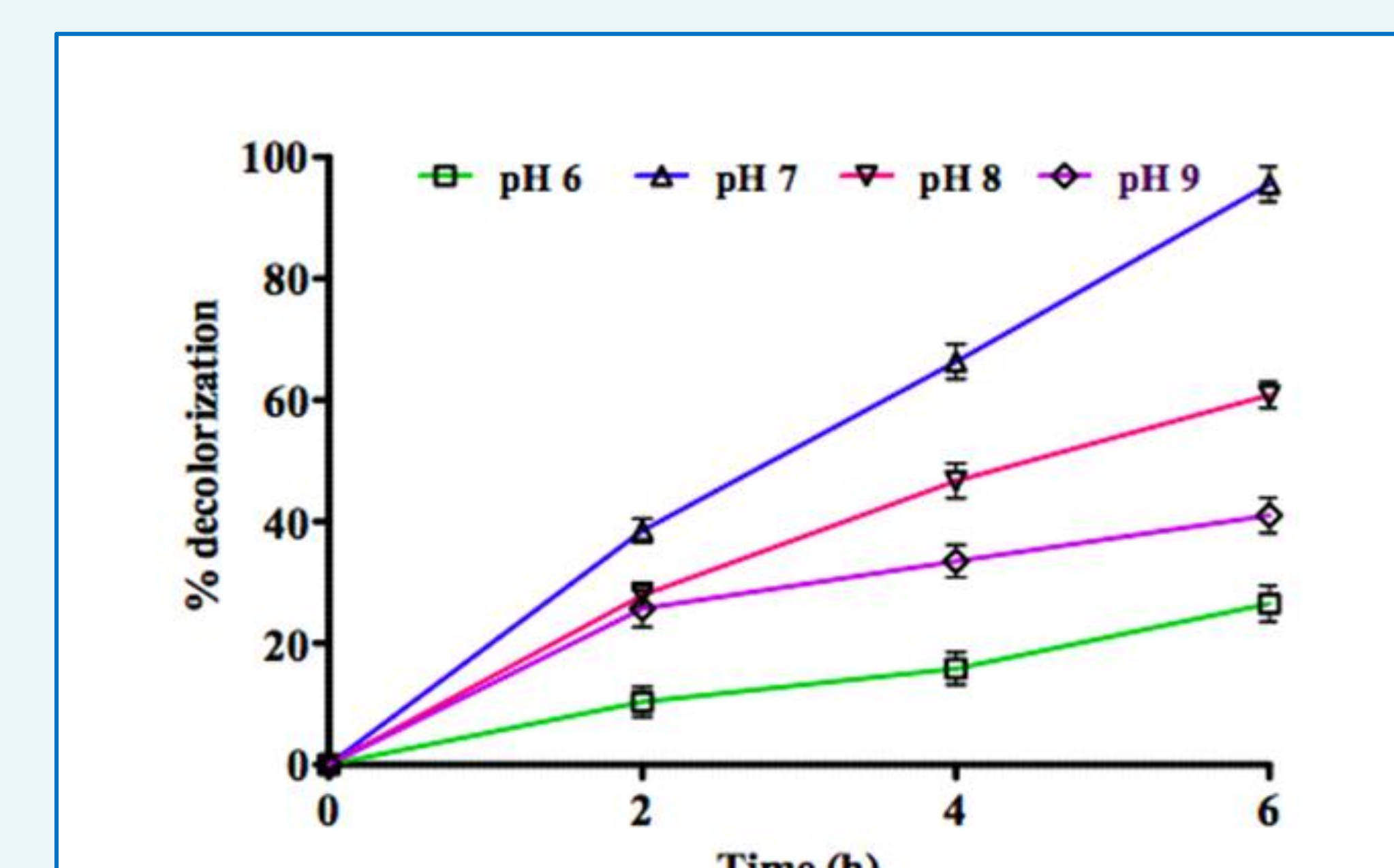
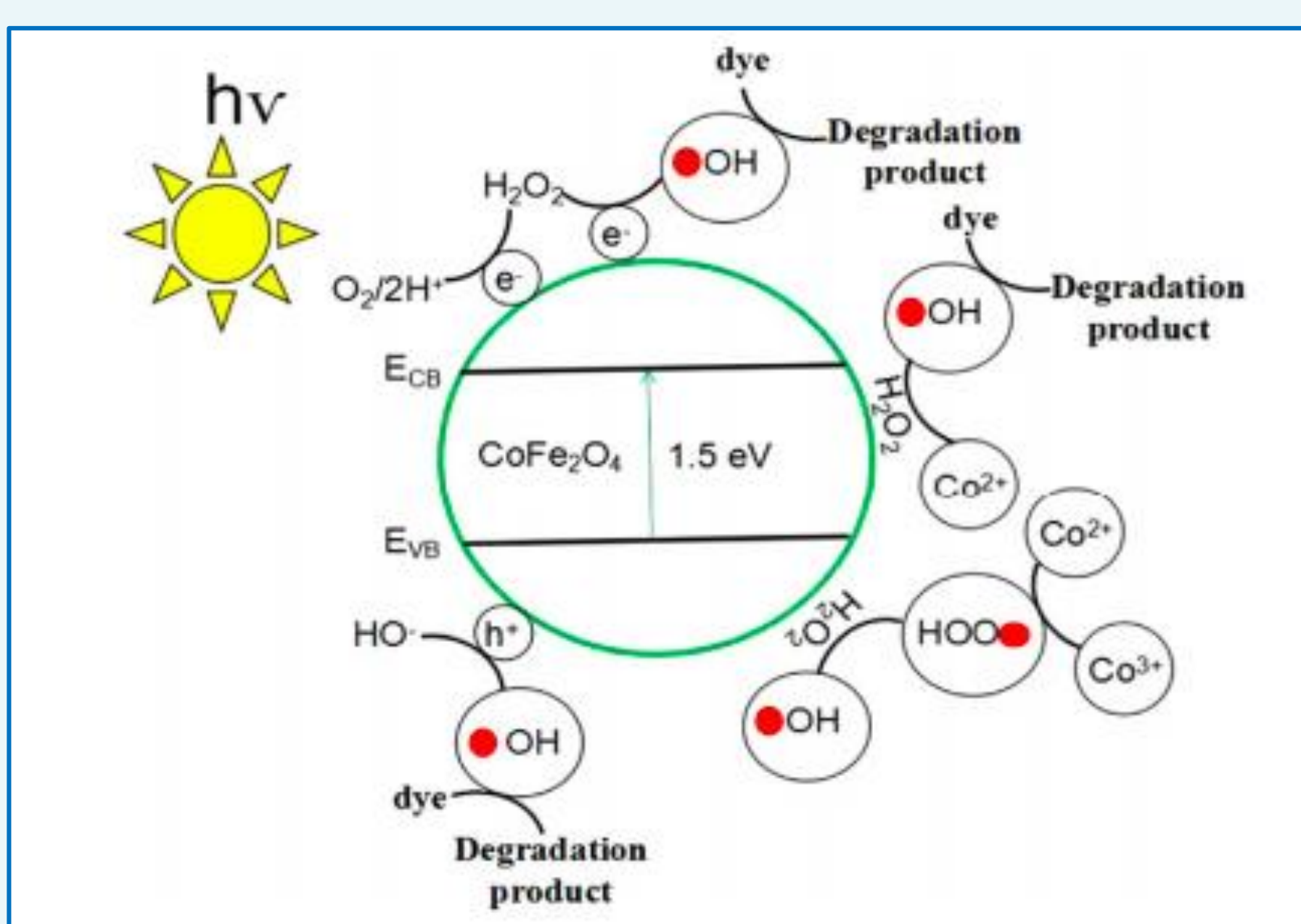
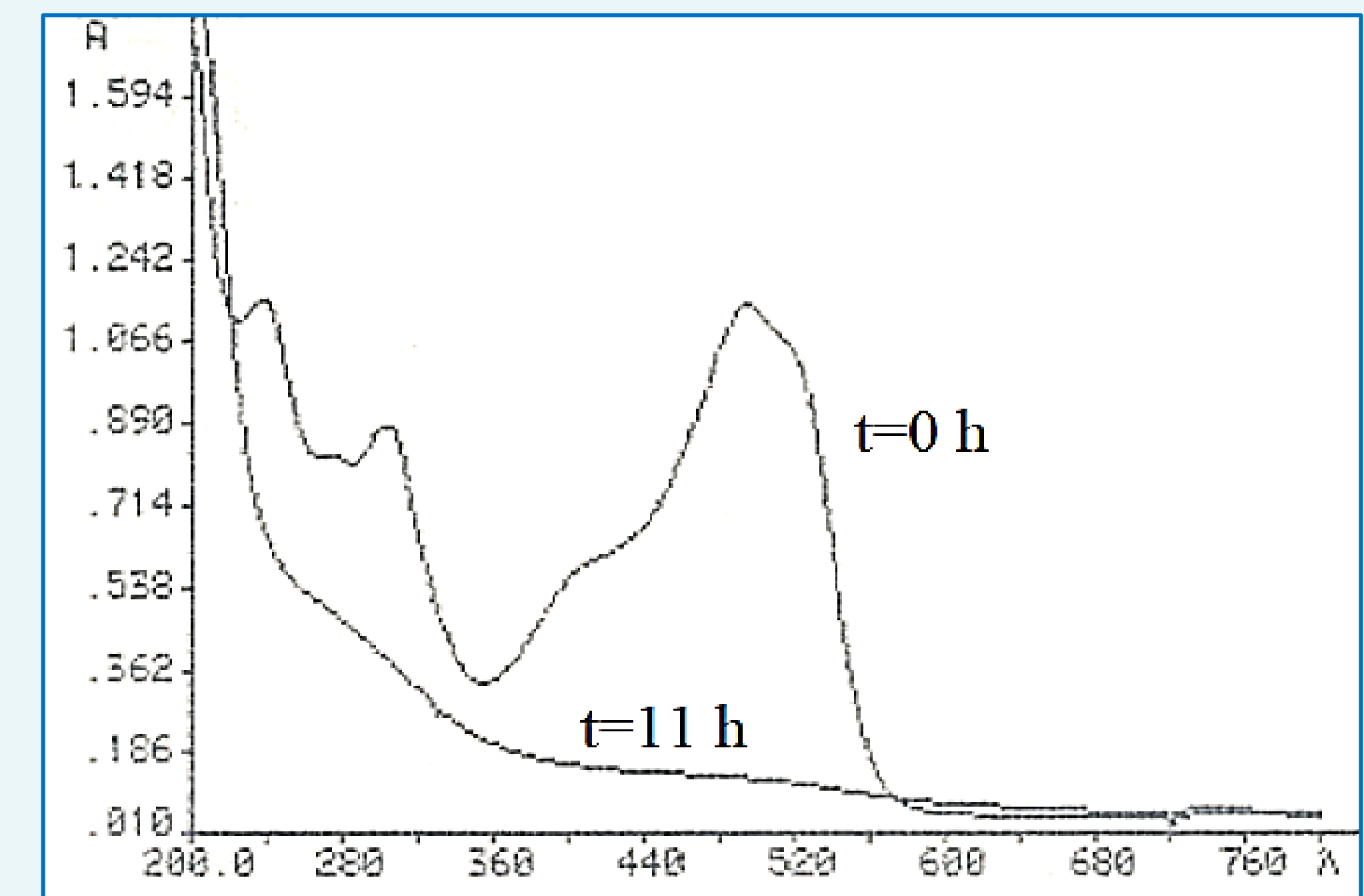
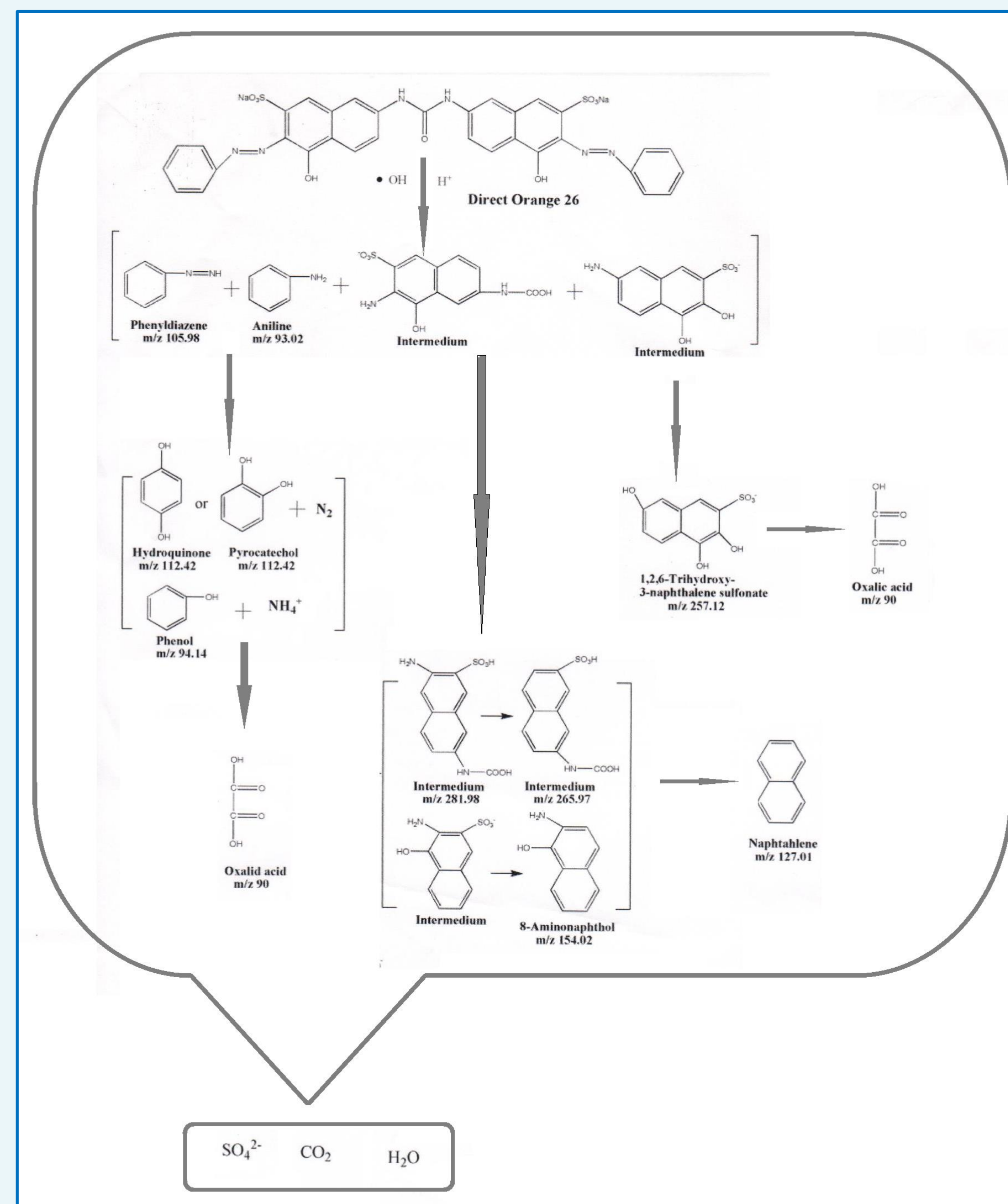
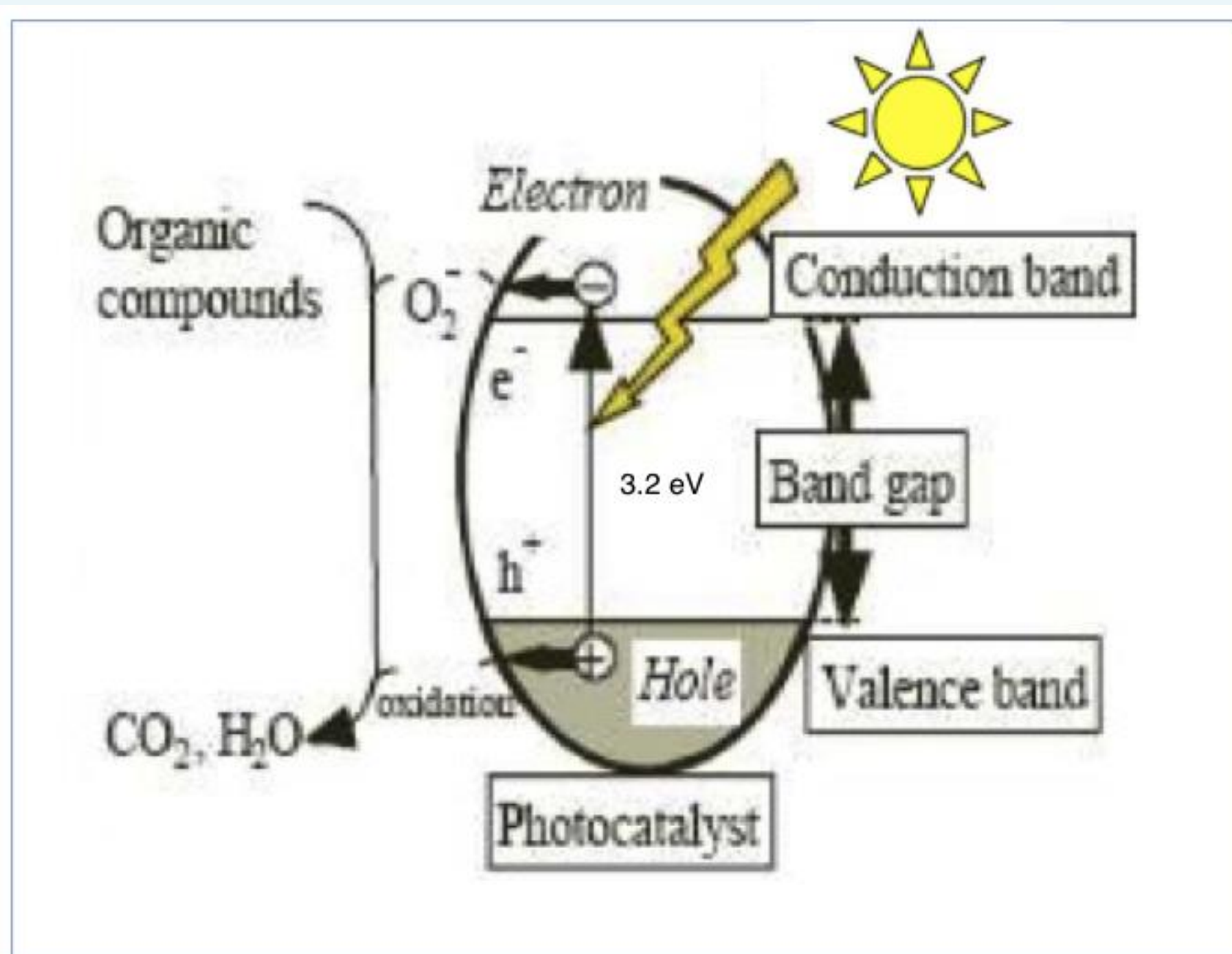
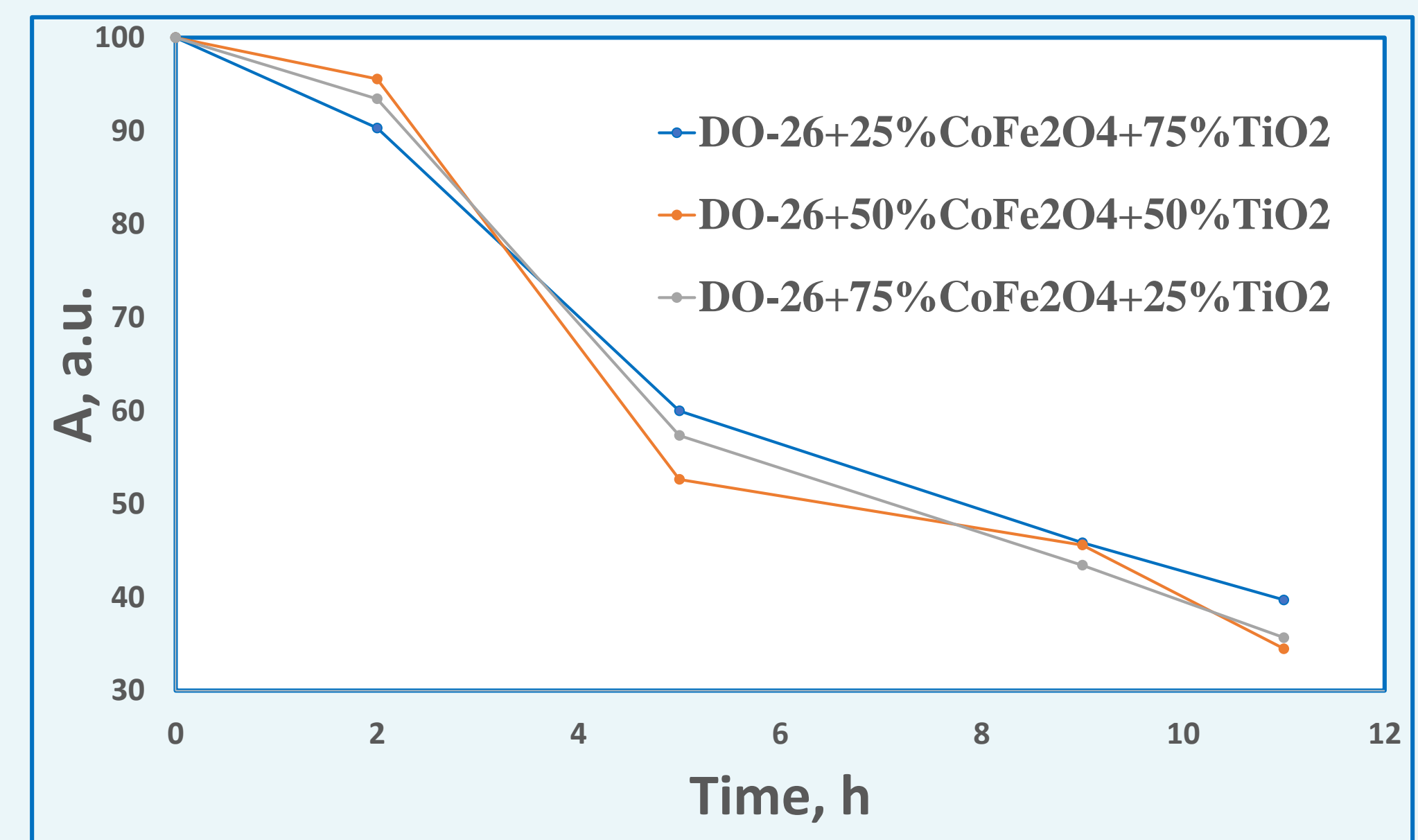
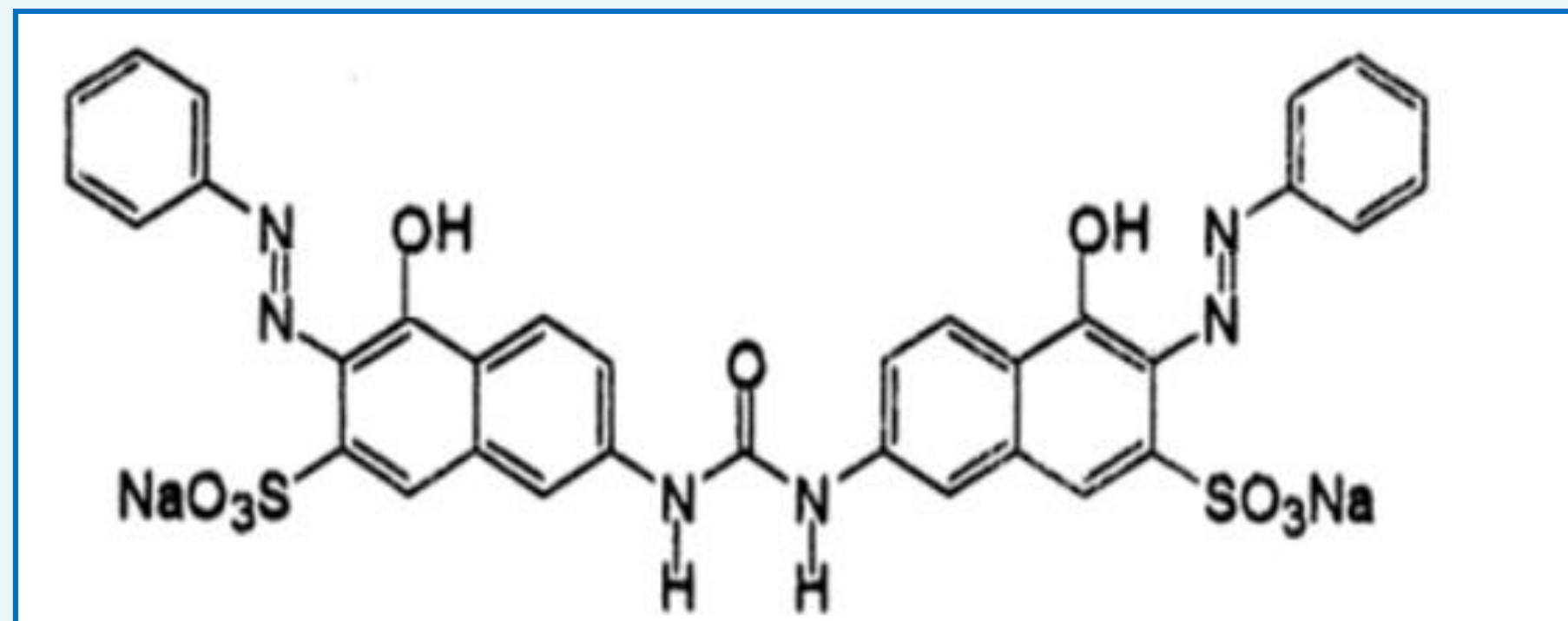
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Abstract

In this paper, photocatalytic degradation of direct orange dye (DO-26) solution was achieved in the presence of CoFe_2O_4 : TiO_2 as catalyst under solar light. The process was of pseudo-first order kinetics. The best conditions of decolorization for this dye was the following: initial dye concentration is 50 mg/L, photocatalytic system CoFe_2O_4 : TiO_2 (50%:50%) = 0.025 g/100 mL and the initial pH of an aqueous solution of dye is 8.



CONCLUSIONS

Experimental results proved that DO-26 photocatalytic degradation is obeying a pseudo-first-order kinetic model, with a photocatalytic degradation efficiency of DO-26 was 65.50 % by using CoFe_2O_4 : TiO_2 = 50%:50% as a good photocatalyst under solar light irradiation after 11 h. Also, a neutral pH and an ordinary temperature of 37 °C are favouring the highest percent of decolorization.

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