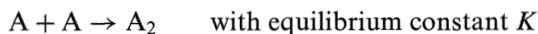


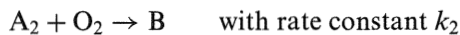
Fig. 13 In the legend M denotes molarity of phosphate buffer. The pH employed was 8.0 and the concentration of drug was 0.2 mg/mL. (Graph constructed from data published by Franchini and Carstensen, 1994.)

Franchini and Carstensen (1994) have studied the auto-oxidation (in the presence of trace quantities of heavy metals) of the oxygen-sensitive compound β -[2-(2-carboxyethyl)-thio-2]-[8-2-phenylacetyl]-benzenepropanoic acid. This is denoted A in the following.

The degradation is an oxidation leading to a sulfoxide and a cinnamic acid. The mechanism that applies to the decomposition is



and



The ensuing rate equation is fourth order in A_{obs} . The authors studied the decomposition at a series of buffer concentrations and temperatures, and some of their data are shown in Fig. 4.13. They showed that the reaction was subject to kinetic salt effect, but that buffer catalysis was absent.

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