

Review of: "Reaction rate view on autocatalysis"

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Autocatalysis is an important topic in chemistry, e.g., environmental chemistry and biochemistry. The study pointed to an insightful exploration on the quantitative descriptions of such autocatalyzed reactions, and clarified the intrinsic role of the involved product, also the catalyst in the course, in the reactions. The methodology is important for kinetic study, and will broaden the application of such ideas for chemistry modeling studies.

As autocatalysis is rather complex, especially involving several products as catalysts, I suggest adding the discussion on chain reactions, which are usually autocatalyzed reactions, e.g., ozone decomposition.

When the reaction mechanism is intricate, accurate mathematical modeling is not feasible. So computer tools such as chemical modeling software are required. The problems are related to the rate constants of elementary reactions involving intermediate catalysts. So I suggest discussing the estimation or evaluation of such unknown reactions.

Ultimately, this study is helpful and valuable for the researchers in the field of chemistry and engineering.