

## COMMENTS

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### **Comment on A Linear Chemical Cycle and Oscillations**

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Suzuki and Morita have in a recent letter<sup>1</sup> proposed the idea of building a chemical oscillator on a cyclic array of first-order

reactions. This idea is interesting, but I wish to point out that the irreversible case as considered by the authors is chemically unrealistic, as it violates the "Principle of Detailed Balance". The principle can be stated in several ways and is described in many textbooks.<sup>2</sup> One of its applications is that it explicitly rules out the possibility of a cyclic irreversible process such as that described by Suzuki and Morita.

### **References and Notes**

- (1) Suzuki, J.; Morita, A. *J. Phys. Chem. A* **2001**, *105*, 7321–7325.
- (2) See for example: Connors, K. A. *Chemical Kinetics. The Study of Reaction Rates in Solution*, VCH-Publishers: Weinheim, 1990; p 125.