

Chemical kinetics by NMR

Nowadays, NMR has been a widely adopted analytical technique for identifying chemical compounds, obtaining information on the geometry and orientation of molecules. And it is also a powerful tool for the study of some chemical equilibrium system by looking at the specific sites of the different species involved in the system, which allows for the study and understanding of the kinetics of a system. The exchange rates between two sites can be evaluated through dynamic nuclear magnetic resonance experiments (DNMR).

In the first part of the paper, the author will introduce several examples of the study of chemical kinetics by NMR, mainly about the exchange of ligands of complexes' in aqueous systems.

In the second part, the author will focus on the NMR change in different temperature, which is also an important application for chemical kinetics.

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