

Special Issue

Isotope Effects in Studies of Chemical and Enzymatic Reactions

Message from the Guest Editor

Isotope effects have proven to be an invaluable tool in studies of the mechanisms of different (bio)chemical and physical phenomena. Initially, only “primary” isotope effects, i.e., those associated with bond-making/bond-breaking events, were amenable to experimental scrutiny. In recent years, analytical methodologies have also permitted studies of much smaller isotope effects that originate from noncovalent interactions, such as hydrogen bonding, electrostatics, and confinement. They are widely used in environmental, material, and biochemical studies. This Special Issue aims to provide information on the recent developments in the application of isotope effects in all (new and traditional) areas of mechanistic studies, as well as on the theoretical methods of their calculations and developments in new techniques of their experimental determination.

Guest Editor

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