



The elucidation of RNA reaction mechanisms ...

... has a wide range of implications, from the origin of life to biotechnology. In their Communication on page 647 ff., K.-Y. Wong, J. A. Piccirilli, M. E. Harris, D. M. York, et al. report a joint theoretical and experimental study on kinetic isotope effects in models of RNA cleavage transesterification. The characteristics of the mechanism and the transition states are distinctly different in the reaction with the native compound relative to two thio-substituted analogues.