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 Building 49, Room 108

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## Tuning photodissociation dynamics: Influence of $\pi$ perturbing effects in thioanisoles

Photo-induced X-CH<sub>3</sub> bond fission in heteroaromatic systems has attracted much interest over the past years because of their potential importance in determining photo-stability. They also provide a test-bed for exploring interactions between an optically bright, bound  $\pi\pi^*$  state and a dark  $\pi\sigma^*$  state that is dissociative along the X-CH<sub>3</sub> coordinate.

In particular, *para*-substituted thioanisoles provide an excellent prototype system for the study of the influence that  $\pi$  perturbing groups have on the geometry in the ground and excited states, and subsequently on the photodissociation dynamics and product branching ratios.

