TIFR Centre for Interdisciplinary Sciences
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Internal Seminar

Structure & Dynamics of Excited States of Molecular Anions

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Negative ions represent a special niche of atomic & molecular physics. Excited anion states are at the core of numerous phenomena observed in nature, ranging from radiation biology to astrochemistry. Hence, it is essential to study the structure and dynamics of these states in order to complete our fundamental understanding of these phenomena. We have carried out systematic studies of the structure and dynamics of excited anion states of few triatomic molecules by recording the momentum images of the fragment anions from dissociative electron attachment using velocity slice imaging technique. All the studied triatomic molecules have oxygen as the terminal atom (OXO (X=O, S, N, Cl)), have C_{2v} geometry and their anions are immensely important in atmospheric chemistry. In this talk, I will discuss the most intriguing features of their dissociation dynamics in detail.

Monday, May 1st 2017

2:00 PM (Tea/Coffee at 1:45 PM)

Seminar Hall, TCIS