

tifr Tata Institute of Fundamental Research

Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500107

Internal Seminar

Ion induced Molecular dynamics T Sai Ram

Inter University Accelerator Centre, New Delhi

The talk comprises a study of molecular dynamics relating to stability, rearrangement, fragmentation of the cationic polyatomic molecules. To this end, both theoretical and experimental methods have been employed. From the abinitio calculations, viewing substitution as a controlling parameter, we have explored whether intact polycationic stability in polyatomic molecules can be accomplished? On the experimental front, ion beams extracted from an electron cyclotron resonance ion source have been utilized to create highly charged polyatomic molecules. Using recoil ion momentum spectroscopy fragmentation dynamics has been explored. Furthermore, using deceleration technique, the highly charged ion beams have be obtained in the eV regime. Our deceleration system is capable of delivering low energy ion beams from 2.5 eV/q to 1 keV/q.

Wednesday, Jan 3rd 2018 02:00 PM (Tea/Coffee at 01:30 PM) Seminar Hall, TIFR-H