

Abstract Submitted  
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**Simulation and Modeling of charge particles transport using SIMION for our Time of Flight Positron Annihilation Induce Auger Electron Spectroscopy systems**<sup>1</sup> PRASAD JOGLEKAR, K. SHASTRY, SUMAN SATYAL, ALEXANDER WEISS<sup>2</sup>, University of Texas at Arlington — Time of flight Positron Annihilation Induced Auger Electron Spectroscopy system, a highly surface selective analytical technique using time of flight of auger electron resulting from the annihilation of core electrons by trapped incident positron in image potential well. We simulated and modeled the trajectories of the charge particles in TOF-PAES using SIMION for the development of new high resolution system at U T Arlington and current TOFPAES system. This poster presents the SIMION simulations results, Time of flight calculations and larmor radius calculations for current system as well as new system.

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