Abstract Submitted for the DAMOP07 Meeting of The American Physical Society

Inner-shell Ionization With Relativistic Corrections By Electron Impact¹ BIDHAN SAHA, Department of Physics, Florida A&M University, FL-32307., M.A.R. PATOARY, M. ALFAZ UDDIN, A.K.F. HAQUE, ARUN K. BASAK, Department of Physics, Rajshahi University, Rajshahi, Bangladesh — A simple method is proposed and tested by evaluating the electron impact inner-shell ionization cross sections of various targets up to ultra high energy region. In this energy region there are not many calculations due to lack of reliable method. In this work we extend the validity of the siBED model [1] in terms of targets and incident energies. The extension of our earlier RQIBED model [2] is also reported here and we examined its findings for the description of the experimental EIICS data of various targets up to E=1000 MeV. Details will be presented at the meeting.

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- [2] M. A. Uddin, A. K. F. Haque, M. S. Mahbub, K. R. Karim, A. K. Basak and B. C. Saha, Phys. Rev. A 71, 032715 (2005).

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