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Internal conversion electron study of excited states in $^{76}As^1$ F.M. PRADOS-ESTÉVEZ, S.W. YATES, Dept. of Physics & Astronomy and Chemistry, University of Kentucky, USA, B.P. CRIDER, Dept. of Physics and Astronomy, University of Kentucky, USA, E.E. PETERS, Dept. Chemistry, University of Kentucky, USA, T. KIBEDI, G.D. DRACOULIS, R.F. LESLIE, A.E. STUCHBERY, Dept. of Nucl. Physics, Australian National University (ANU), Australia, N.M. COOPER, V. WERNER, T. WILLIAMS, Wright Nucl. Structure Lab., Yale University, USA, A.P. TONCHEV, Dept. of Physics (TUNL), Duke University, USA — Experiments on ⁷⁶Ge and ⁷⁶Se are revealing new information about double beta decay and giving better insight into whether or not the neutrino is Majorana particle. New data on intermediate nucleus ⁷⁶As, which is virtually populated by double beta decay modes $(2\nu\beta\beta, 0\nu\beta\beta)$, should lead to important constraints on the theoretical models that allow the determination of the neutrino mass. We carried out the 76 Ge(p,n $\gamma e^{-}){}^{76}$ As reaction at 6.0 MeV at the ANU. Internal conversion coefficients have been obtained, giving better insight into the level structure of ⁷⁶As. First results of the ongoing data analysis will be presented.

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