1105-35-45 **Thinh T Kieu*** (thinh.kieu@ung.edu), Gainesville Campus, 3820 Mundy Mill Rd., Oakwood, GA 30566, and **Luan T. Hoang** (lluan.hoang@ttu.edu), 2500 Broadway & Boston, Lubbock, TX 79409. *Interior estimates for generalized Forchheimer flows for slightly compressible fluids in porous media.*

The generalized Forchheimer flows are studied for slightly compressible fluids in porous media with time-dependent Dirichlet boundary data for the pressure. We derive, for all time, the interior L^∞-estimtes for the presure and its partial derivatives, and the interior L^2-estimates for its Hessian. The De Giorgi and Ladyzhenskaya-Uralsetva iteration techniques are utilized and adapted to the specific structures of the equations for both pressure and its gradient. These are combined with the uniform Gronwall-type bounds in establishing asymptotic estimates when time tends to infinity. (Received August 24, 2014)