1014-Z1-362 **Marian Deaconescu** and **Gary L Walls*** (`gwalls@mail.wtamu.edu`), Dept of MPSE, Box 60787, WTAMU, Canyon, TX 79015. *Finite Groups with Cyclic Autocommutator Subgroups.*

If G is a group and α is an automorphism of $g \in G$, then $[g, \alpha]$ is defined to be $g^{-1}g^{\alpha}$. The autocommutator subgroup of G is defined to be $K(G) = \langle [g, \alpha] : \alpha \in Aut(G), g \in G \rangle$. The structure of a group is strongly influencd by putting conditions on its autocommutator subgroup. In this paper we determine the finite groups in which the autocommutator subgroup is cyclic of prime order. (Received September 12, 2005)