

ABSTRACT. For a ring endomorphism α and an α -derivation δ , we introduce α -compatible ideals which are a generalization of α -rigid ideals and study the connections of the prime radical and the upper nil radical of R with the prime radical and the upper nil radical of the Ore extension $R[x; \alpha, \delta]$ and the skew power series $R[[x; \alpha]]$. As a consequence we obtain a generalization of Hong, Kwak and Rizvi, 2005.