

## On quasi-Armendariz properties on skew polynomial rings

### ABSTRACT

This paper deals with the quasi-Armendariz ring in general setting. We generalize the notions of quasi-Armendariz and  $\sigma$ -skew Armendariz ring to quasi  $\sigma$ -Armendariz and quasi  $\sigma$ -skew Armendariz ring and investigate their properties. The notions of quasi  $\sigma$ -Armendariz and quasi  $\sigma$ -skew Armendariz rings are useful in understanding the relationships between annihilators of rings  $R$  and  $R[x; \sigma]$ .

**Keyword:** Armendariz ring;  $\sigma$ -quasi-Armendariz ring; Quasi  $\sigma$ -skew Armendariz ring