T.K.Dutta in 1982 has introduced the concept of generalized left semi ideals of a ring $R$. He calls a non empty set $S$ of a ring $R$ to be a generalized left semi ideal of $R$ if $S$ is closed under addition and $x^2$'s is in $S$ for any $s \in S$ and $x \in R$. In this paper we define the concept of generalized semi ideals of groupoid rings. Groupoid rings are defined analogous to group rings where groups are replaced by groupoids $G$. In this paper we have taken the groupoids as non-associative semigroups under multiplication and $R$ any commutative ring. We define generalized semi ideals in groupoid rings $RG$. If we take a finite groupoid $G$ over $Z_2 = \{0, 1\}$ we prove

$$S = \left\{ 0, \sum_{g_i \in G} g_i \right\}$$

is a generalized semi ideal of the groupoid ring $Z_2 G$ if and only if $g_i (g_1 + \ldots + g_n) = g_1 + \ldots + g_n$ for all $g \in G$, where $G = \{g_1, \ldots, g_n\}$. Further we prove if $R$ is a ring such that $R^2 = \{0\}$, $G$ any groupoid then in $RG$ the groupoid ring every additively closed subset of $RG$ is a generalized semi ideal of $RG$. Finally we prove a nice characterization theorem for the existence of semi ideals in a groupoid ring $FG$ where $F$ is a field and $G$ a finite groupoid with $G = \{g_1, \ldots, g_n\}$ such that $g_i (g_1 + \ldots + g_n) = g_1 + \ldots + g_n$. 

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