Thus the present work mainly deals with the study of generalized closed sets in bitopological spaces, namely \((\tau_1, \tau_2)^*-\text{regular generalized star closed sets, } (\tau_1, \tau_2)^*-\text{generalized star regular closed sets}\). Further their various important properties of them have been investigated. Moreover, the different verities of functions, namely \((\tau_1, \tau_2)^*-\text{rg}^*\) continuous functions, \((\tau_1, \tau_2)^*-\text{rg}^*\) irresolute maps, \((\tau_1, \tau_2)^*-\text{rg}^*\) homeomorphisms, \((\tau_1, \tau_2)^*-\text{RG}^*O\) compactness, were also introduced and explored. In this direction, \((\tau_1, \tau_2)^*-\text{g}^*r\) continuous functions, \((\tau_1, \tau_2)^*-\text{g}^*r\) irresolute maps, \((\tau_1, \tau_2)^*-\text{g}^*r\) homeomorphisms, \((\tau_1, \tau_2)^*-\text{G}^*\text{RO}\) compactness, were also introduced and explored by using \((\tau_1, \tau_2)^*-\text{g}^*r\) closed sets. Borges (1967) showed that locally closed sets play an important role in the context of simple extensions. So there is scope to study the role of these locally closed sets in the context of simple extensions with the help.

Later, Ganster et al. (1999) showed that generalized closed sets can also be used to characterize certain classes of topological spaces and their variations; for example the class of submaximal spaces and the class of extremally disconnected spaces. Further studies may be undertaken in this direction in respect of new generalized closed sets also. Further as an application, we also have discussed algorithm for the nature and properties of some newly generalized closed sets in the bitopological spaces associated to the digraph in the last chapter. This may be new beginning for further research on the study of generalized closed sets in the bitopological spaces associated to the directed graphs. Hence further research may be undertaken.
towards this direction. That is, one may take further research to find the suitable way of defining the bitopological spaces associated to the digraphs by using bitopological generalized closed sets such that there is a one to one correspondence between them. It may also lead to the new properties of separation axioms on these spaces.