SYNOPSIS

The thesis entitled “Studies towards the total synthesis bioactive macrolides: (-)-exiguolide, (+)-cladospolide C, (+)-aspicilin and (+)-seimatopolide A” has been divided into five chapters.

CHAPTER-I: Chapter I describes a brief introduction to bioactive natural macrolides and their construction (macrolactonization).

CHAPTER-II: Chapter II describes the “Formal total synthesis of (-)-exiguolide”.

CHAPTER-III: Chapter III describes the “Total synthesis of (+)-cladospolide C”.

CHAPTER-IV: Chapter IV describes the “Total synthesis of (+)-aspicilin”.

CHAPTER-V: Chapter V describes the “Total synthesis of (+)-seimatopolide A”.