TABLE OF CONTENTS

Chapter I

A brief review on the carbocyclic compounds and the transformative reactions of carbocyclic compounds

Chapter II

A greener and sustainable approach towards the synthesis of propargylamine using multi-component A^3-coupling reaction

Chapter III

Environmentally begin approach towards C-S cross coupling reaction by organo - copper(II) complex

Chapter IV

Graphene oxide catalysed one pot synthesis of pyrimido[4,5-*b*]quinolinone-2,4-diones and their biological evaluation

Chapter V

One-pot three-component tandem annulation of 4-hydroxycumarine with aldehyde and aromatic amines using Graphene oxide as an efficient catalyst

Chapter VI

Transformative reaction on triterpenoids: Action of hydrogen peroxide in presence of selenium dioxide on the oxime derivative of taraxerone and antimicrobial activity of the isolated compounds