

Preface

Pyrrolo[1,2-a]quinoxalines as important heterocyclic compounds have potential application in pharmaceuticals and synthesis due to their wide range of biological activities and pharmacological effects. This research project focuses on the modification of pyrrolo[1,2-a]quinoxaline as core structure by direct C-H bond functionalization. We expect to obtain a series of efficient approaches for introducing halogen, difluoroacetate, aryl, and arylthio groups on the pyrrolo[1,2-a]quinoxaline, and to reveal the reaction mechanism of C-X bond formation for the direct C-H bond functionalization of pyrrolo[1,2-a]quinoxaline. Our goal is to establish new strategies for easily synthesizing various pyrrolo[1,2-a]quinoxaline derivatives, to extend the application of pyrrolo[1,2-a]quinoxaline in the field of pharmaceutical synthesis, and to further enrich the methodology of organic synthesis. A solid foundation has been laid for the application of synthetic chemistry in the area of biopharmaceuticals.

This book can be used as a reference for workers in the fields of organic transformations and drug synthesis of pyrrolo[1,2-a]quinoxaline, as well as for teachers and students at relevant universities and research institutes.