

## **Table of Contents**

### Preface

### **Chapter 1: Pharmacognosy and Phytochemistry**

#### **Fabrication, Characterization and Antioxidation Activity of Clove Oil- Loaded Microemulsions**

S. Panomsuk and N. Nuntharatanapong 3

#### **Optimization of Formulation Variables Using Central Composite Design to Enhance Andrographolide Release from *Andrographis paniculata* Extract-Chitosan Solid Dispersion**

C. Nontasirichayakul, C. Wiranidchapong, W. Sithithaworn and D. Shuwisitkul 9

### **Chapter 2: Activity, Cytotoxicity and Biocompatibility of Antibiotics**

#### **Biocompatibility of Polymyxin B Sulfate Based on Sodium Deoxycholate Sulfate Formulations with Kidney Cell Lines, Macrophage Cells, and Red Blood Cells**

S. Kaewpaiboon, T. Nakpheng and T. Srichana 19

#### **Antibacterial Activity and *In Vitro* Cytotoxicity of Colistin in Sodium Deoxycholate Sulfate Formulation**

M.A.K. Mudhar Bintang and T. Srichana 25

### **Chapter 3: Drug Delivery Systems**

#### **Optimization of Fluorescein Sodium-Loaded Dissolving Microneedles for Ocular Drug Delivery Using a Computational Design Strategy**

P. Aumklad, P. Suriyaamporn, M. Sukma, P. Akkaramongkolporn, N. Nattapulwat and P. Opanasopit 33

### **Chapter 4: Validation and Quantitative Analysis Methods**

#### **Development of a Validated RP-HPLC Method for Quantification of Four Bioactive Phenolic Compounds from Mulberry Leaf Infusion**

K. Ruttanakorn, A. Detpan, M. Thongkham, D. Mahavijitr, D. Pangpun, A. Thida and M. Satiraphan 41