Contents

Foreword	—	/

A brief professional profile of Prof. Anil Kumar Singh — IX

List of contributors — XIII

Sabir Ahammed and Brindaban C. Ranu

Chapter 1

Synthesis of bio-active heterocycles using ionic liquids — 1

Vaidya Jayathirtha Rao

Chapter 2

Synthesis of oxygen and sulfur heterocycles mediated by ionic liquids —— 25

Radhika Gupta, Yukti Monga, Ashu Gupta and Rakesh Kumar Sharma

Chapter 3

Supported ionic liquids for advanced catalytic applications —— 65

Avtar Singh, Nirmaljeet Kaur, Rohini, Anupama Parmar, Payal Malik and Harish Kumar Chopra

Chapter 4

Recent updates on chiral ionic liquid-mediated asymmetric organic synthesis —— 87

Yadavalli Venkata Durga Nageswar, Katla Ramesh and Katla Rakhi

Chapter 5

Deep eutectic solvent-mediated organic transformations — 107

Simranpreet K. Wahan, Gaurav Bhargava and Pooja A. Chawla

Chapter 6

Role of crown ethers as mediator in various chemical reactions —— 145

Arruje Hameed, Razia Noreen, Muhammad Sami Ullah Khan Niazi, Shaheera Batool, Anwar Ahmad, Tanzeela Khalid and Tahir Farooq

Chapter 7

Fluorinated alcohol-assisted preparation of functional and biologically active compounds —— 163

XII — Contents

Bijeta Mitra and Pranab Ghosh

Chapter 8

PEG-assisted organic transformation —— 195

Gyan Chandra Pariyar, Bijeta Mitra and Pranab Ghosh Chapter 9
Glycerol-mediated organic transformation —— 211

Index —— 231