## Contents

**Synthesis of Heterocycles Through Classical Ugi and Passerini Reactions Followed by Secondary Transformations Involving One or Two Additional Functional Groups** .................................. 1  
Luca Banfi, Andrea Basso, and Renata Riva

**Aminoazoles as Key Reagents in Multicomponent Heterocyclizations** ............................................................. 41  
Valentin A. Chebanov, Katerina A. Gura, and Sergey M. Desenko

**The Piperazine Space in Isocyanide-based MCR Chemistry** ............... 85  
Yijun Huang, Kareem Khoury, and Alexander Dömling

**α-Acidic Isocyanides in Multicomponent Chemistry** ......................... 129  
Niels Elders, Eelco Ruijter, Valentine G. Nenajdenko, and Romano V.A. Orru

**Microreactor Technology as an Efficient Tool for Multicomponent Reactions** .................................................. 161  
Ana Cukalovic, Jean-Christophe M.R. Monbaliu, and Christian V. Stevens

**Cyclic Peptidomimetics and Pseudopeptides from Multicomponent Reactions** .................................................. 199  
Ludger A. Wessjohann, Cristiano R.B. Rhoden, Daniel G. Rivera, and Otilie Eichler Vercillo

**β-Diketo Building Blocks for MCRs-based Syntheses of Heterocycles** ... 227  
Maria del Mar Sanchez Duque, Christophe Allais, Nicolas Isambert, Thierry Constantieux, and Jean Rodriguez

**Index** ............................................................................... 279