Synthesis of bound-type -heterocycles via Groebke-Blackburn-Bienaymé

As a part of our ongoing program to develop short and versatile Groebke-Blackburn-Bienaymé based methodologies towards novel bound-type bis-heterocycles, we are here summarizing our recent published results. Thus, in 2015 we synthesized the series of 18 2-chromone-imidazo[1,2-a]pyridines (a) in 70-93% yield via acid-catalyzed GBBR. Then, in 2016, we synthesized the series of 11 imidazo[2,1-b]thiazoles (b) and 12 benzo[d]fused analogues (c) bound in C-2 position with julolidine, 2-chloroquinoline and chromone heterocyclic frameworks in 82-96% and 72-97% yields respectively, via an acid-free version of the GBBR. As seen, the products herein described may find application in MedChem because they have two heterocyclic frameworks present in many bioactive products and drugs.

Biography

Gámez-Montaño Rocío has got her PhD under guidance of Professor Raymundo Cruz-Almanza in UNAM, CDMX, México. After a Post-doctoral fellow under guidance of Professor Jieping Zhu at Gif-Sur-Yvette, France, she was incorporated to University of Guanajuato, México, where she is actually full-time Research-Professor (Class B). Her scientific interest includes design and development of efficient synthesis of heterocycles and poly-heterocycles via MCR, in vitro and in silico studies of biological properties, applications in optics, as well as study of reaction mechanisms.

rociogm@ugto.mx