Synthesis of novel tetrazol-chromones via Ugi-azide reaction and in vitro studies for their antibiotic properties

Rocio Gámez-Montaño  
Universidad de Guanajuato, Mexico

As a part of our ongoing program to develop short and versatile Ugi-azide based methods toward poly-heterocycles containing the 1,5-disubstituted tetrazole moiety, here I show my recent results about in vitro studies of eighteen newly synthesized tetrazol-chromones against series of pathogenic parasites (Entamoeba histolytica, Giardia lamblia, and Trochomonas vaginalis), pathogenic bacteria (Pseudomonas aeruginosa, and Staphylococcus aureus), and human fungal pathogens (Sporothrixschenckii, Candida albicans, and Candida tropicalis). Moderate to good values were found in all cases, however, the best activity was observed in iodine-containing analogues against G. lamblia and C. albicans. These results have been published recently

Biography

Rocio Gámez-Montaño is currently employed at Departamento de Ciencias Naturales y Exactas, Universidad de Guanajuato, Mexico. She was Associate Professor Investigator B during the year 2002-2003 and Associate Professor Investigator C during 2003-2009. She was Chair Professor Investigator A during the year 2009-2015 and Chair Professor Investigator B during the year 2015-present. She completed her Post Doctoral Fellow during (2001-2002) from Institute of Chemistry of Natural Substances, France with Dr. Jieping Zhu. She completed her PhD in Organic Chemistry in the year 2001 from National Autonomous University of Mexico (UNAM).

rociogm@ugtomx.onmicrosoft.com