



ELSEVIER

Contents lists available at ScienceDirect

Ultrasonics Sonochemistry

journal homepage: www.elsevier.com/locate/ultsonch



Ultrasound assisted one-pot, three-components synthesis of pyrimido[1,2-a]benzimidazoles and pyrazolo[3,4-b]pyridines: A new access *via* phenylsulfone synthon

Tamer S. Saleh^{a,b,*}, Taha M.A. Eldebss^c, Hassan M. Albishri^b

^a Green Chemistry Department, National Research Centre, Dokki, Cairo 12622, Egypt

^b Chemistry Department, Faculty of Science, King AbdulAziz University, Jeddah 21589, Saudi Arabia

^c Chemistry Department, Faculty of Science, Cairo University, Giza 12613, Egypt

ARTICLE INFO

Article history:

Received 31 October 2010

Received in revised form 20 April 2011

Accepted 4 May 2011

Available online 8 May 2011

Keywords:

2-aminobenzimidazole

5-aminopyrazoles

Multicomponent reactions (MCRs)

Pyrimido[1,2-a]benzimidazoles

Pyrazolo[3,4-b]pyridines

Ultrasound irradiation

ABSTRACT

A simple, facile, efficient and three-components procedure for the synthesis of pyrimido[1,2-a]benzimidazoles and pyrazolo[3,4-b]pyridines utilizing phenylsulfone synthon, under ultrasonic irradiation was developed.

© 2011 Elsevier B.V. All rights reserved.