

**Facile syntheses of Bi-1,2,4-triazoles via hydrazonyl halides.** Shawali, Ahmad S.; Farag, Ahmad M.; Albar, Hassan A.; Dawood, Kamal M. *Fac. Sci., Univ. Cairo, Giza, Egypt. Tetrahedron* (1993), 49(13), 2761-6. CODEN: TETRAB ISSN: 0040-4020. Journal written in English. CAN 119:117184 AN 1993:517184 CAPLUS (Copyright 2004 ACS on SciFinder (R))

### Abstract

The reaction of  $\text{trans-Cl(RNHN:)}\text{CC}(\text{:NNHR})\text{Cl}$  ( $\text{R} = \text{Ph}, 4\text{-ClC}_6\text{H}_4$ ) with  $\text{NaN}_3$  afforded the corresponding diazides which, upon redn. with  $\text{LiAlH}_4$ , gave the corresponding diamines. Cyclocondensation of the diamines with  $\text{R}_1\text{COCl}$  ( $\text{R}_1 = \text{Ph}, 4\text{-XC}_6\text{H}_4, 3\text{-O}_2\text{NC}_6\text{H}_4, \text{ClCH}_2$ ;  $\text{X} = \text{Me}, \text{Cl}$ ) gave the bi-1,2,4-triazoles I. I were alternatively prepd. by the reaction of the diazides with  $\text{PPh}_3$  to give phosphinimines, which were cyclocondensed with  $\text{R}_1\text{COCl}$ .

