

# Stereoselective Synthesis and Single Crystal X-Ray Structures of Some Sterically Congested Electron-poor *N*-Vinyl Pyrazole Derivatives

Nader Noshiranzadeh<sup>a</sup>, Ali Ramazani<sup>a</sup>, Amir Tofangchi Mahyari<sup>a</sup>, Katarzyna Ślepokura<sup>b</sup>, and Tadeusz Lis<sup>b</sup>

<sup>a</sup> Department of Chemistry, Zanjan University, P O Box 45195-313, Zanjan, Iran

<sup>b</sup> Faculty of Chemistry, University of Wrocław, 14 Joliot-Curie St., 50-383 Wrocław, Poland

Reprint requests to Dr. A. Ramazani. Fax: +98 241 5283100. E-mail: aliramazani@yahoo.com

*Z. Naturforsch.* **2008**, *63b*, 65 – 70; received August 5, 2007

A one-pot synthesis of sterically congested electron-poor *N*-vinyl pyrazoles in fairly good yields by the reaction of ethyl 3-phenyl-2-propynoate, pyrazoles and triphenylphosphine is reported. The structures of these compounds were confirmed by IR, <sup>1</sup>H, and <sup>13</sup>C NMR spectroscopy, and single crystal X-ray structure determination. The structural analysis of the products indicated that the reaction is completely regio- and stereoselective.

*Key words:* 3-Phenyl-2-propynoate, Vinyltriphenylphosphonium Salts, Crystal Structure, Phosphorus Ylide, *N*-Vinyl Pyrazoles