(2) Cycloaddition of diphenylnitrilimine to coumarins. The synthesis of **3a,9b-dihydro-4-oxo-1H-benzopyrano[4,3-c]pyrazole derivatives.** Shawali, Ahmad S.; Elanadouli, Bahgat E.; Albar, Hassan A.. Fac. Sci., King Abdulaziz Univ., Jeddah, Saudi Arabia. Tetrahedron (**1985**), 41(10), 1877-84. CODEN: TETRAB ISSN: 0040-4020. Journal written in English. CAN 104:88477 AN 1986:88477 CAPLUS (Copyright 2004 ACS on SciFinder (R))

## Abstract

The cycloaddn. of PhCCI:NNHPh (I) to a series of coumarins in C6H6 and Et3N gave benzopyrano[4,3-c]pyrazoles II (R = H, Ac, Bz, EtO2C, R1 = H; R = H, R1 = 7-OMe, 8-Me). In EtONa-EtOH, the reaction between coumarin and I afforded no cycloadducts, but yielded o-(EtO2CCH:CH)C6H4OCPh:NNHPh. The regiochem. of the cycloaddn. was rationalized with frontier MO theory.

