

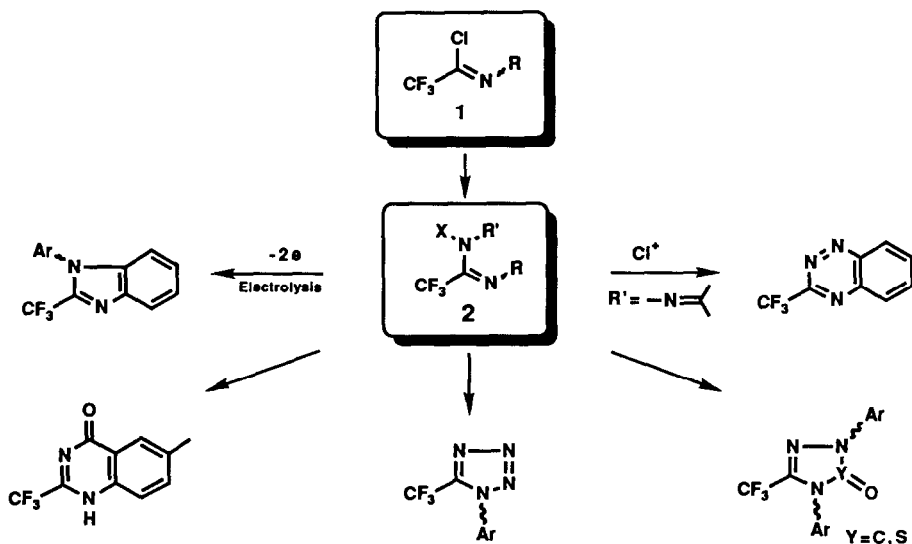
2,2,2-TRIFLUOROACETAMIDINS AS NEW TRIFLUOROMETHYL BUILDING BLOCKS FOR FLUORINATED NITROGEN HETEROCYCLES

Kenji Uneyama, Koji Sugimoto, Osamu Morimoto, Fumio Yamashita, and Masashi Kobayashi

Department of Applied Chemistry, Faculty of Engineering, Okayama University, Okayama 700, Japan

2,2,2-Trifluoroacetimidoyl chlorides **1** are much more stable than the corresponding nonfluorinated chlorides because of the deactivation for hydrolysis by the strong electron-withdrawing fluorine atom and thus useful as synthetic blocks. They react smoothly with nucleophiles such as Grignard reagents, active methylene compounds, and primary amines.

2,2,2-Trifluoroacetamidines **2** are promising precursors for CF₃-containing heterocycles as shown in the scheme. Preparations and reactions of **2** are discussed in details.



K. Uneyama, O. Morimoto, and F. Yamashita, *Tetrahedron Lett.*, **30**, 4821 (1989)

K. Uneyama, F. Yamashita, K. Sugimoto, and O. Morimoto, *Tetrahedron Lett.*, **31**, 2717 (1990)