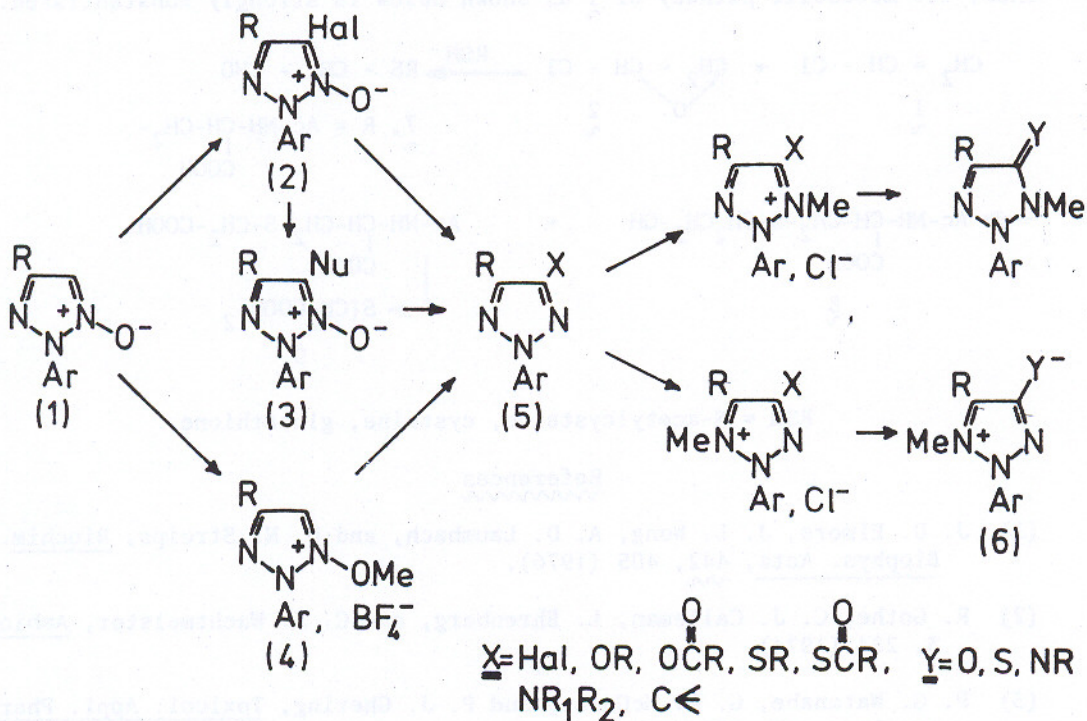


TRIAZOLE N-OXIDES AND N-METHOXYTRIAZOLIUM SALTS AS USEFUL INTERMEDIATES BY PREPARATION OF SUBSTITUTED 1,2,3-TRIAZOLES

Mikael Begtrup

Department of Organic Chemistry, The Technical University of Denmark, DK-2800 Lyngby, Denmark

1,2,3-Triazole N-oxides (1) are readily halogenated. The products (2) react with strong nucleophiles to give (3). The N-alkoxytriazaolium salts (4) under proper conditions react also with weak nucleophiles, even fluoride ions. Replacements of α -hydrogen is the main reaction and a variety of selectively



substituted halogen, oxygen, nitrogen, sulfur, and carbon substituted triazoles becomes accessible. After N-alkylation, these can be transformed further to triazolones, thiones, and imines, or probably to the new mesoionic species (6). In some cases the phenyl group of (5) can be removed by nitration and subsequent methanolysis producing monosubstituted triazoles.

