

Anodic Fluorination of 4-Methoxy-1-naphthol and 4-Nitroanisole Using $\text{Et}_3\text{N}\cdot 5\text{HF}$ in Mixed Nonaqueous Solvent

A. Saraswat, L.K. Sharma, S. Singh, I.R. Siddiqui, and R.K.P. Singh

*Electrochemical Laboratory of Green Synthesis, Department of Chemistry, University of Allahabad, Allahabad, 211002 India
e-mail: rkp.singh@rediffmail.com*

Received April 30, 2012

Abstract—Anodic fluorination of 4-methoxy-1-naphthol and 4-nitroanisole has been investigated in a mixed nonaqueous solvent using $\text{Et}_3\text{N}\cdot 5\text{HF}$ as supporting electrolyte as well as fluorine source. In order to avoid the formation of polymer on the anode, pulse electrolysis was carried out without exchanging the electrodes. The proposed procedure ensures excellent yield at room temperature, shortest reaction time, and easy work-up which provide additional advantages in the context of green chemistry. Experimental parameters of the reaction are discussed.

DOI: 10.1134/S107042801309008X