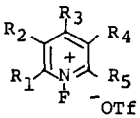
O_{43}

USE AND APPLICATION OF NEW FLUORINATING AGENTS, *N*-FLUOROPYRIDINIUM TRIFLATE AND ITS DERIVATIVES

Kyoichi Tomita† *, Kosuke Kawada† and Teruo Umemoto
Sagami Chemical Research Center, Nishi-Ohnuma 4-4-1, Sagamihara, Kanagawa, 229 (Japan)

Mild and selective introduction of fluorine into organic compounds has become of wide interest because of the attractive effects of fluorine on the physical, chemical, or biochemical properties. Most of the methods now used to fluorinate organic compounds employ extremely reactive, explosive and toxic reagents or less reactive reagents, both of which limit their utilization.

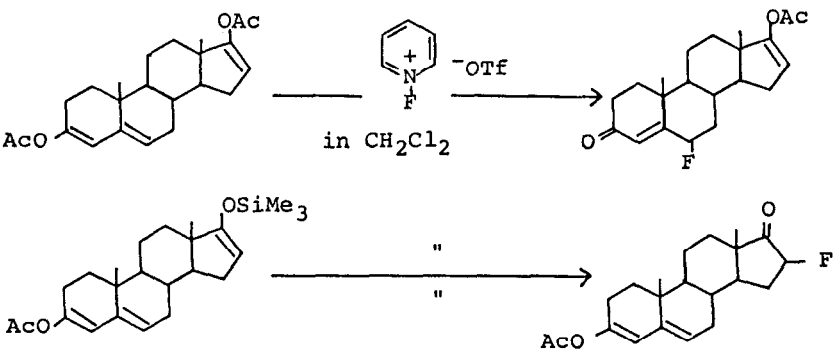
We have developed a series of N-fluoropyridinium triflates fixing F^+ on the pyridine nitrogen atom as very effective fluorinating reagents.



Our reagents have wide applications because the fluorinating ability can be remarkably changed by introducing electron-withdrawing or -donating substituents on the pyridine nuclei according to the purpose, in addition to easy handling and preparation of the reagents.

We will present their use and application.

(Examples)



† Researchers from Onoda Cement Company, Japan.