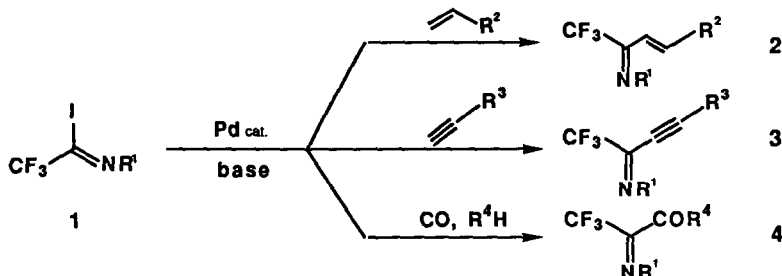


# PALLADIUM-CATALYZED COUPLINGS WITH OLEFINS AND 1-ALKYNES AND CARBONYLATION OF TRIFLUOROACETIMIDOYL IODIDES

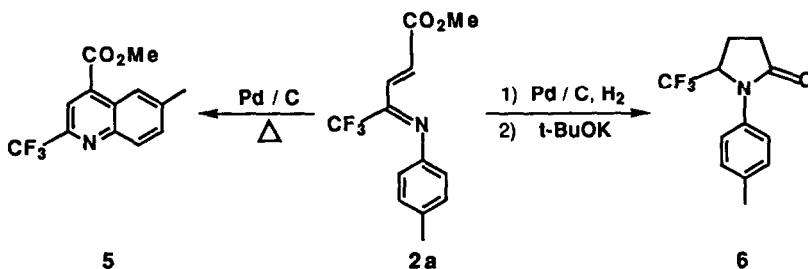
Kenji Uneyama and Hisayuki Watanabe

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

Palladium-catalyzed couplings with olefins and 1-alkynes <sup>1)</sup> and carbonylation of trifluoroacetimidoyl iodides (1) proceed to give trifluoromethylated  $\alpha$ ,  $\beta$ -unsaturated imines (2, 3) and  $\alpha$ -carbonyl imines (4).



These products (2, 3, 4) are fully characterized and are potential precursors of nitrogen heterocycles and amino acids derivatives bearing  $\text{CF}_3$ -group. For examples product 2a is transformed into 5 or 6 as described below.



Scopes and limitations of these palladium-catalyzed reactions would be described.

1 K. Uneyama and H. Watanabe, *Tetrahedron Lett.*, (in press).