



Université de Montréal, Montréal, QC, Canada

THIRD INTERNATIONAL SYMPOSIUM
ON C-H ACTIVATION

May 30 – June 2, 2016

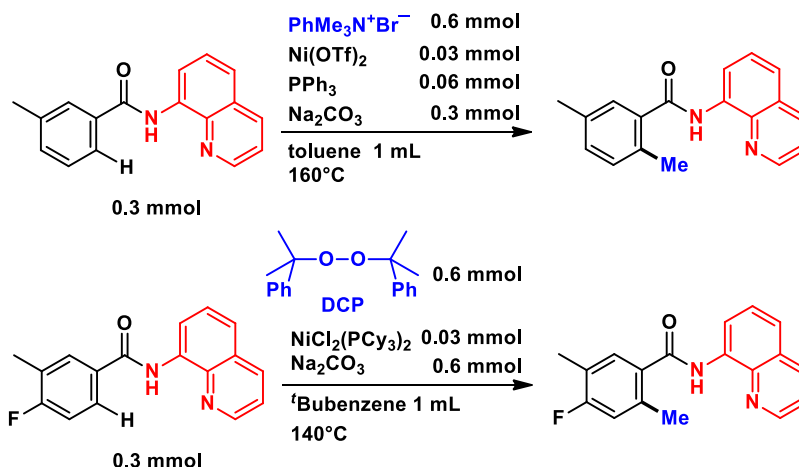
OR05 – Nickel(II)-Catalyzed Methylation of C–H Bonds:
Phenyltrimethylammonium Salts and Dicumyl Peroxide as Methylating Reagents

Naoto Chatani*

Department of Applied Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565-0871, Japan

E-mail: chatani@chem.eng.osaka-u.ac.jp

Various C–C bond formation reactions, such as arylation, alkylation, benzylation, allylation, and carbonylation with the cleavage of C–H bonds have been reported to date. However, the methylation of C–H bonds continues to remain an undeveloped area, compared with the other type of C–C bond formation reactions.¹ Although the methyl group is one of the simplest functional groups, the introduction of a methyl group at a C–H bond can have a significant effect on the biological and physical properties of a drug, an effect that is known as a magic methyl effect.² New types of Ni-catalyzed methylation of C–H bonds will be discussed.^{3,4}



References

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4. Kubo, T.; Chatani, N. *Org. Lett.* **2016**, 18, 1698.