

801300715650 ORGANOMETALİK KİMYA II DERS NOTU

Prof. Dr. Tahir Daşkapan
Ankara Üniversitesi Fen Fakültesi
Kimya Bölümü

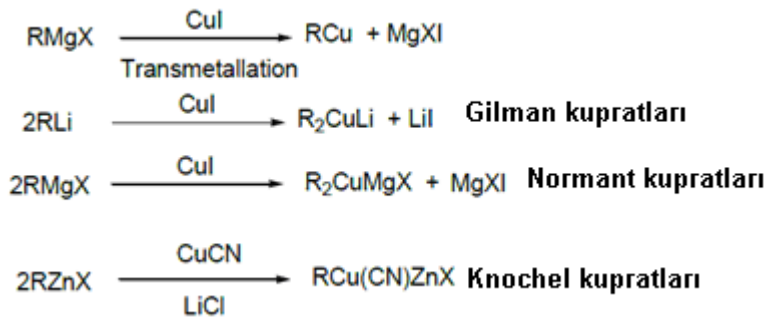
6. ve 7. HAFTA

ORGANOBAKIR REAKTİFLERİ

Organobakır reaktifleri aşağıdaki gibi sınıflandırılabilirler:

- Mono-organobakırlar, RCu, RCu.MX (M: Li, MgBr...)
- Yamamoto Reaktifleri: RCu.BF₃.OEt₂
- Homokupratlar : R₂CuM.MX (M: Li (Gilman kupratları) , MgX (Normant kupratları), ZnX (Knochel kupratları)).
- Heterokupratlar (Karışık kupratlar): R₂Cu(Z)M (M: Li, MgX, ZnX), (Z:R', CN, SCN, PhS, *t*-BuO..).
- Yüksek mertebeden siyanokupratlar (Lipshutz kupratları):R₂Cu(CN)M₂ (M: Li, MgX, ZnX)
- Yüksek mertebeden homokupratlar: R₃CuM₂ (M: Li, MgX, ZnX), R₃Cu₂Li, R₃Cu₃Li₂

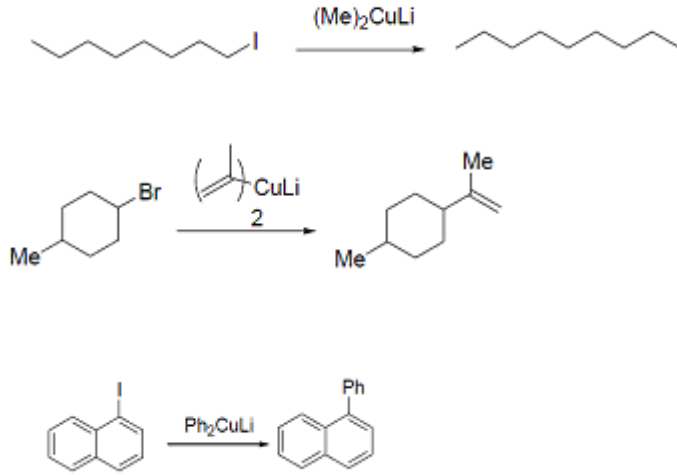
Organobakır reaktifleri, organomagnezyum, organolityum veya organo çinko reaktiflerinin bakır (I) tuzları ile transmetallenmesiyle hazırlanırlar.



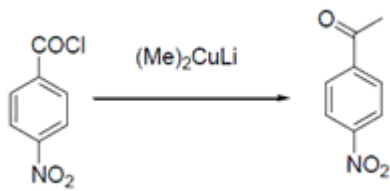
KUPRATLARLA REAKSİYONLAR

Dialkilkupratlarla (Gilman Reaktifi)

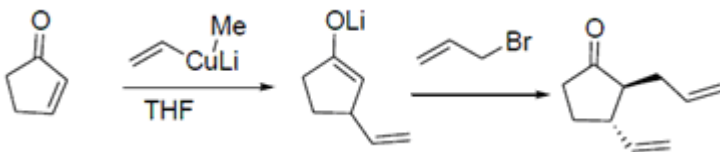
1. Eşleşme Reaksiyonları



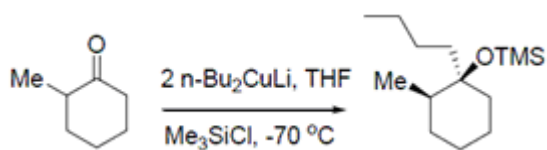
2. Asit Klorürleri ile Reaksiyonlar



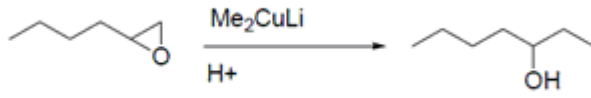
3. Konjüge Katılma



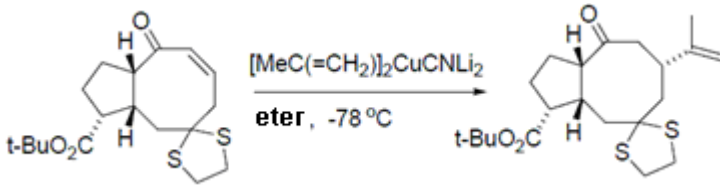
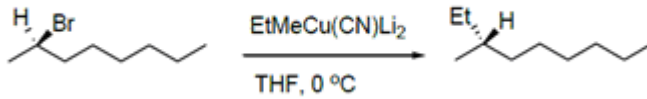
4. Aldehit ve Ketonlarla Reaksiyonları



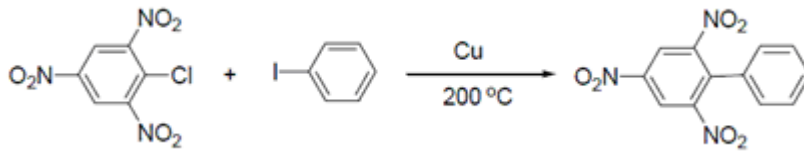
5. Epoksitlerle Reaksiyonları



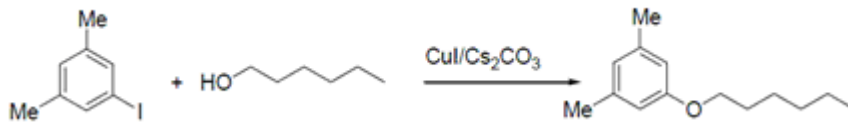
Yüksek Mertebeden Karışık Kupratlar İle Reaksiyonlar



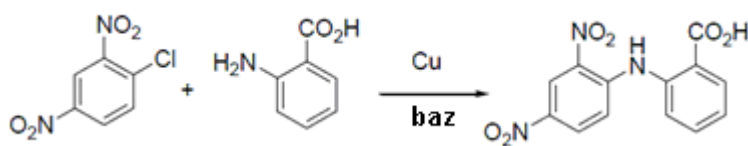
Ullman Reaksiyonu



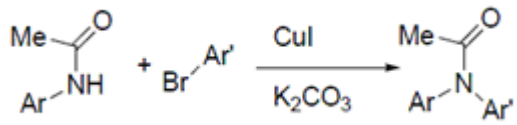
Biaril Eter Sentezi



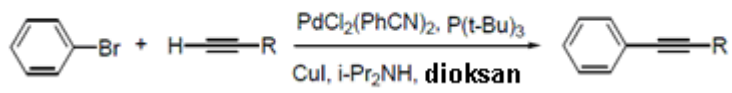
Aminasyon



Goldberg Reaksiyonu



Sonogashira Eşleşmesi



Castro-Stephens eşleşmesi

