

Organometallics Chemistry

(CHEM-7149)

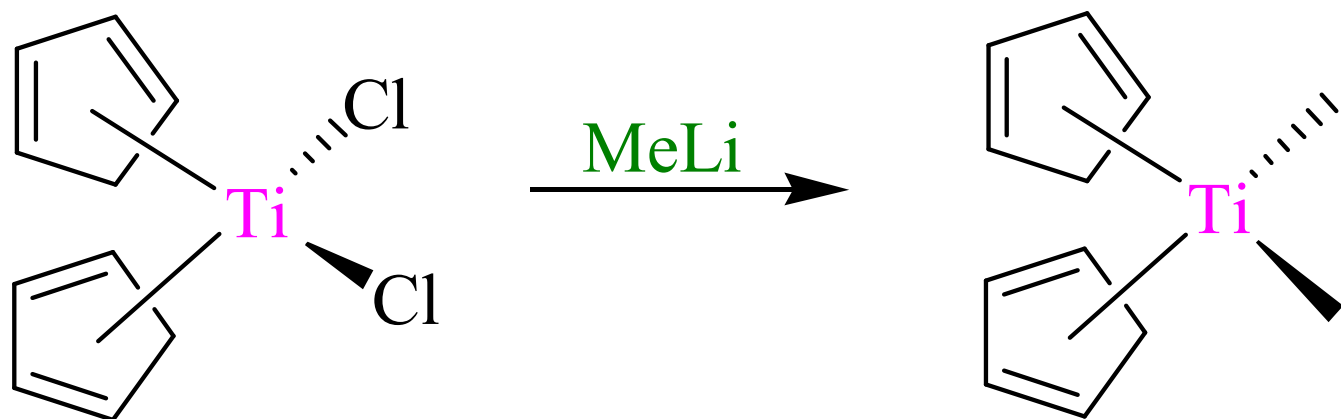
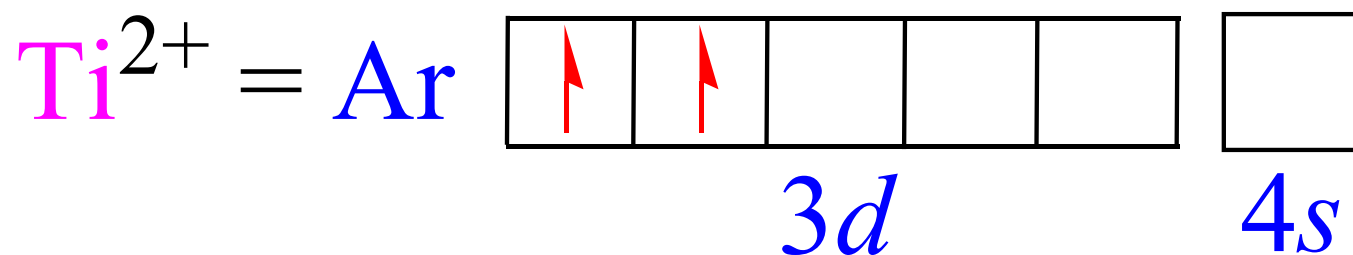
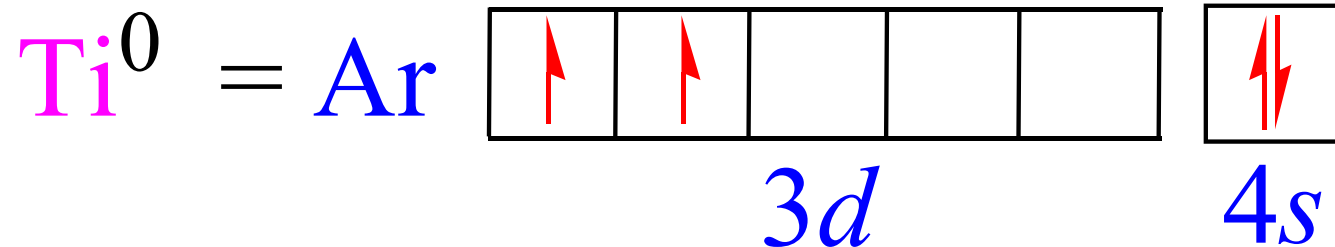
Online Lectures (OrganoTi)

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(*Professor of Chemistry*)
Institute of Chemistry
University of Sargodha, Sargodha

Periodic Table

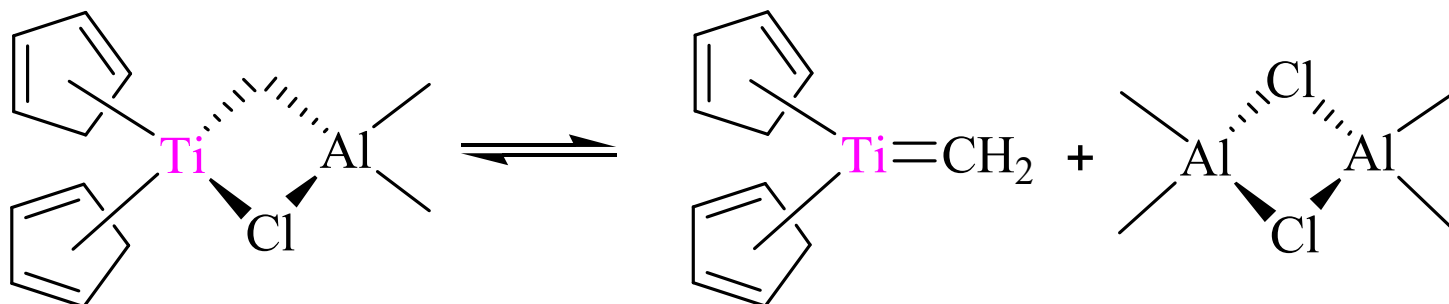
<i>s</i> -Block metals												<i>p</i> -Block Elements	
Group-I	Group-II											XIII	XIV
H												B	C
Li	Be	<i>d</i> -Block metals										Al	Si
Na	Mg	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Ga	Ge
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	In	Sn
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	Tl	Pb
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg		
Fr	Ra												

Reagent

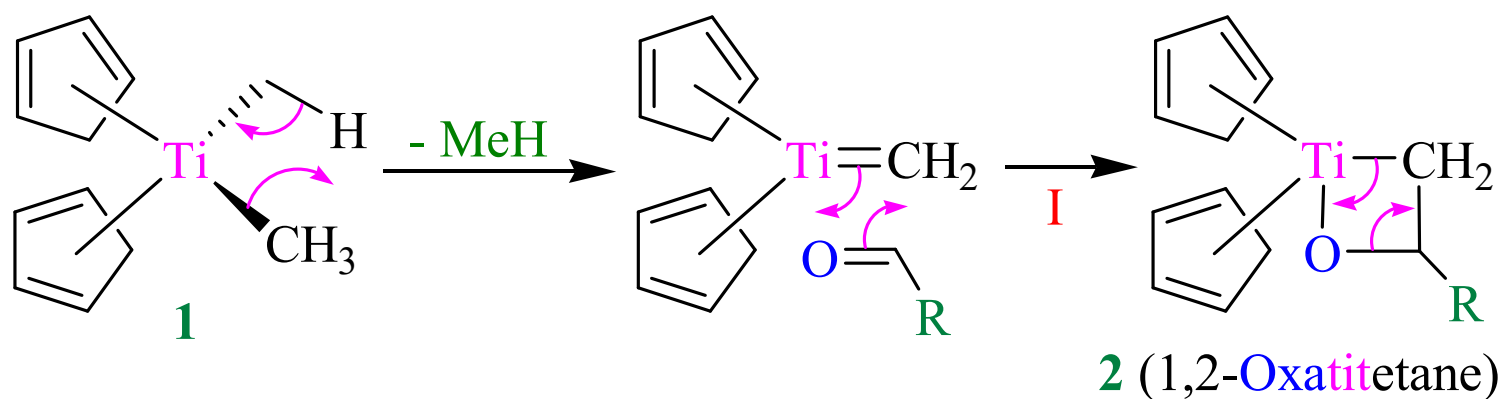


Bis-(cyclopentadienyl)
dimethyltitanium[II]

Mechanism



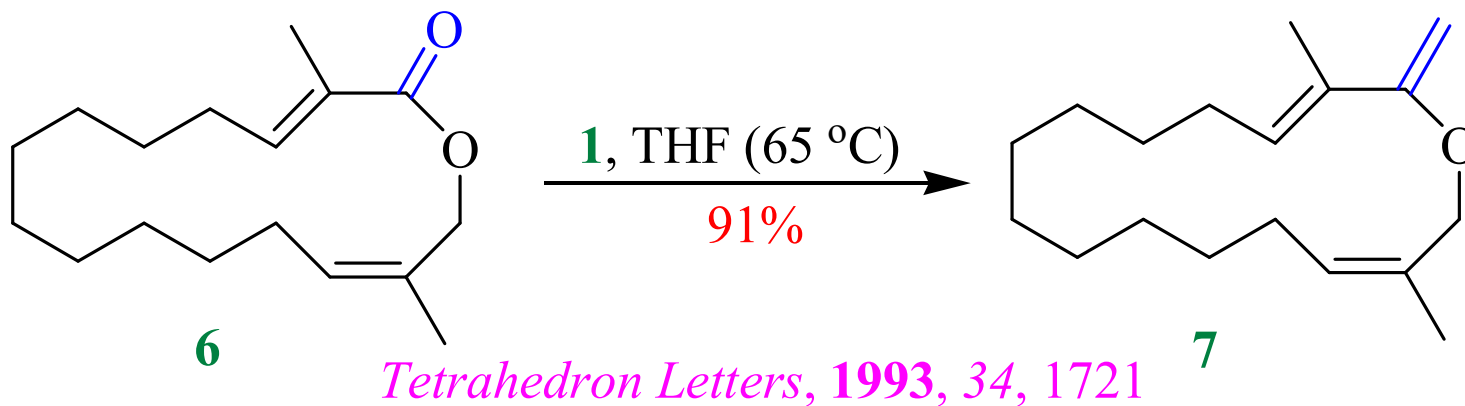
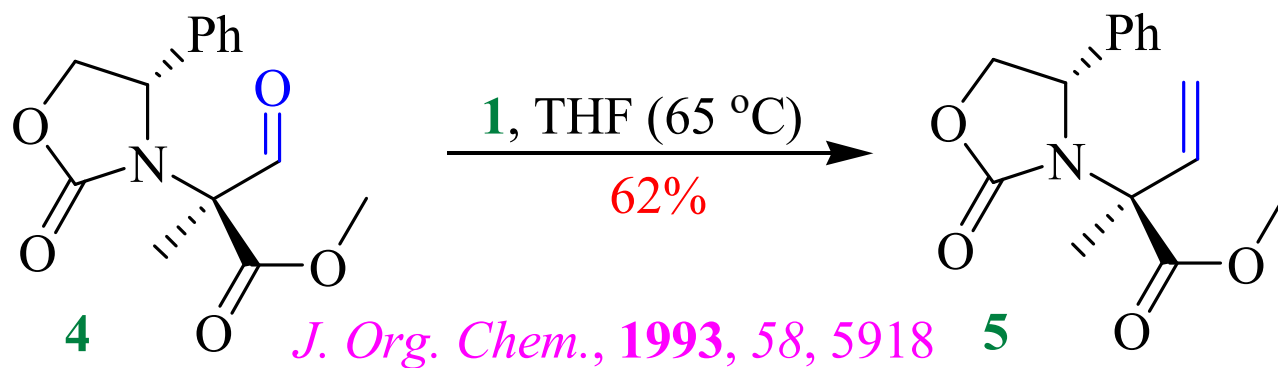
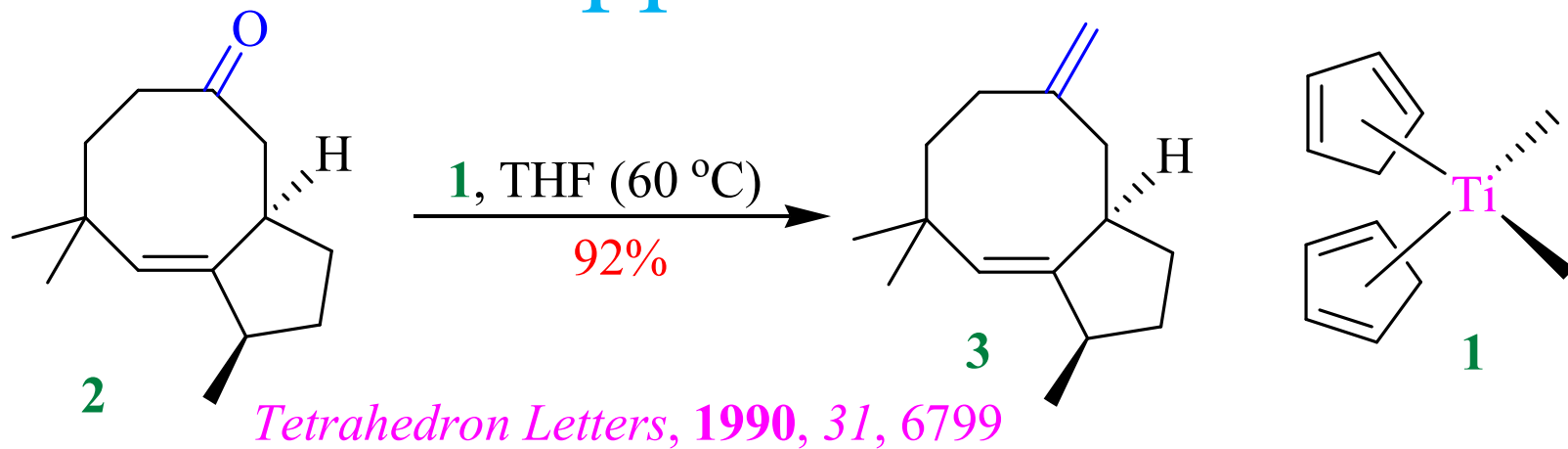
μ -Chloro[di(cyclopenta-2,4-dien-1-yl)]
dimethyl(μ -methylene)titaniumaluminum (*Tebbe's Reagent*)



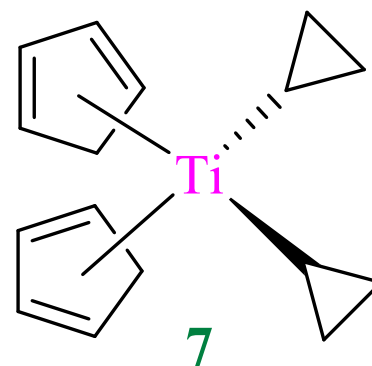
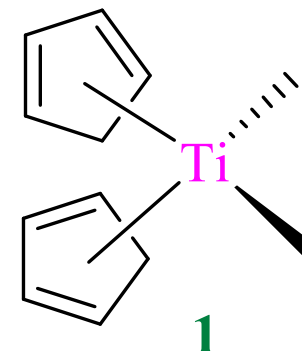
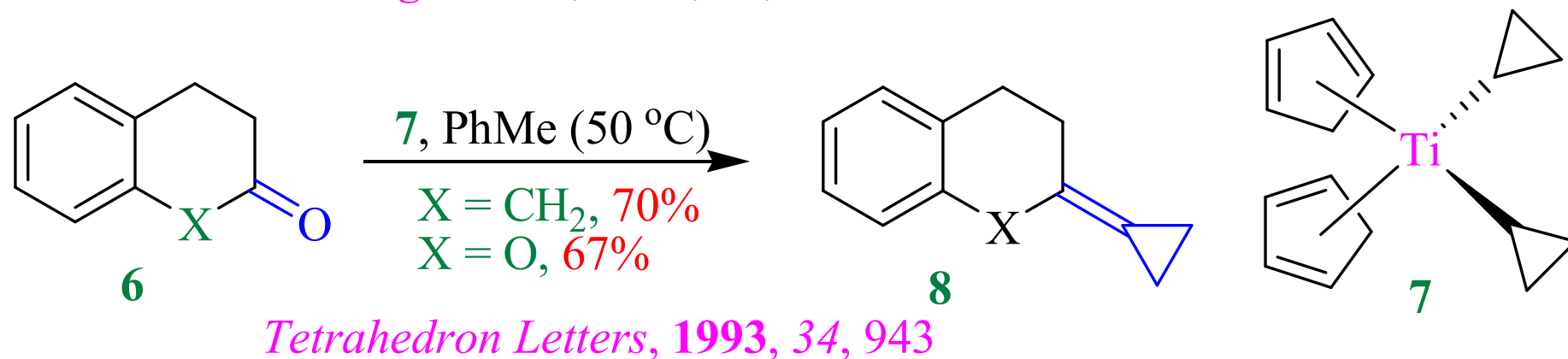
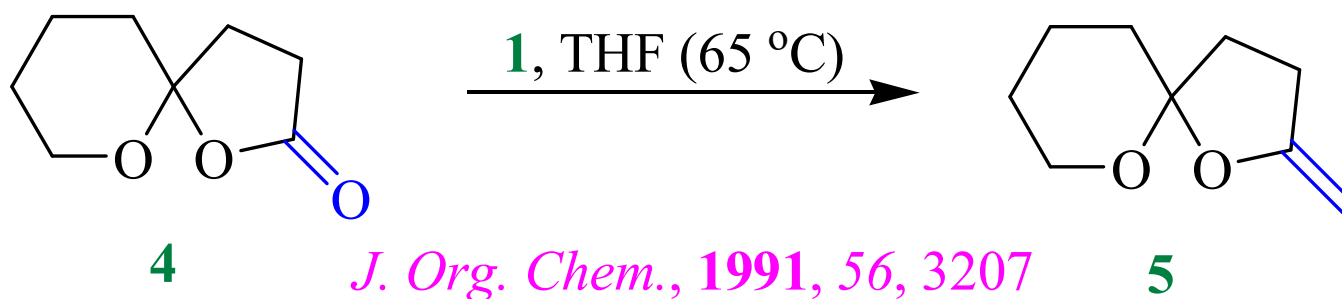
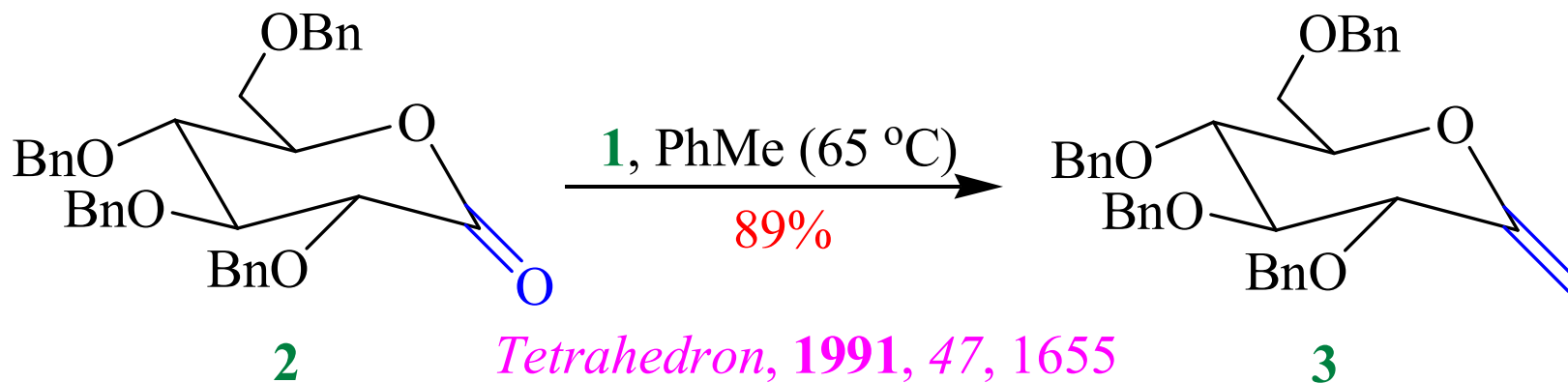
I = Thermally allowed [2π+2π] cycloaddition

II = Retro-cycloaddition

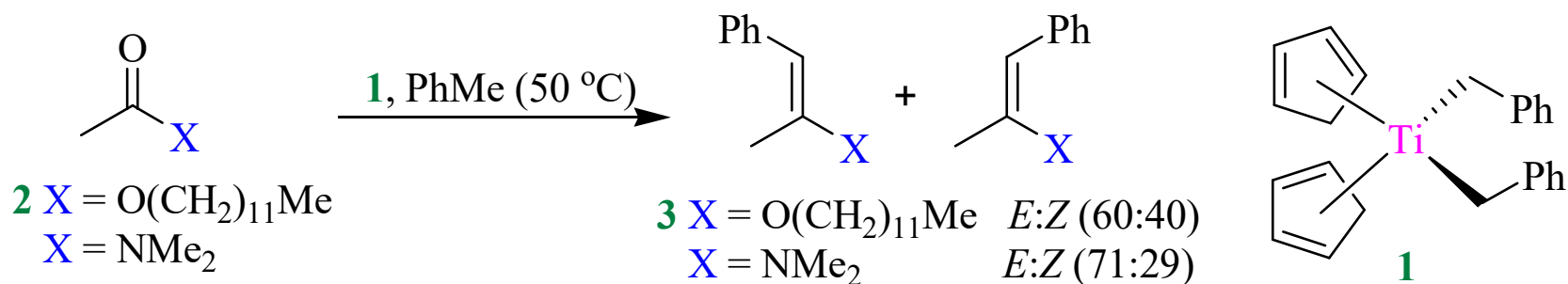
Applications



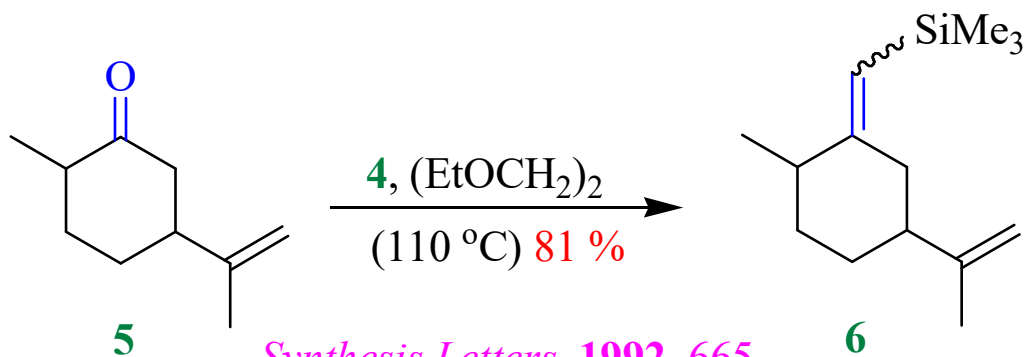
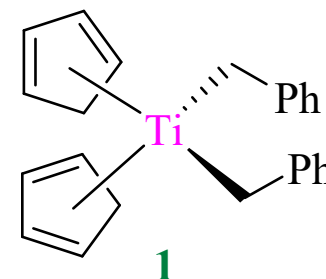
Applications



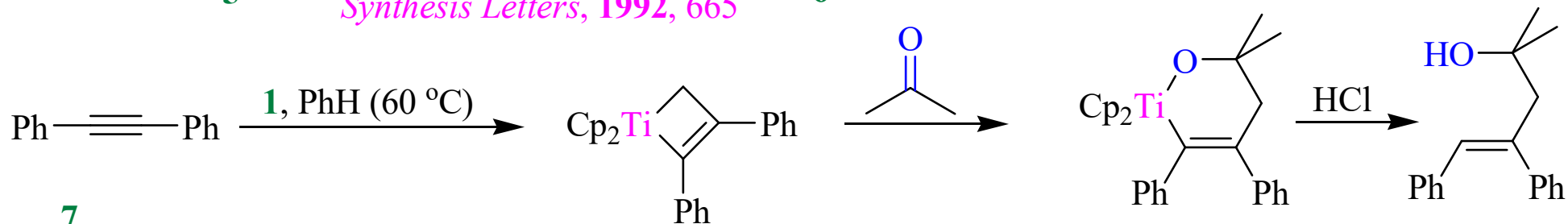
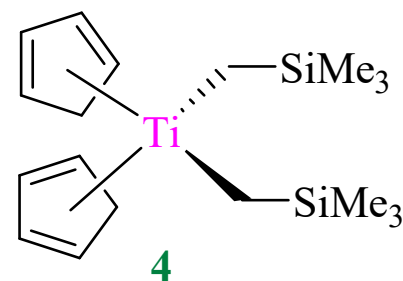
Applications



J. Org. Chem., 1992, 57, 1327



Synthesis Letters, 1992, 665



Organometallics, 1993, 12, 3776