

Organometallics Chemistry

(CHEM-7149)

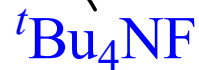
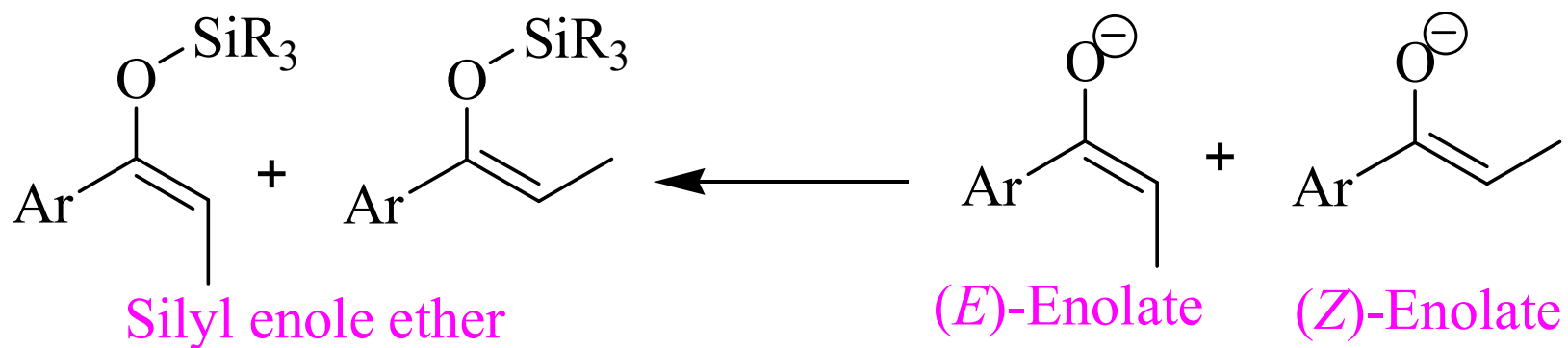
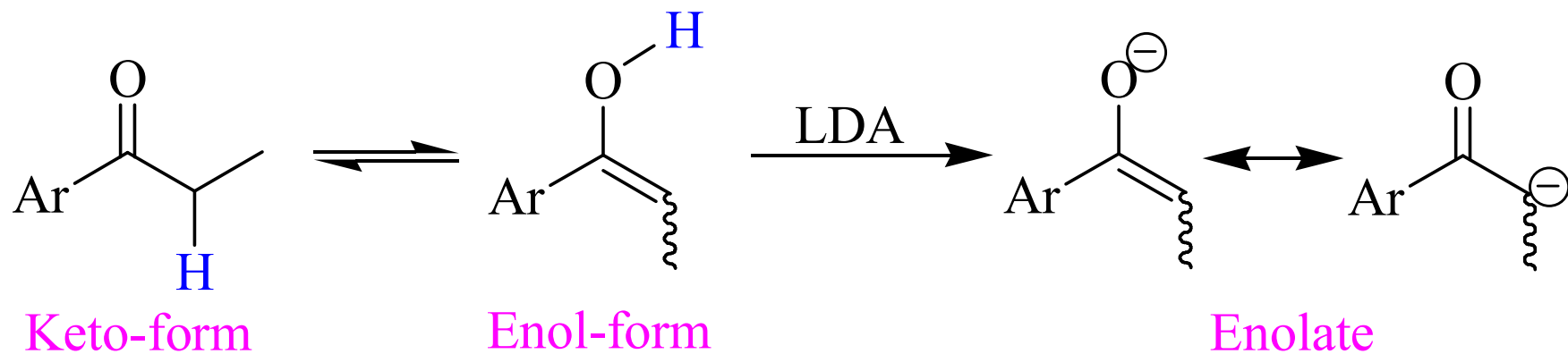
Online Lectures (OrganoSi & Sn)

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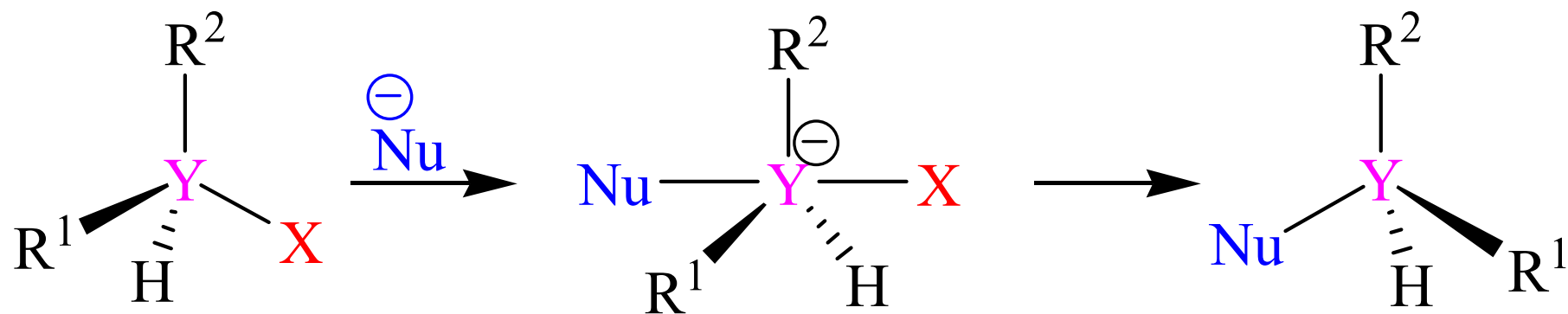
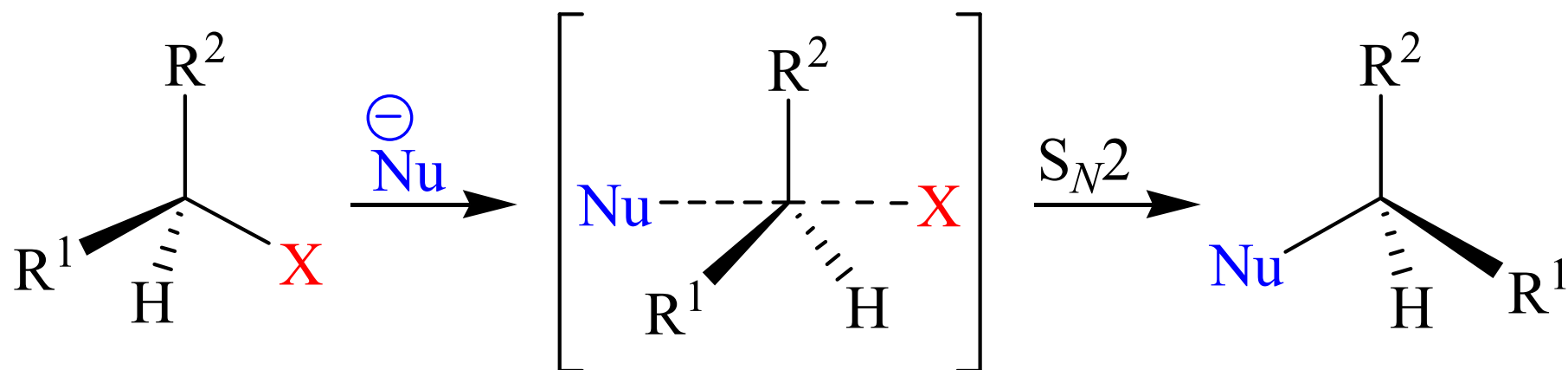
Periodic Table

s-Block metals												p-Block Elements	
Group-I	Group-II											XIII	XIV
H												B	C
Li	Be	d-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												

OrganoSi

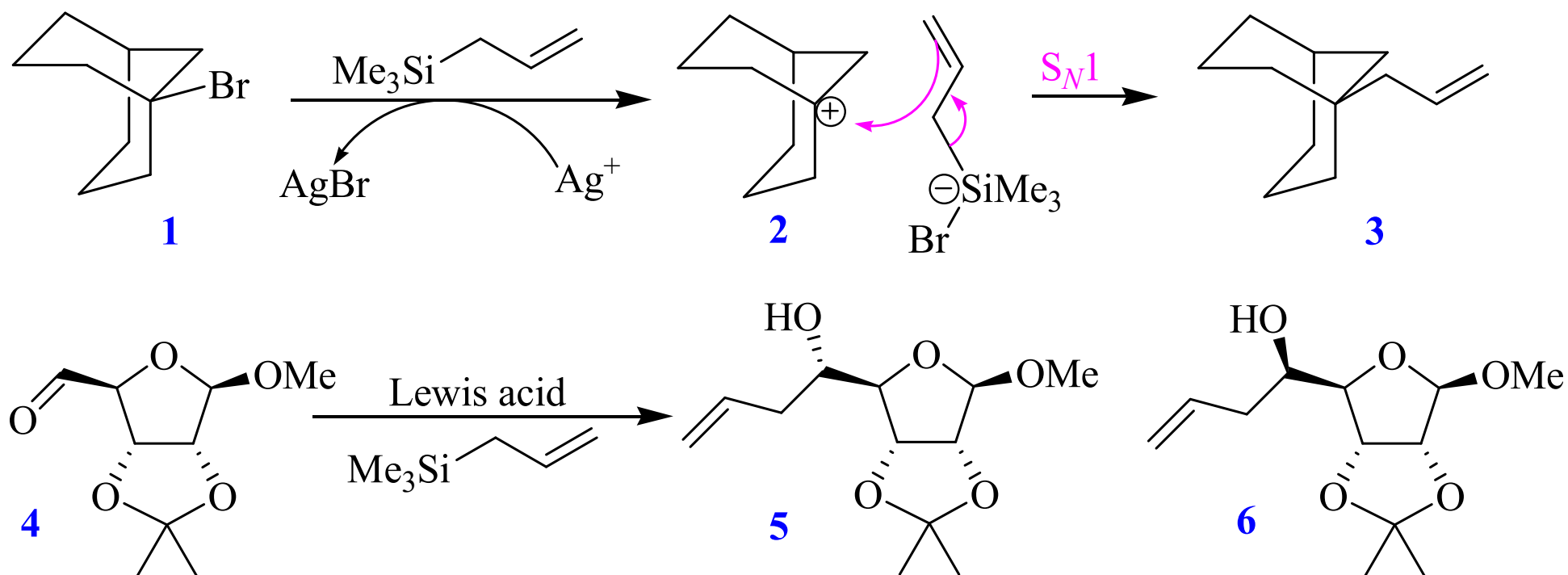


Mechanism of Substitution



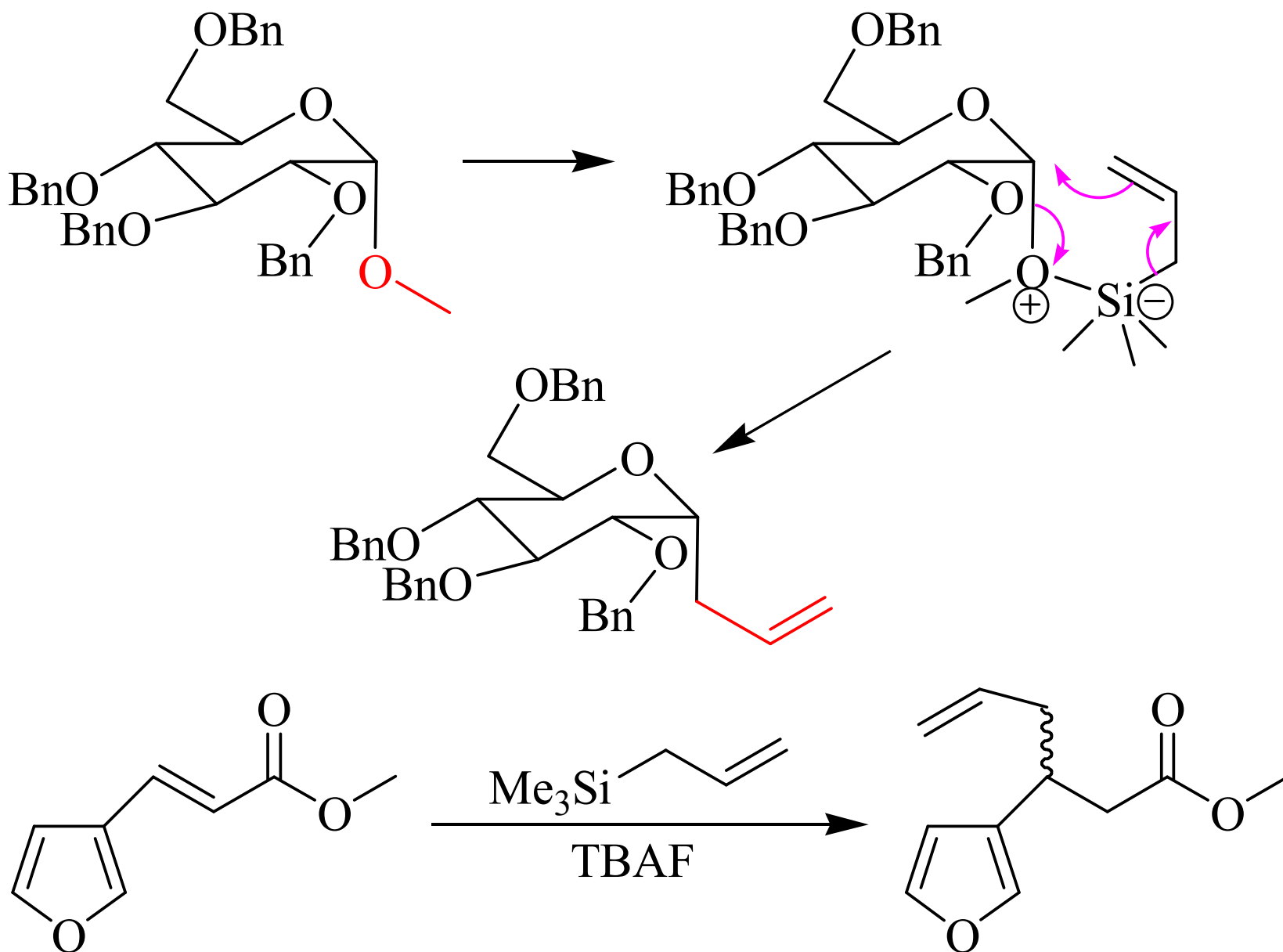
$Y = Si, Sn$

Application of OrganoSi

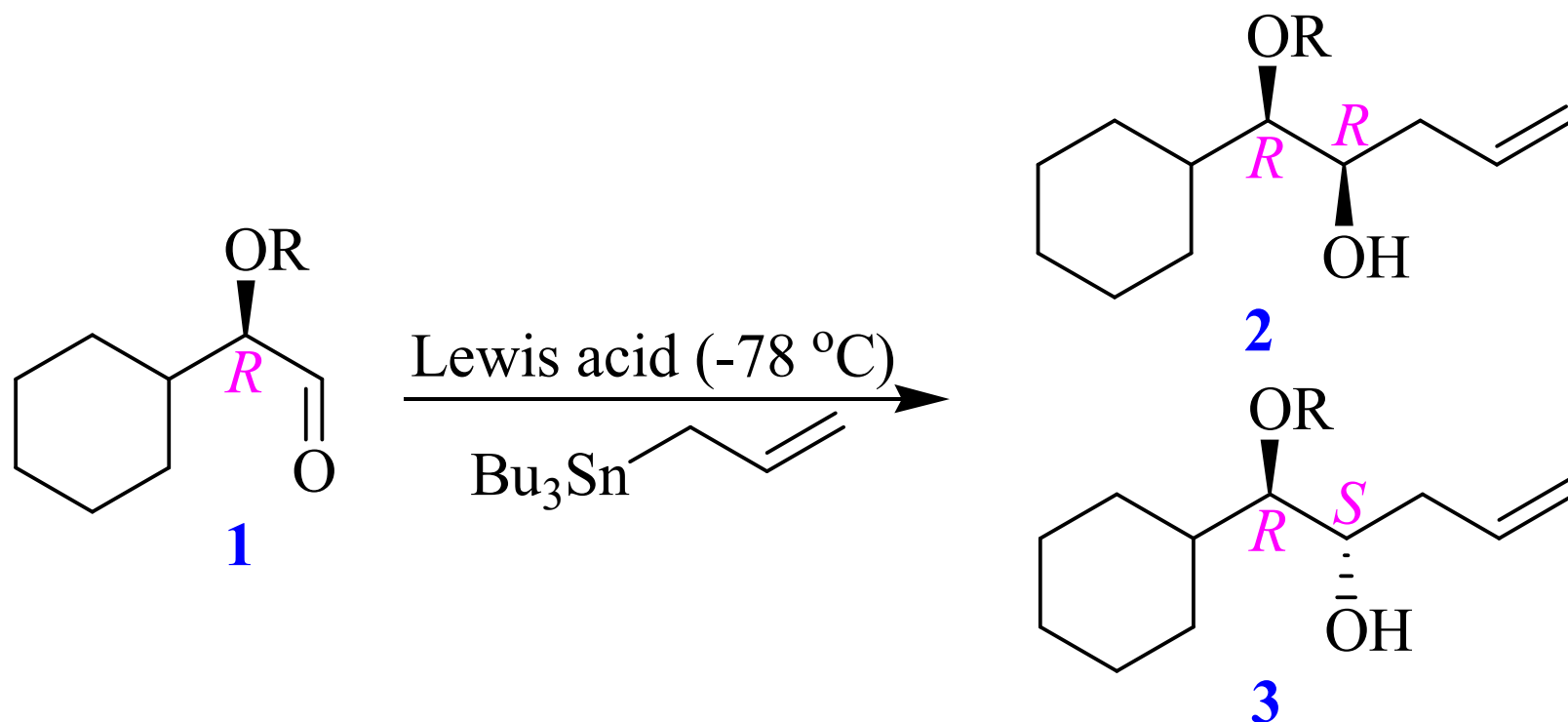


Lewis acid	5	6
TiCl_4	20	1 (89%)
$\text{F}_3\text{B} \cdot \text{OEt}_2$	1	90 (80%)

Application of OrganoSi

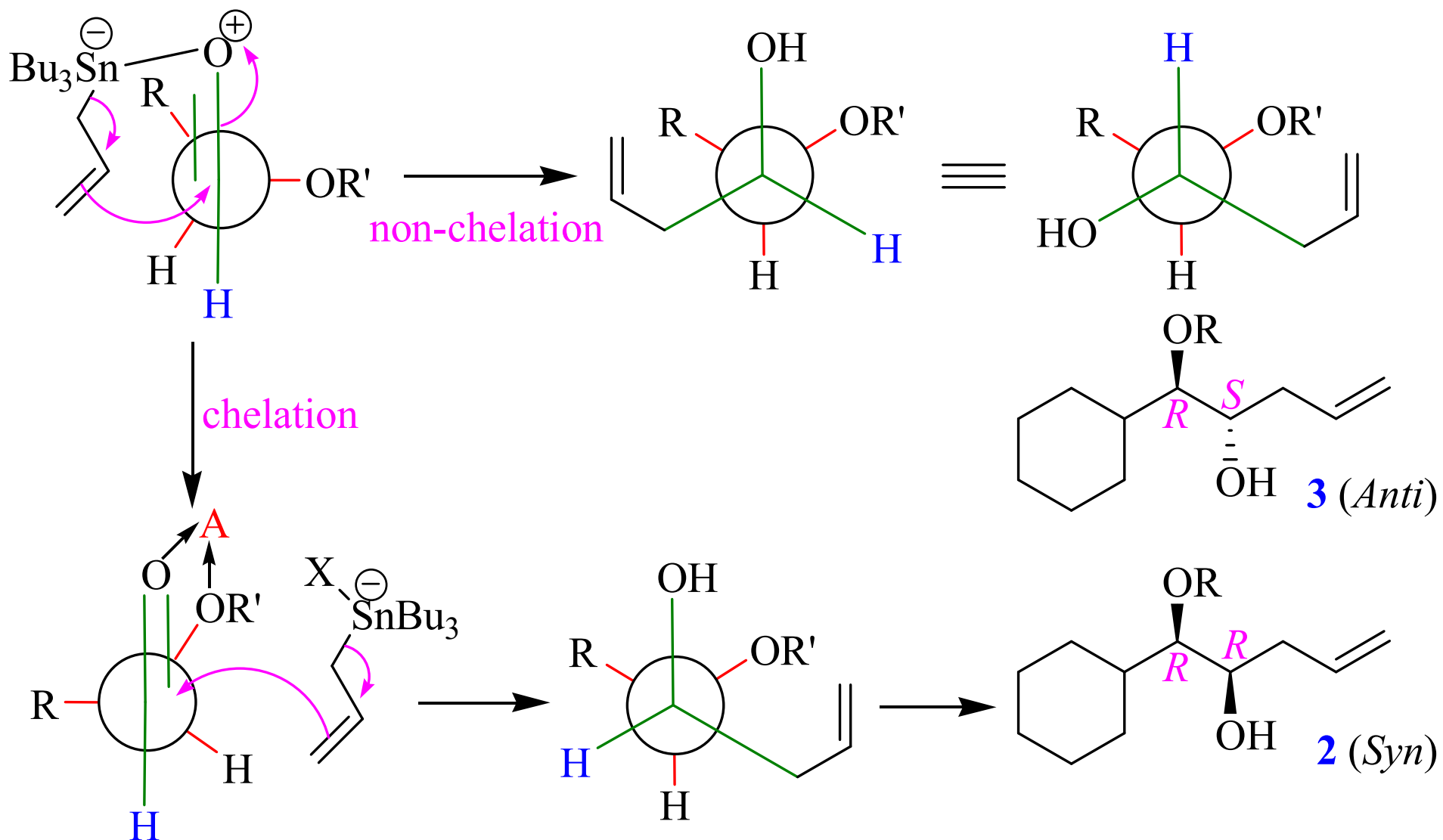


Application of OrganoSn



<i>R</i>	Lewis acid	2 : 3
Bn	MgBr_2	250 : 1
	$\text{F}_3\text{B} \cdot \text{OEt}_2$	39 : 61
$\text{Si}(\text{M}_2)_2^t\text{Bu}$	MgBr_2	21 : 79
	$\text{F}_3\text{B} \cdot \text{OEt}_2$	9 : 91

Mechanism



Application of OrganoSn

