

# Organometallics Chemistry

## (CHEM-753)

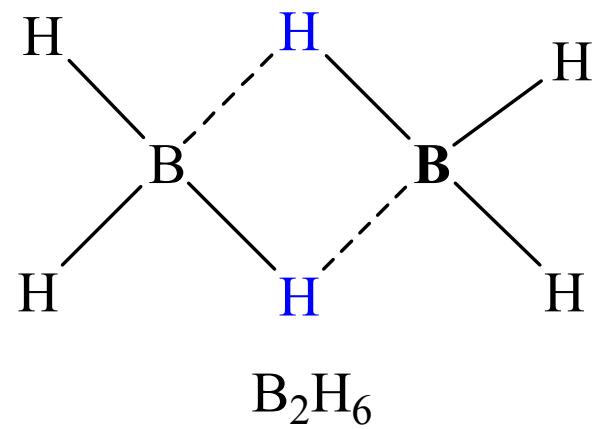
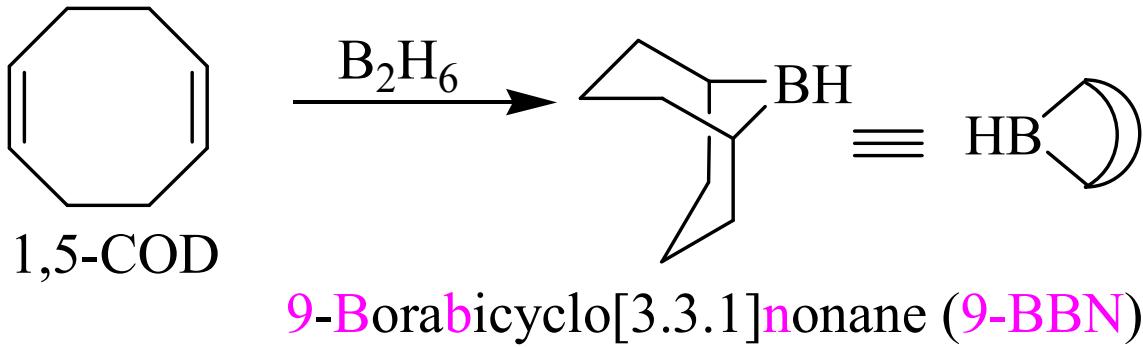
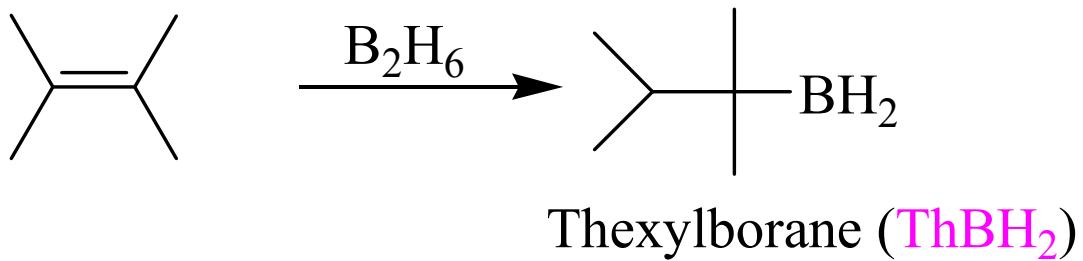
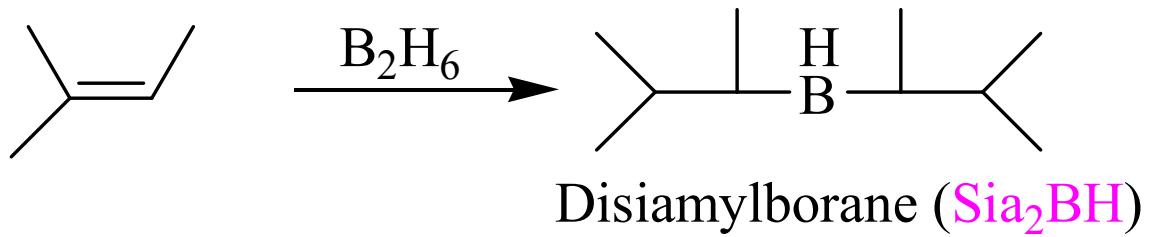
Online Lectures (OrganoB)

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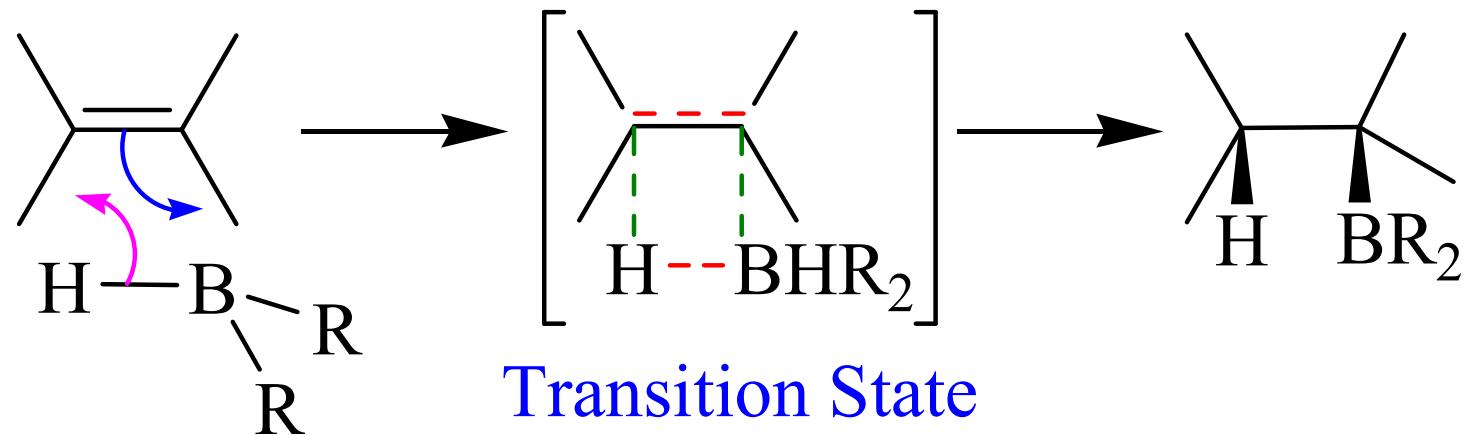
# Periodic Table

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

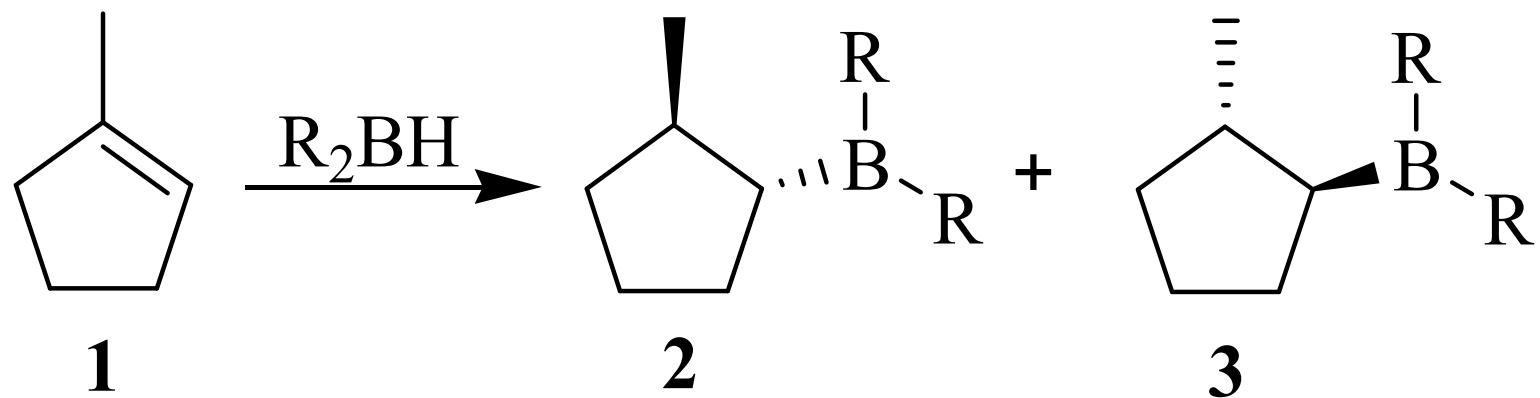
# Method of Preparation of OrganoB



# Mechanism of Hydroboration



Transition State

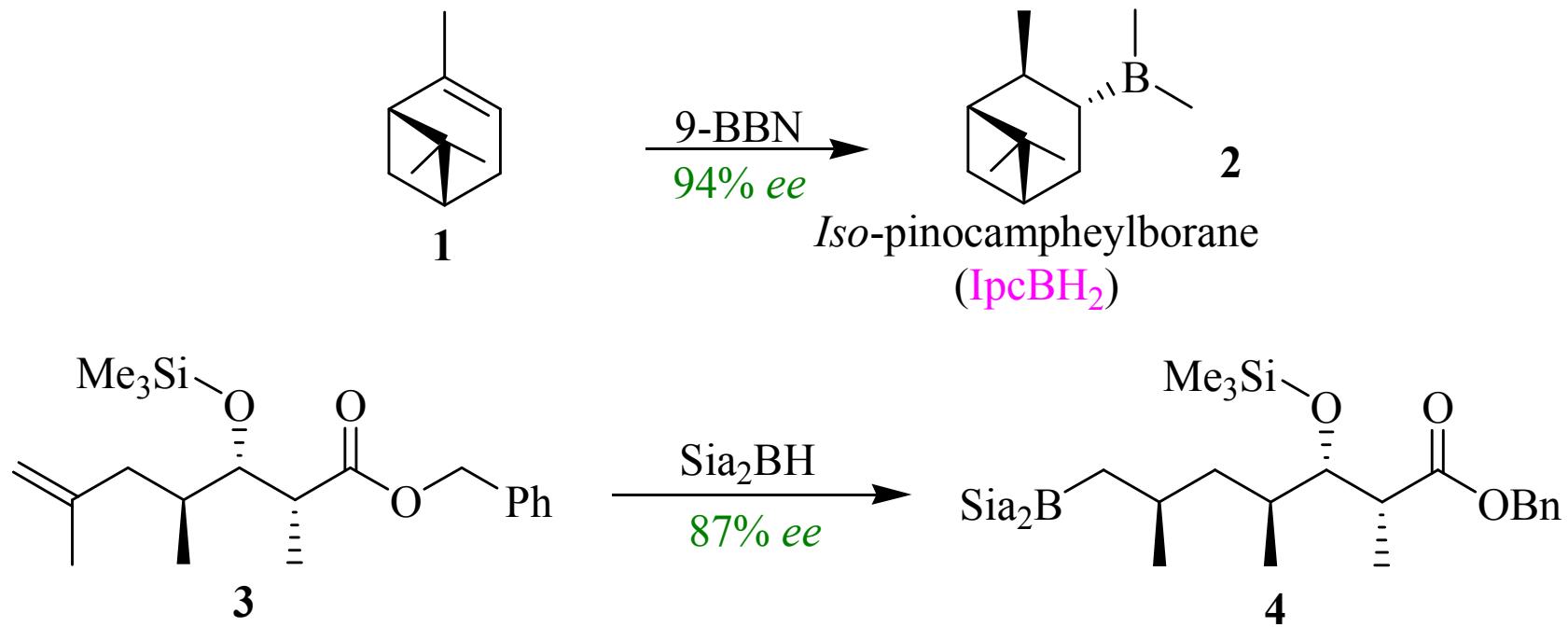


# Orientation

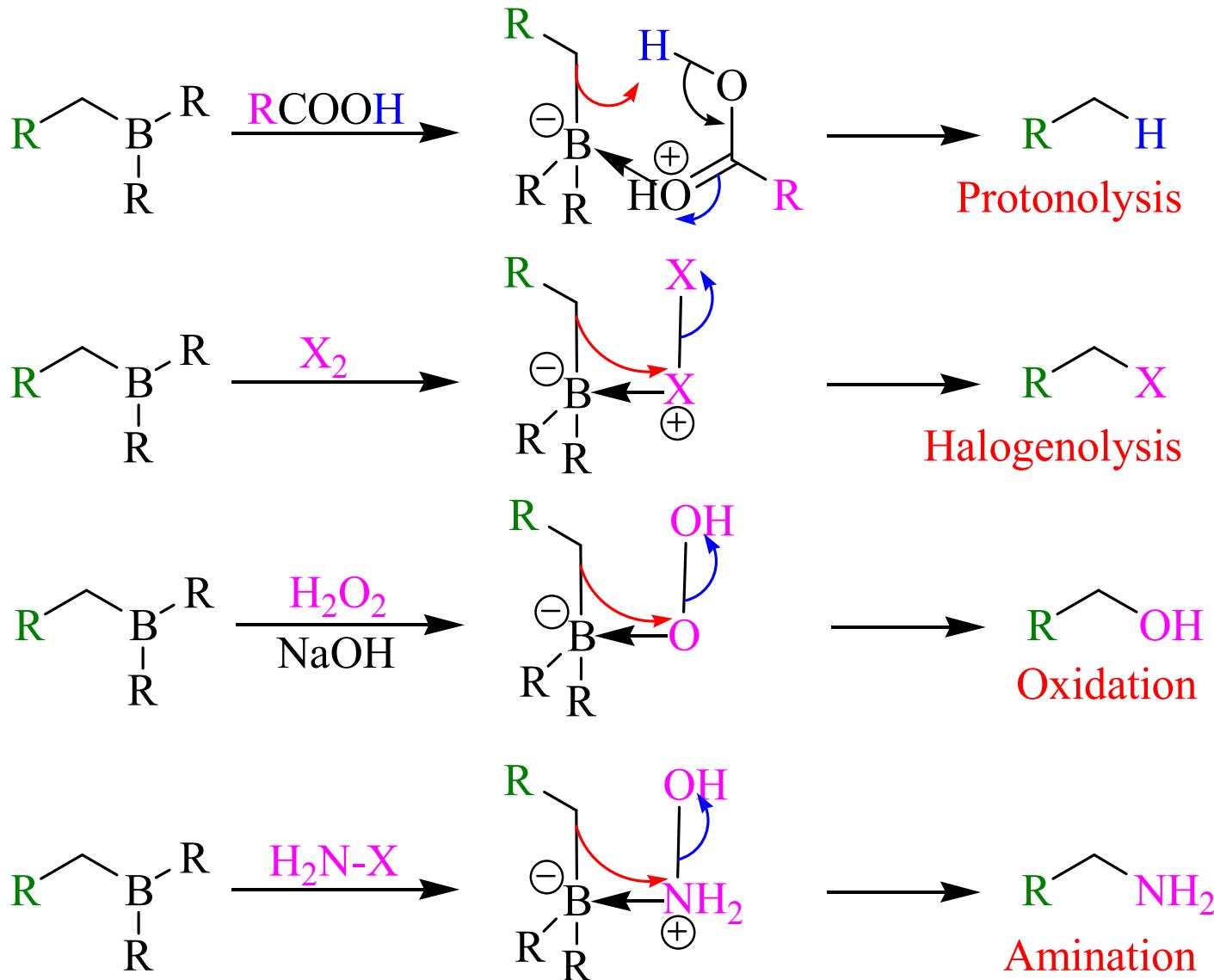
	Bu		Ph
<chem>B2H6</chem>	6 94	1 99	19 81
9-BBN	1 99		2 98
<chem>Sia2BH</chem>	1 99		2 98

The figure shows three chemical structures. On the left, 'Bu' is shown as a butyl group attached to a double bond. Two blue arrows point upwards from below the molecule. In the center, a branched alkene is shown with a double bond at the top right. A blue arrow points upwards from the bottom left carbon atom. On the right, 'Ph' is shown as a phenyl group attached to a double bond. Two blue arrows point upwards from below the molecule.

# Chiral Hydroboration



# Synthetic Applications



# Synthetic Applications

