

Organometallics Chemistry

(CHEM-753)

Online Lectures (OrganoPd)

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Periodic Table

s-Block metals

Group-I Group-II

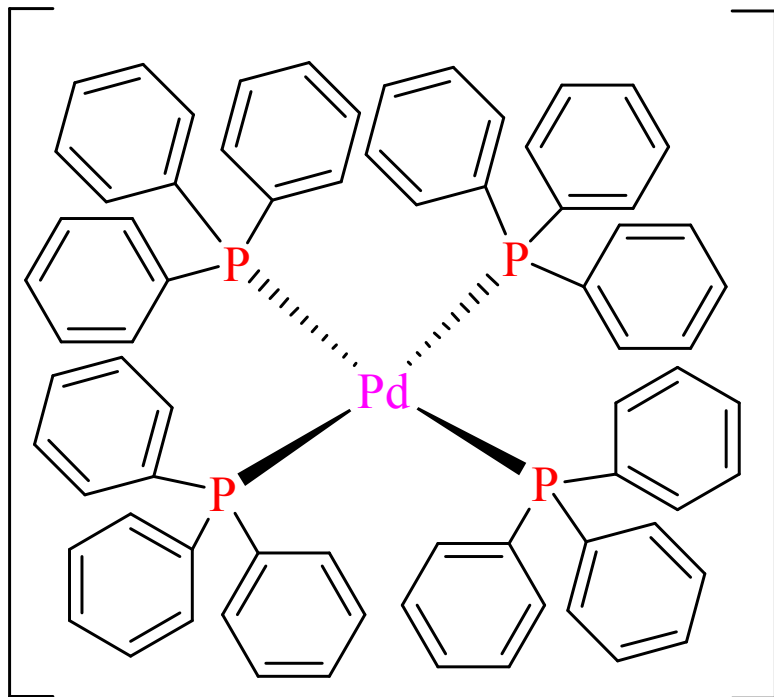
d-Block metals

p-Block Elements

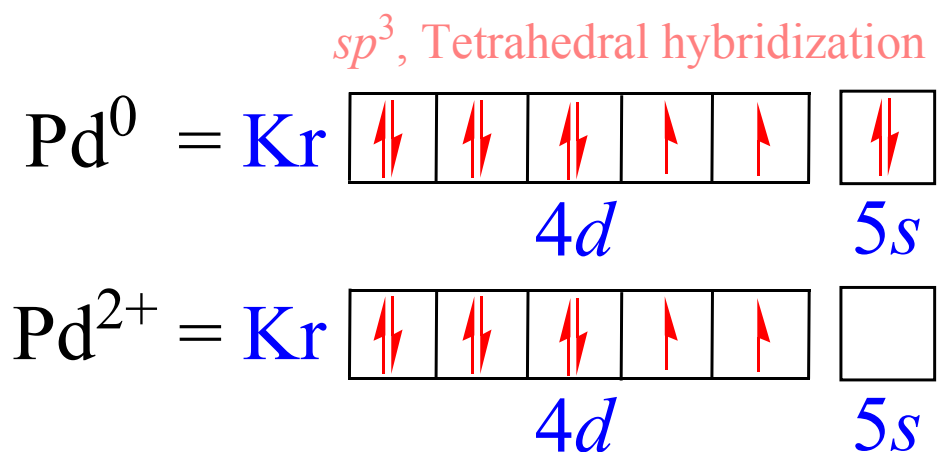
XIII XIV

H													
Li	Be											B	C
Na	Mg											Al	Si
		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												

OrganoPd

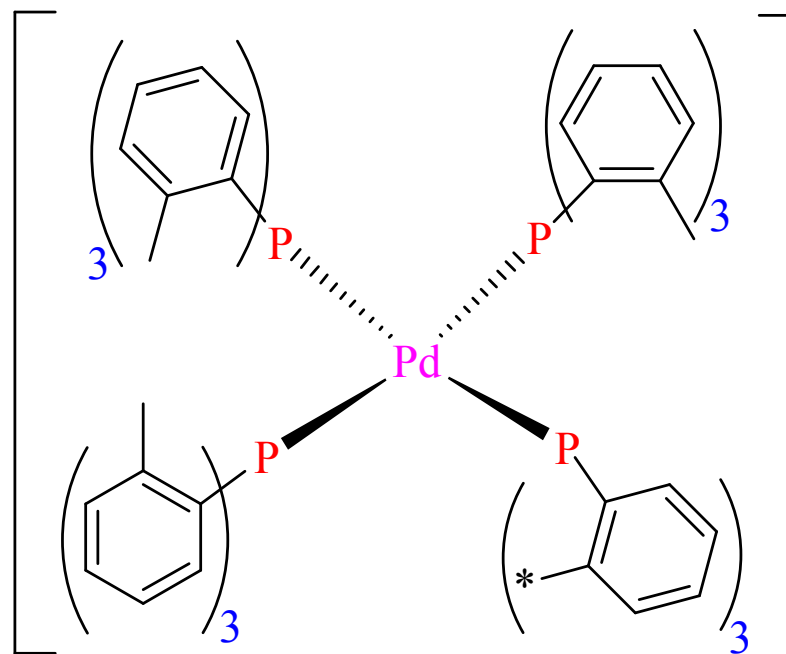
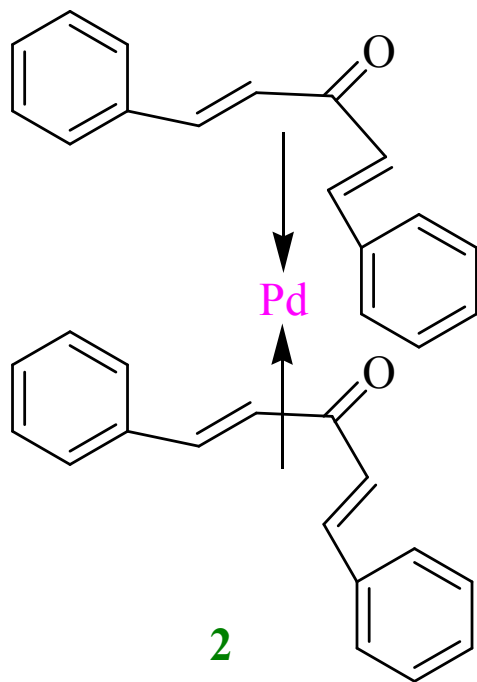
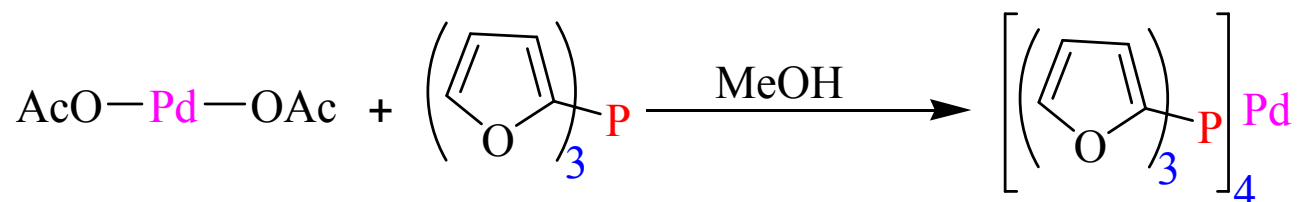
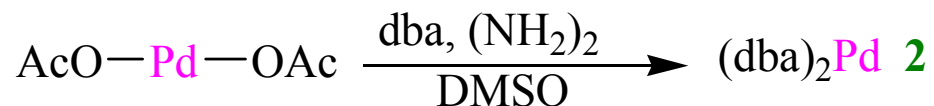
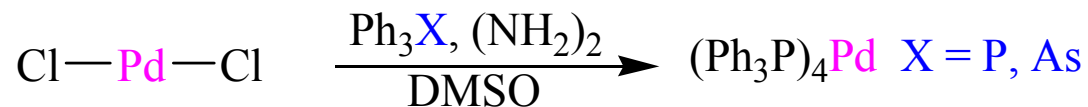


Tetrakis(triphenylphosphine)palladium[0]
Tetrakis(triphenylphosphine)palladium[II]



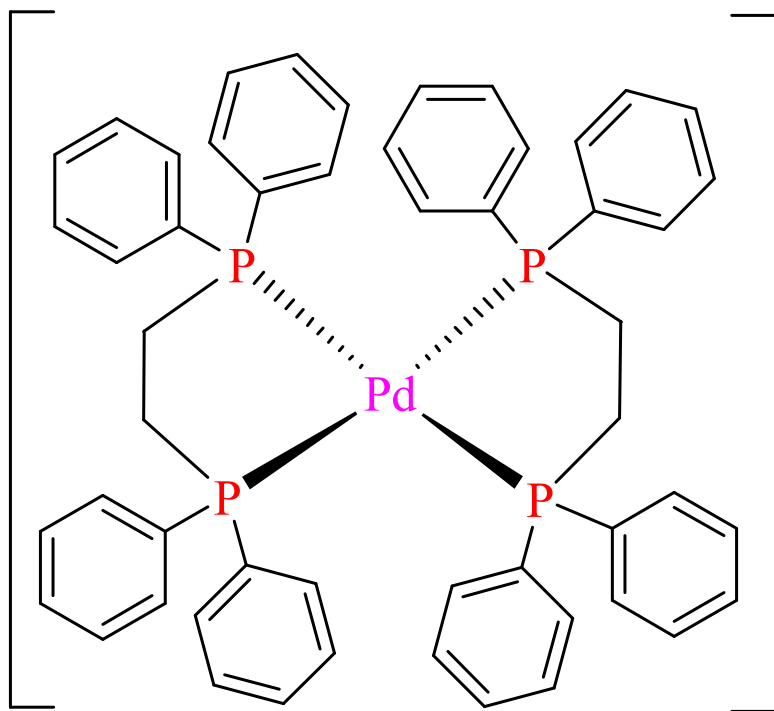
*dsp*², Square planar, trigonal pyramidal

Preparation of Catalysts

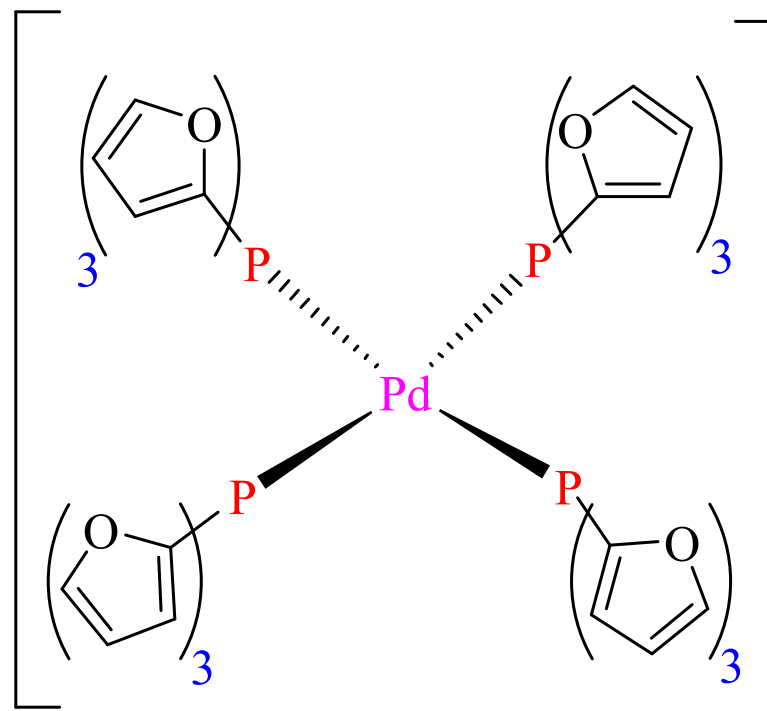


Tetrakis[tri(o-tolylphosphine)]palladium[0]

Preparation of Catalysts

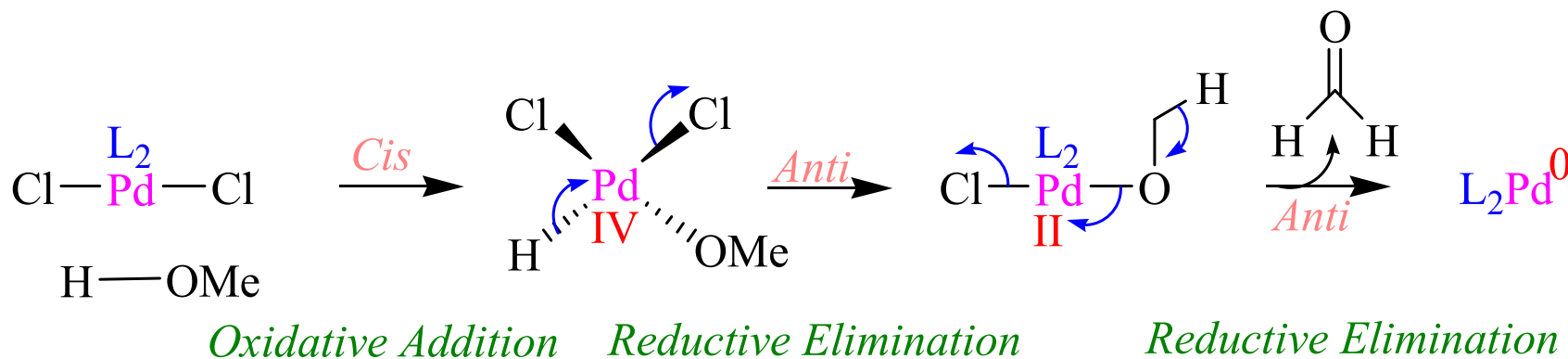
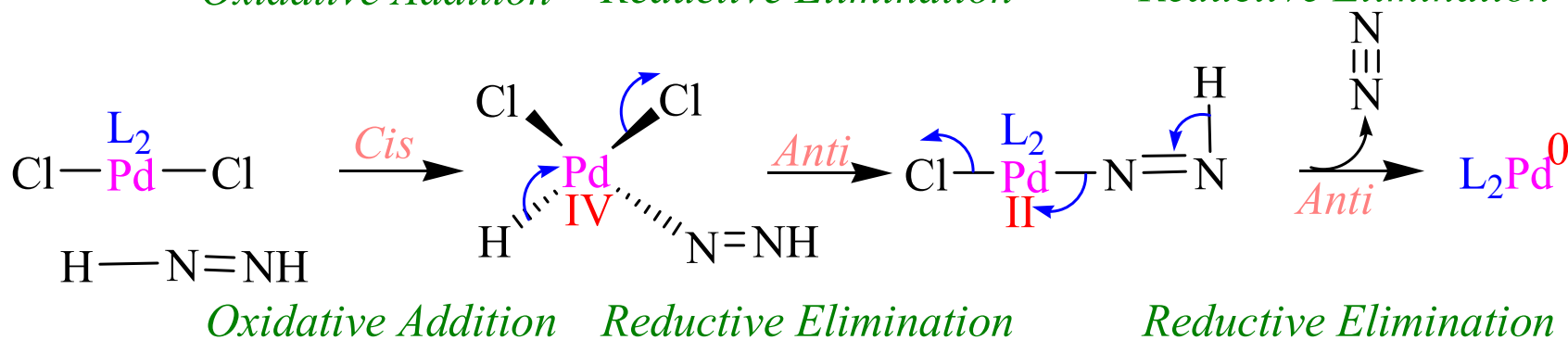
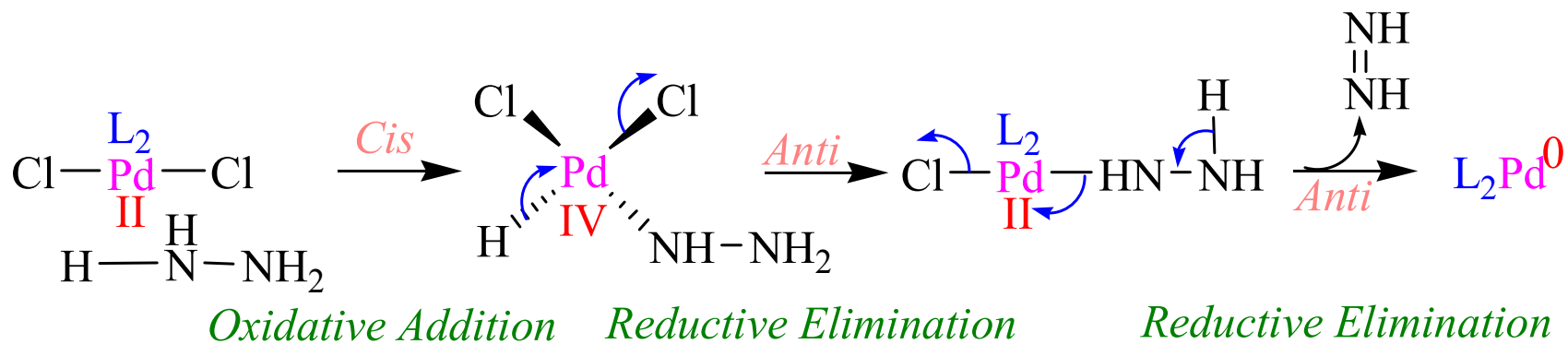


Bis[1,2-bis(diphenyl)ethyl]palladium[0]

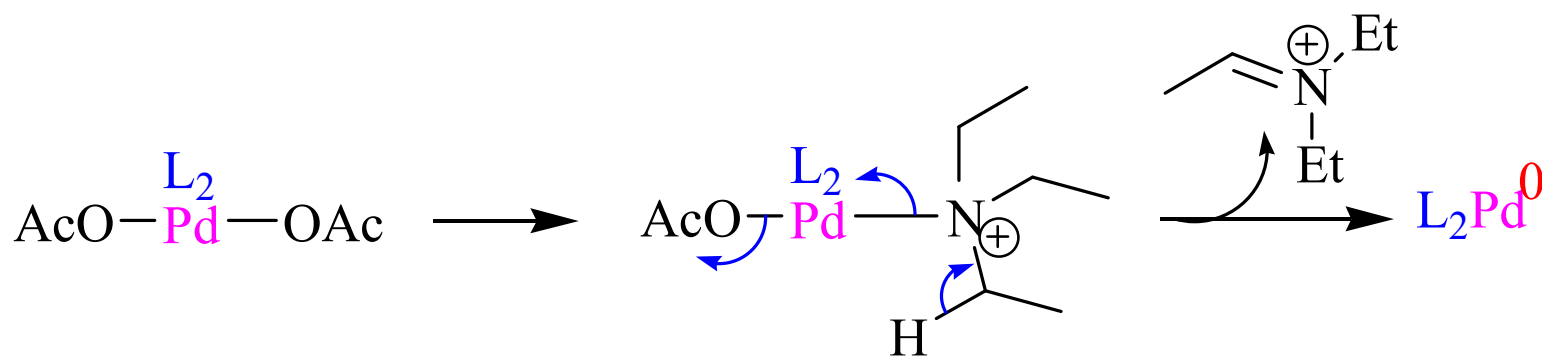
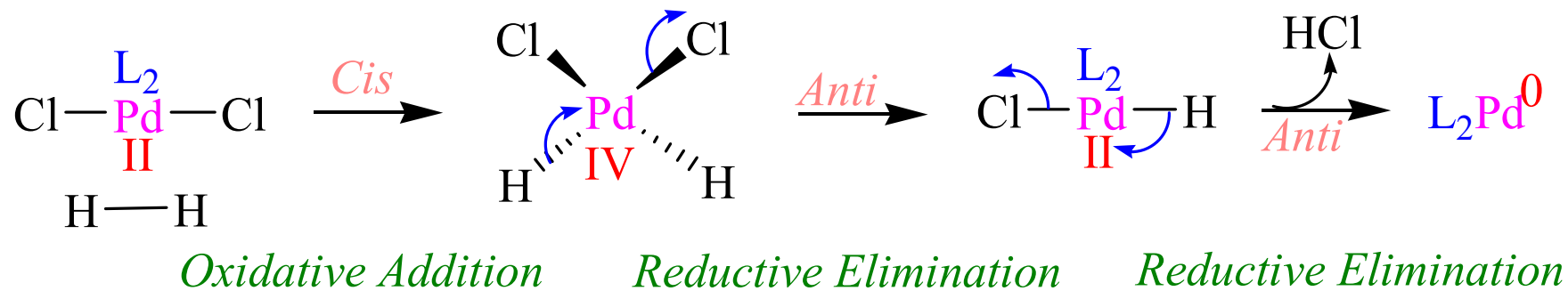


Tetrakis[tri(furylphosphine)]palladium[0]

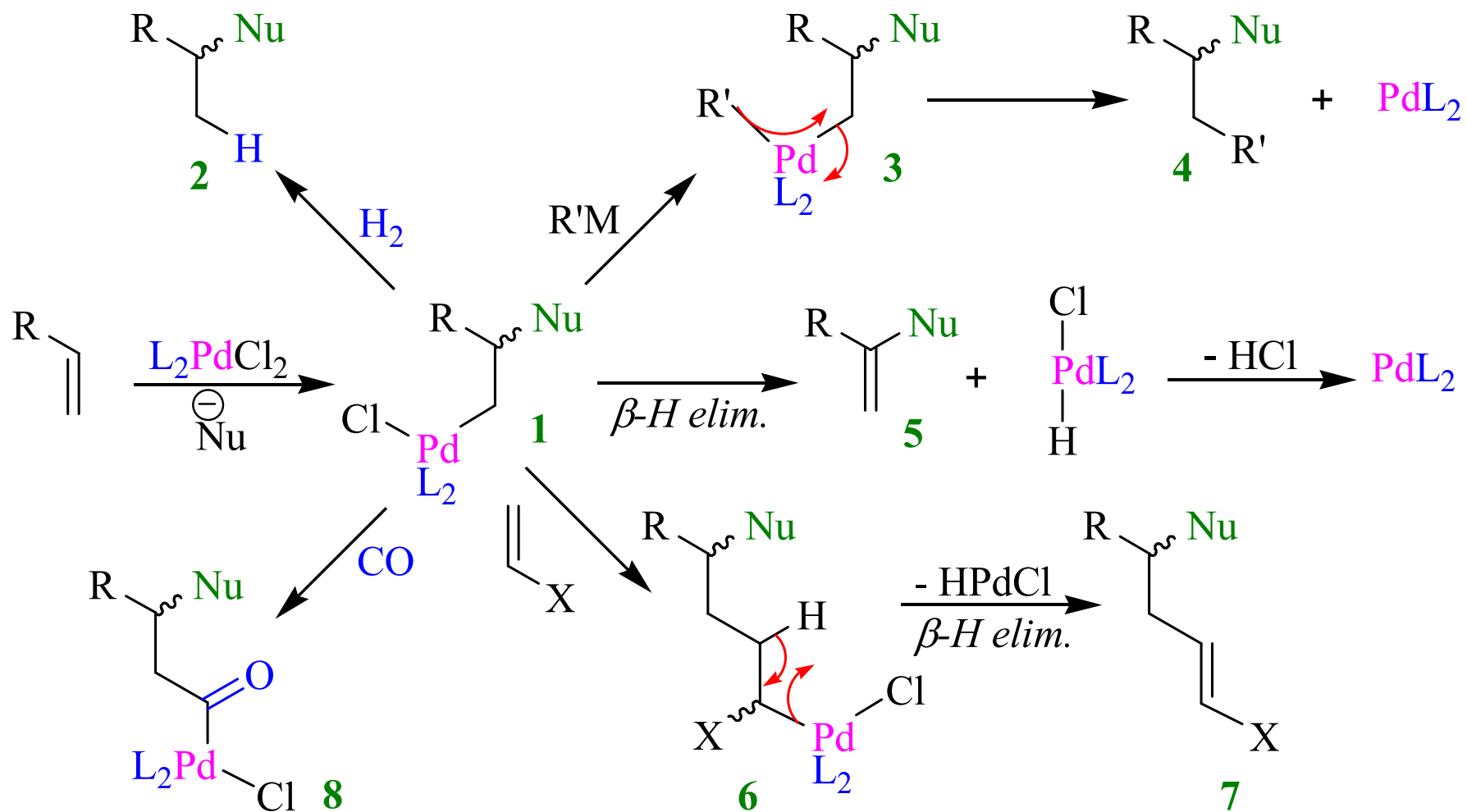
Reduction of Pd[II] to Pd[0]



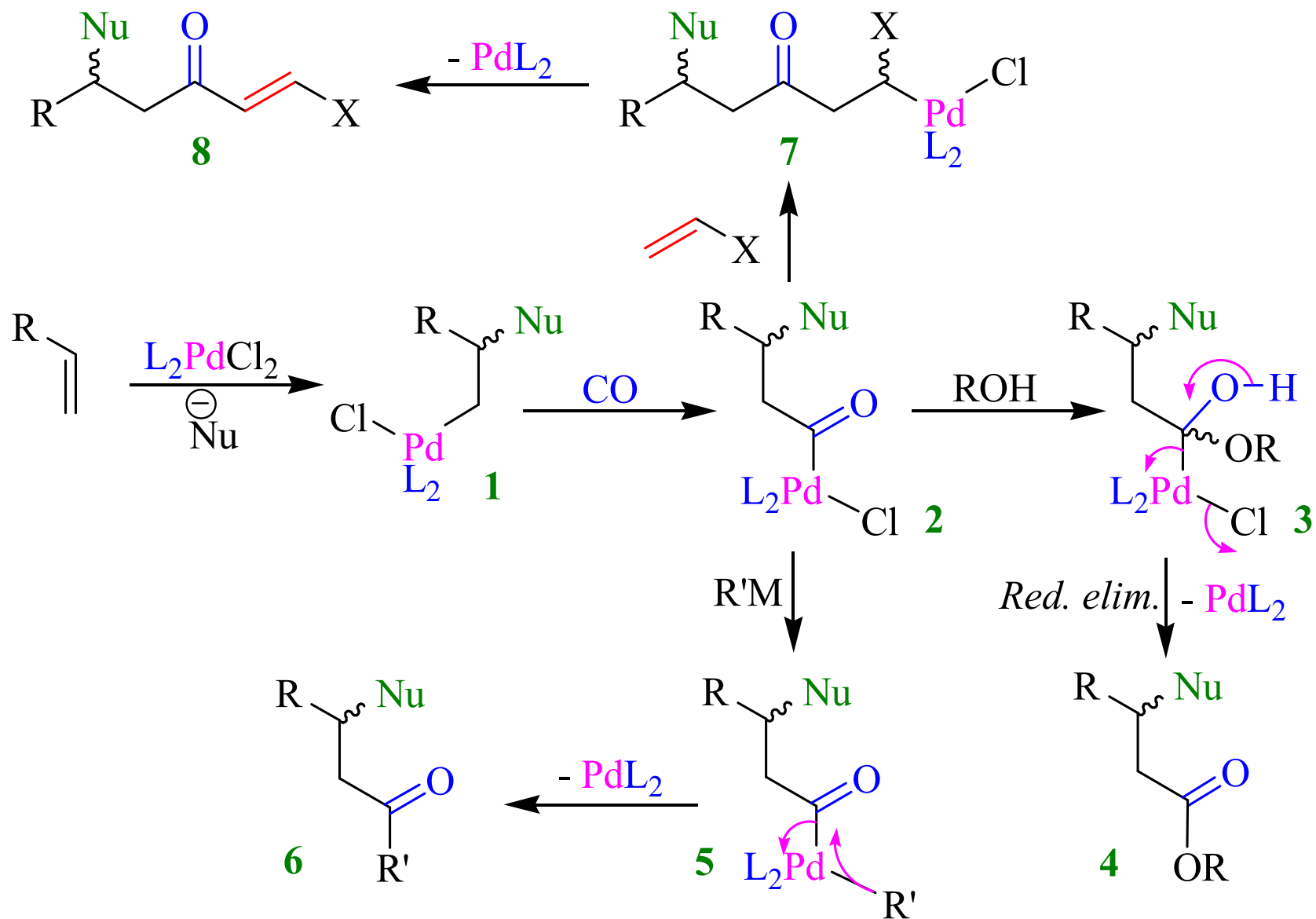
Reduction of Pd[II] to Pd[0]



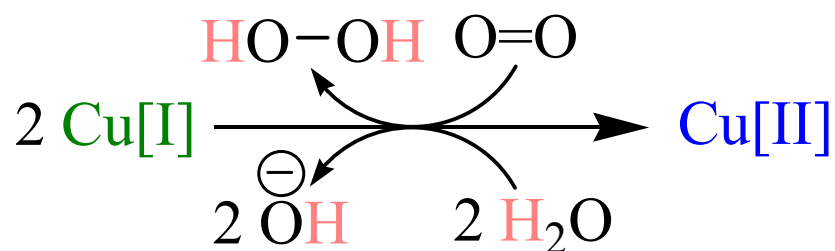
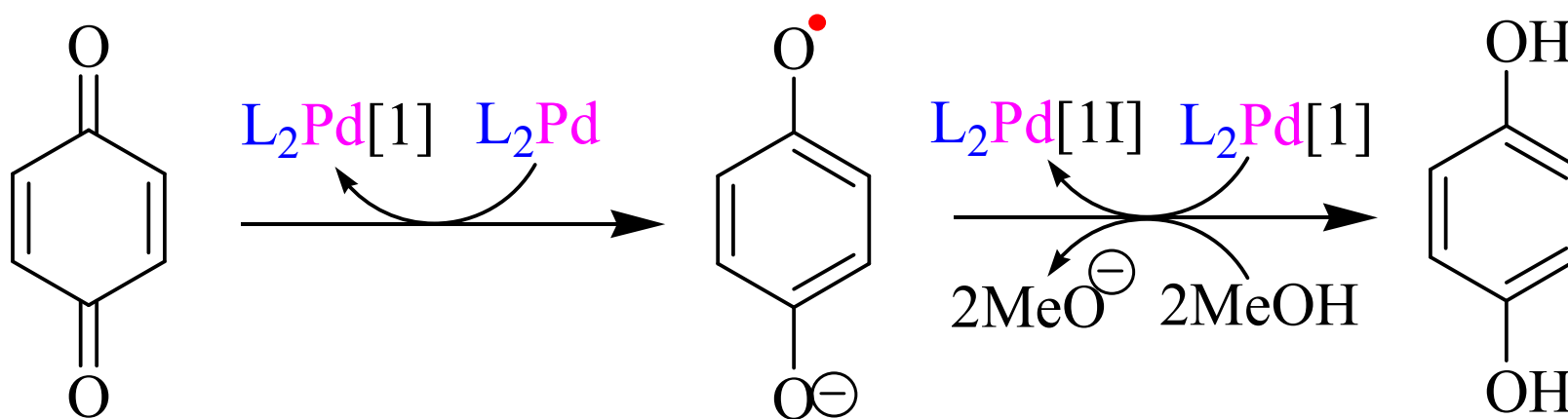
Pd[II] Chemistry



Pd[II] Chemistry

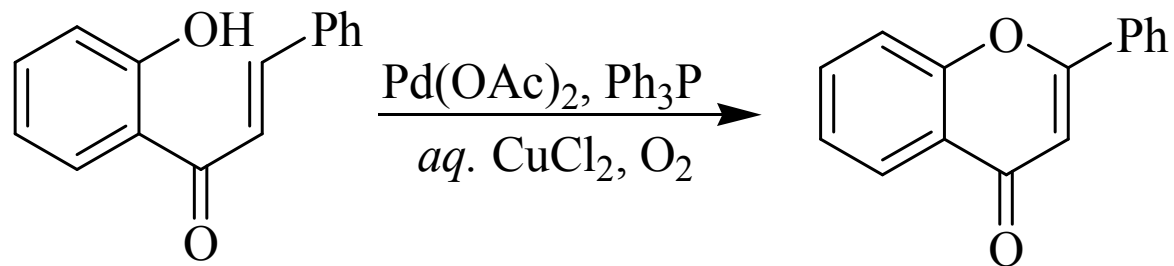


Reoxidation of Pd[0] to Pd[II]



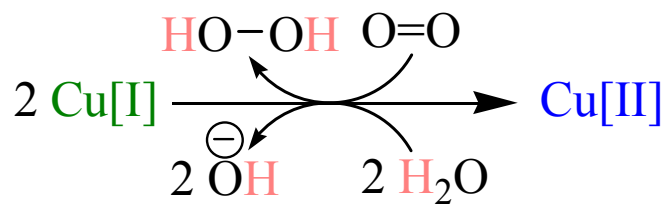
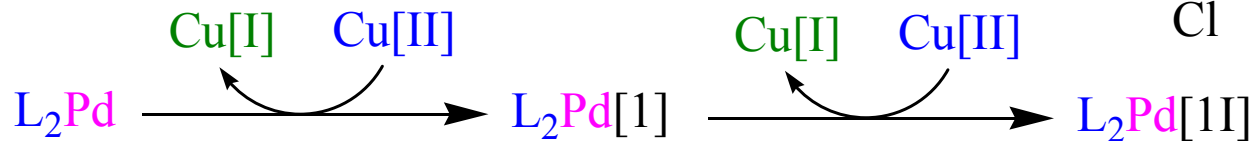
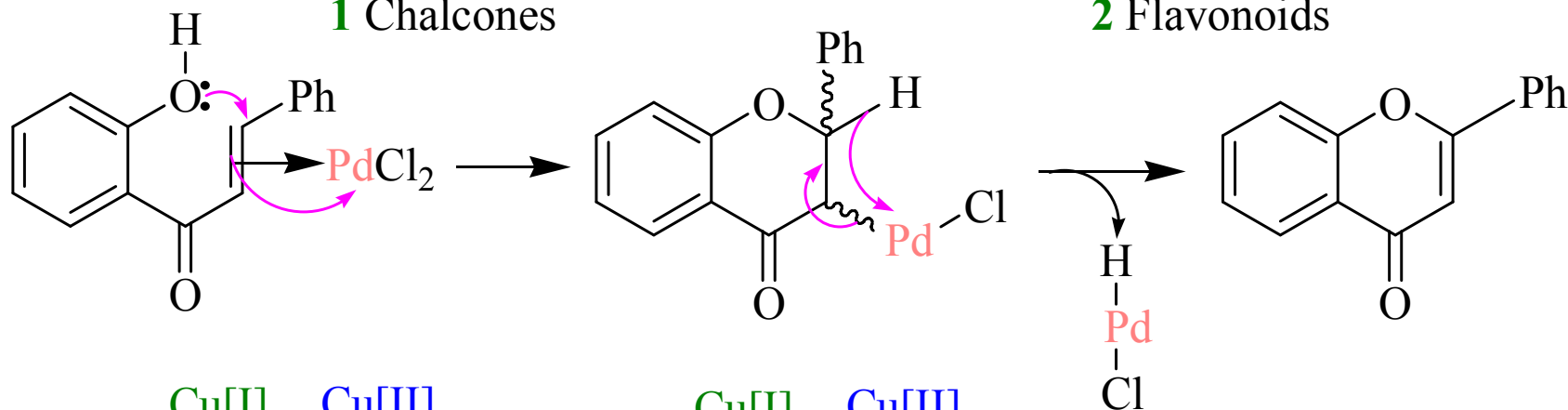
Wacker's Process

Applications of OrganoPd[II]



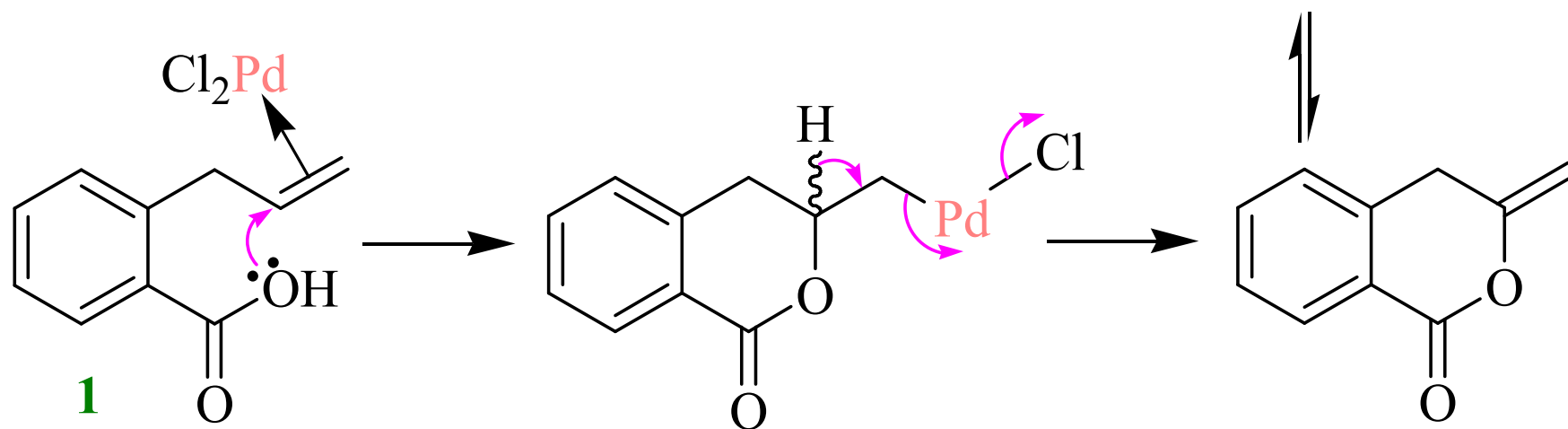
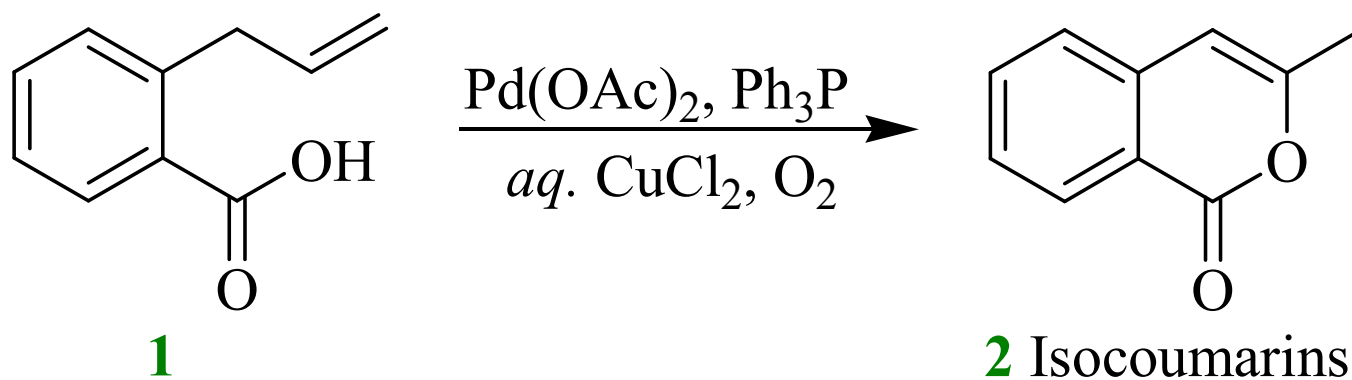
1 Chalcones

2 Flavonoids

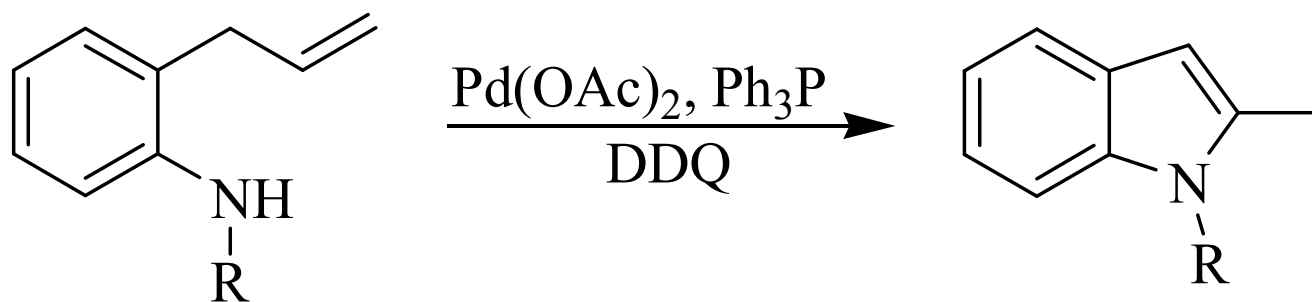


Wacker's Process

Applications of OrganoPd[II]

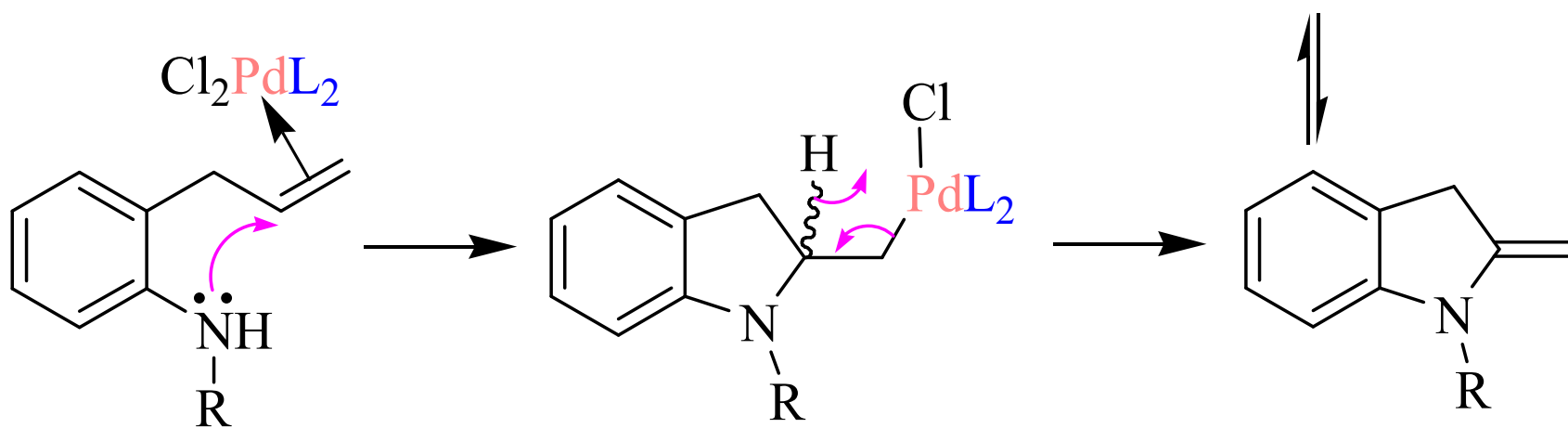


Applications of OrganoPd[II]



1 R = H, Ac, Ts

2 Indole (Alkaloid)



Applications of OrganoPd[II]

