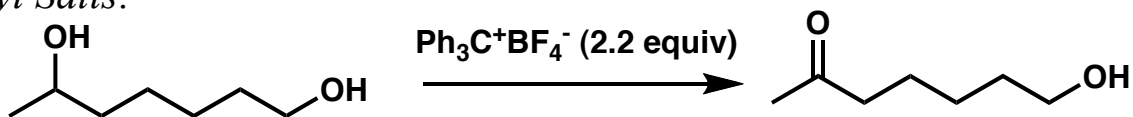


Chem 6352

Selective Oxidations of Polyhydroxylated Compounds

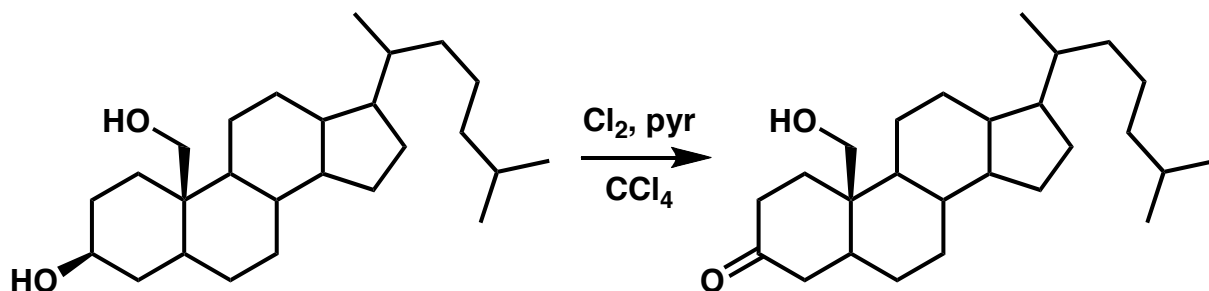
Oxidation of Secondary Over Primary Alcohols

Trityl Salts:

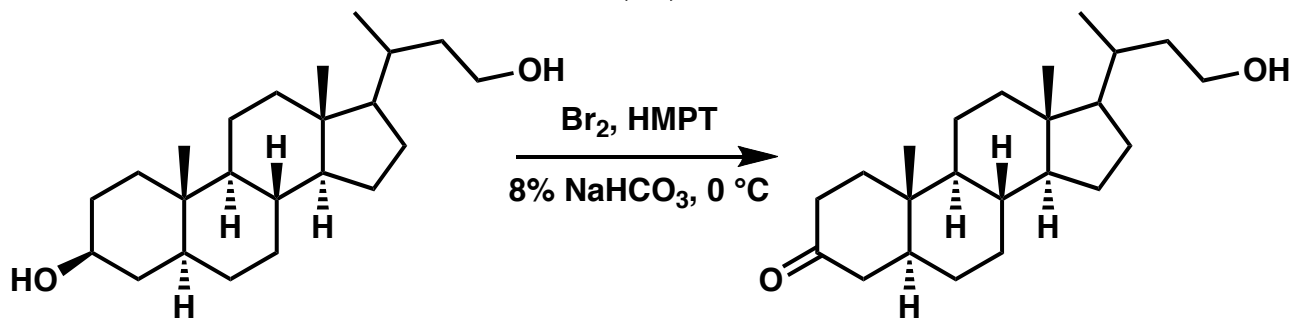


TL 1978, 19, 2771
JACS 1976, 98, 7882

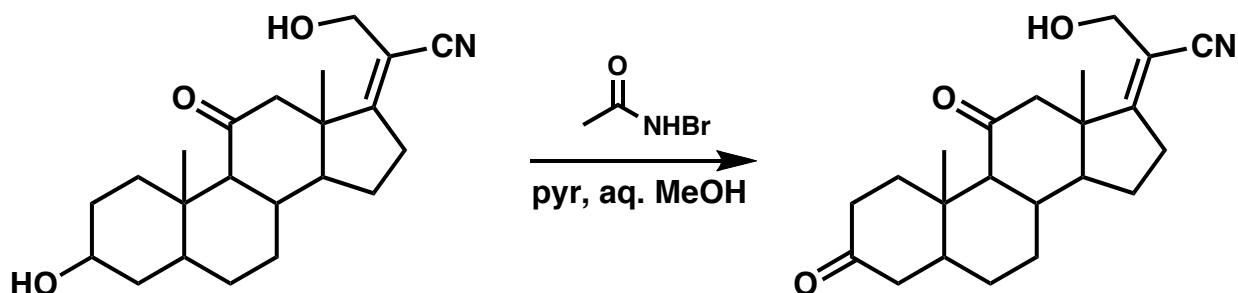
Halogen Reagents:



TL 1974, 15, 3059

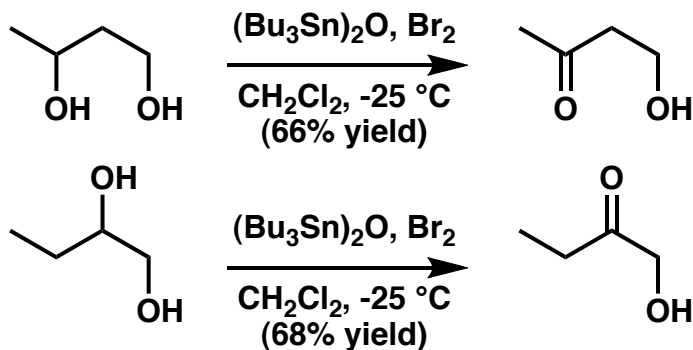


Synth 1976, 811



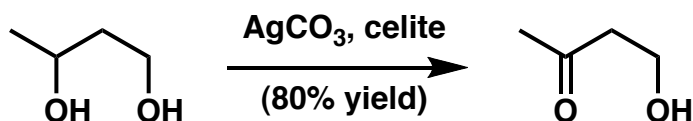
Note the selectivity over the allylic OH
JACS 1954, 76, 3682

Organotin Derivatives: (For a review of the regioselective manipulation of organotin derivatives, see *Tet* **1985**, *41*, 643.)



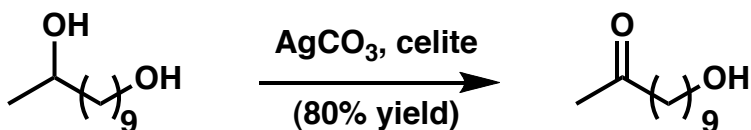
TL **1976**, *17*, 4597

Silver Carbonate (Ag_2CO_3): (Review of silver carbonate *Synth* **1979**, 401.)



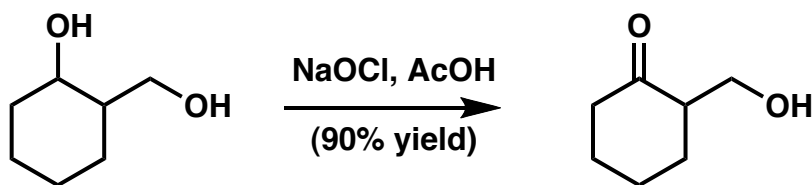
JCS CC **1969**, 1102

Alumina:



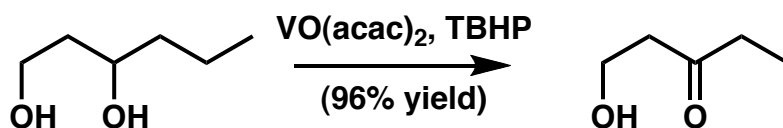
TL **1976**, *17*, 3499

NaOCl, Acetic Acid:



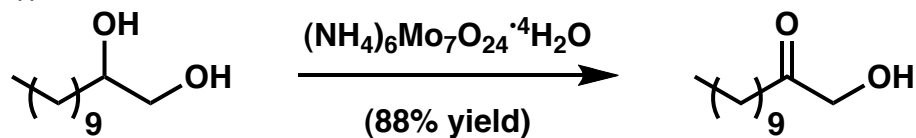
TL **1982**, *23*, 4647

Vanadium:



TL **1983**, *24*, 5009

Molybdenum:

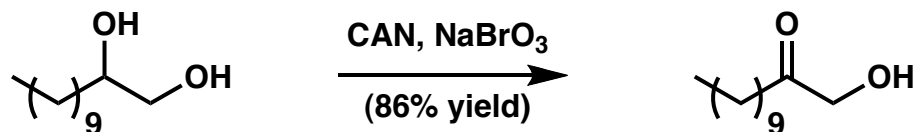


TL 1984,25, 173

TL 1984,25, 4417

Synth 1986, 59

Cerium:



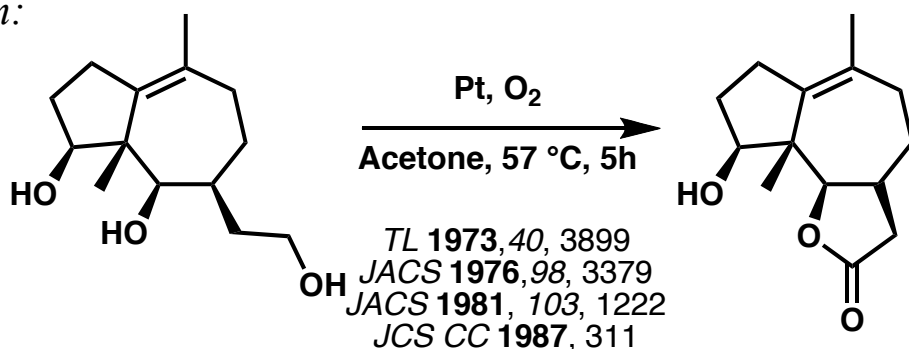
TL 1984,25, 173

TL 1984,25, 4417

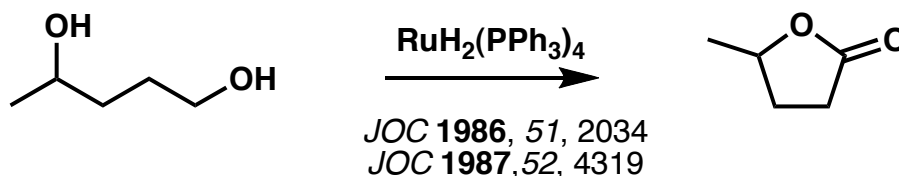
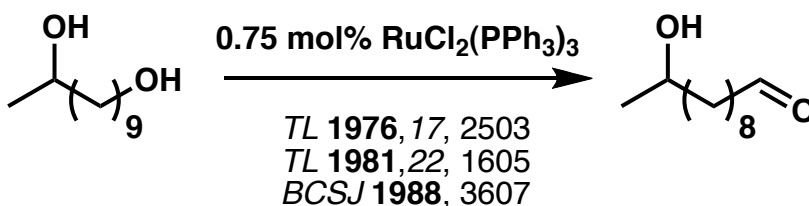
Synth 1986, 59

Oxidation of Primary Over Secondary Alcohols

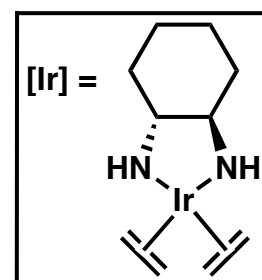
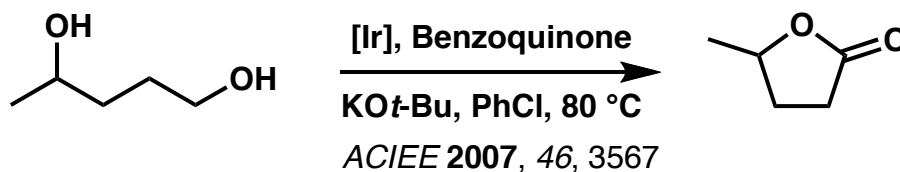
Platinum:



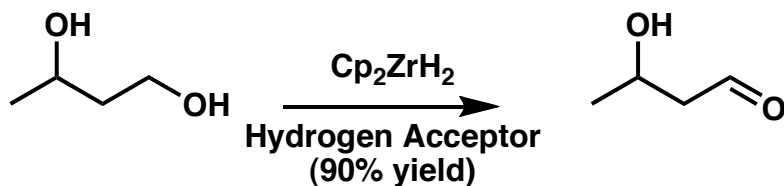
Ruthenium: (Note: Co-oxidants have been used so Ru can be catalytic.)



Iridium:

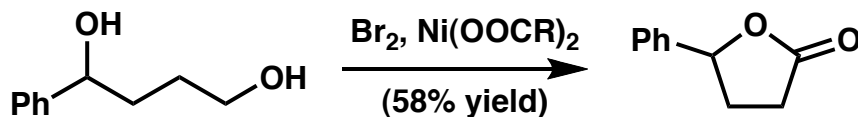


Zirconium:



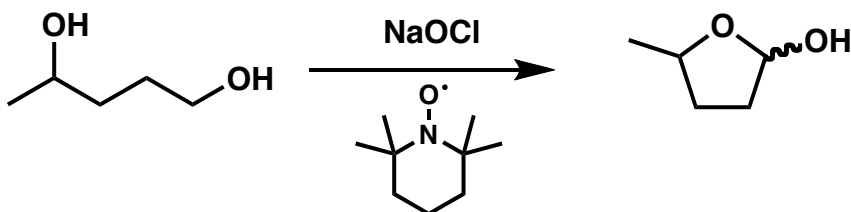
JOC 1986, 51, 240
Synth 1986, 774
JOC 1987, 52, 4855

Nickel:



JOC 1983, 48, 477
JOC 1981, 46, 4806

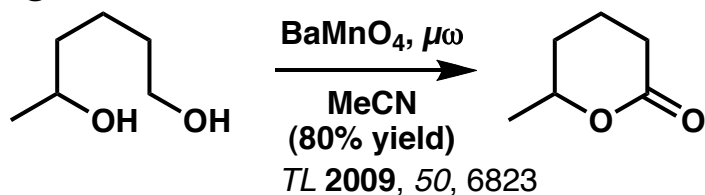
Nitrosonium Salts:



TL 1990, 31, 2177
TL 2006, 47, 8769

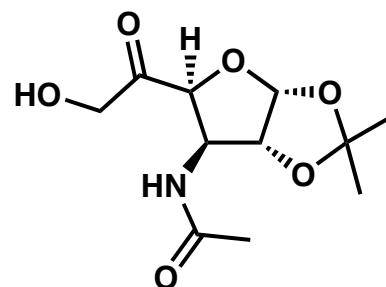
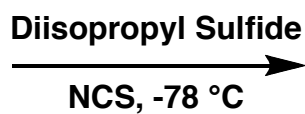
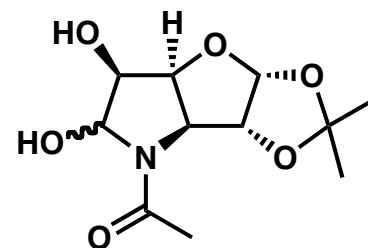
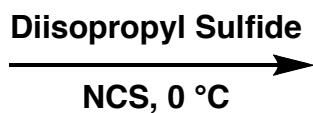
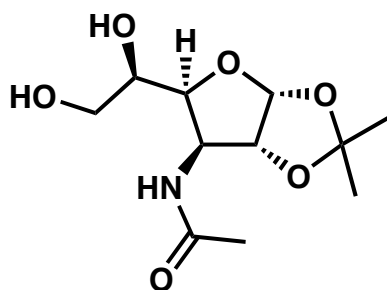
Variation: *JOC* 2009, 74, 4619

Barium Manganate:



Activated Sulfur:

(Note temperature dependance)



JCS CC 1984, 762