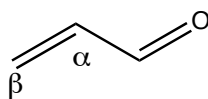


## Chem 345 – Organic Reactions Chapter 22

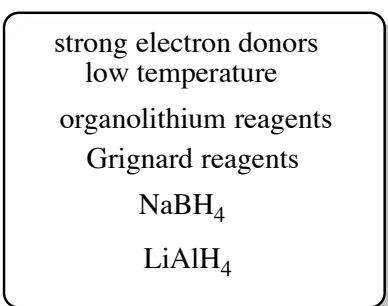
Prepared by José Laboy, MS

[http: www.chem.wisc.edu/areas/clc](http://www.chem.wisc.edu/areas/clc) (Resource page)

### Addition Reactions to $\alpha,\beta$ -Unsaturated Carbonyl Compounds



1,2-addition  
nucleophiles and reaction conditions



1,4-addition  
nucleophiles and reaction conditions

