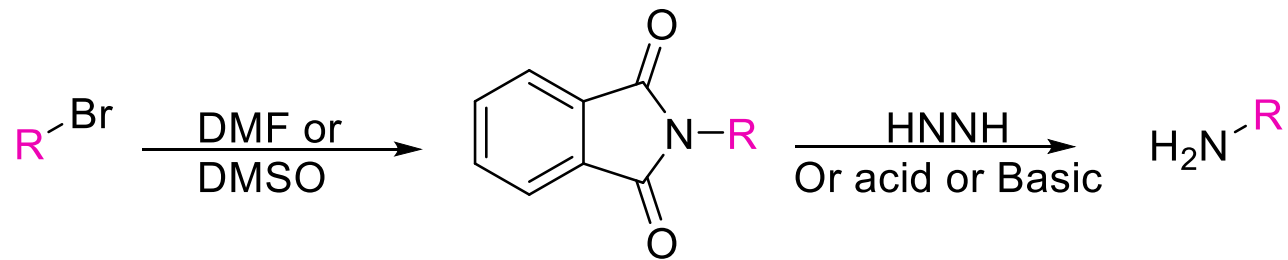
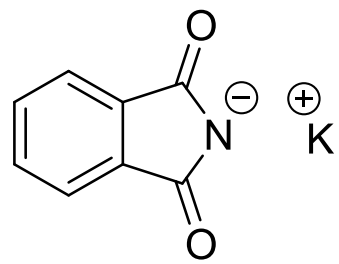


# Gabriel Synthesis

Ilse Welleman 7-10-2021

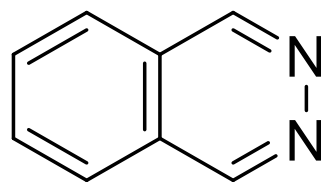


# Siegmund Gabriel

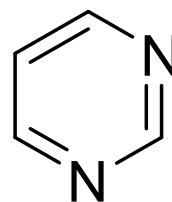
(7 November 1851 - 22 March 1924)



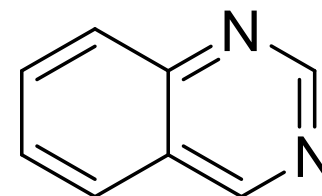
- Discovered the **Gabriel Synthesis** with his partner James Dornbush in 1887.
- He was the first to prepare phthalazine in 1893, pyrimidine in 1899 and in 1903 quinazoline. (with his students)



phthalazine

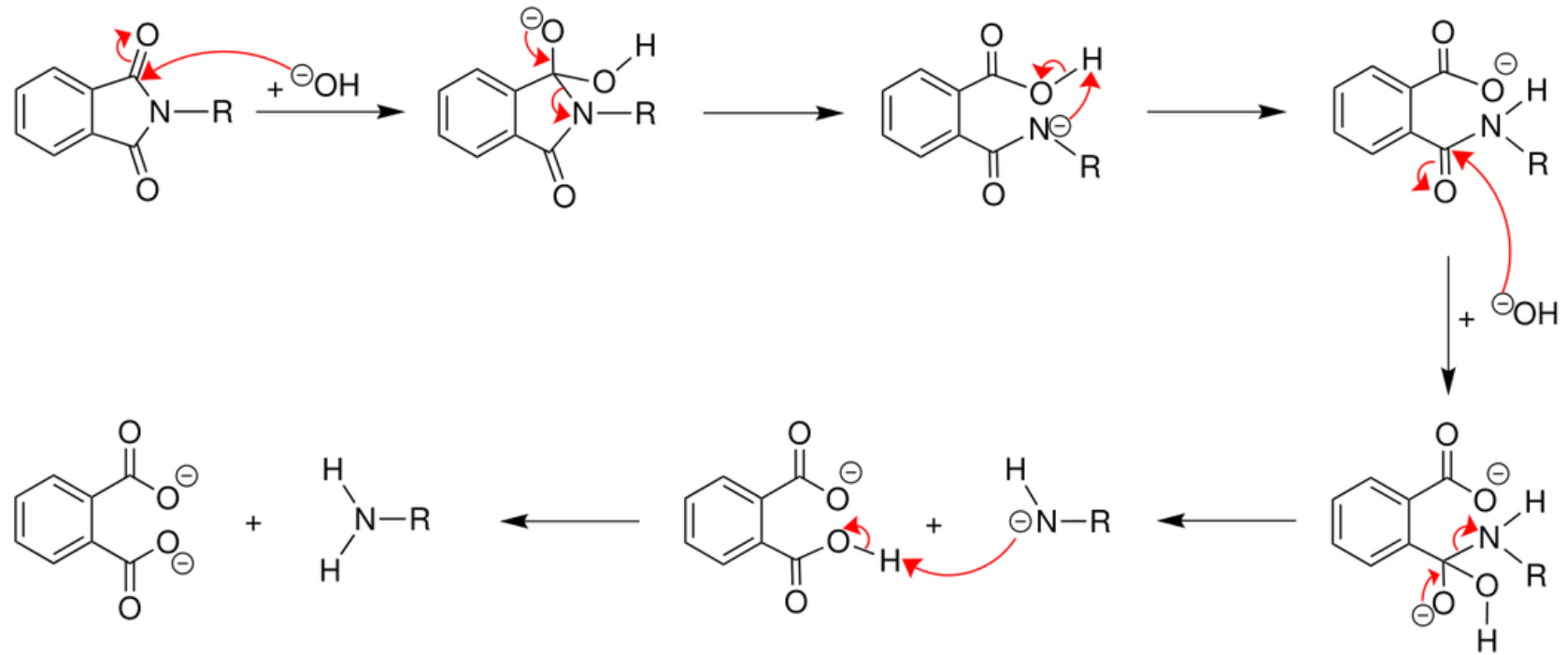
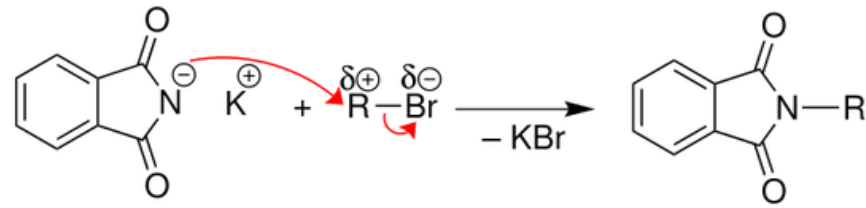


pyrimidine

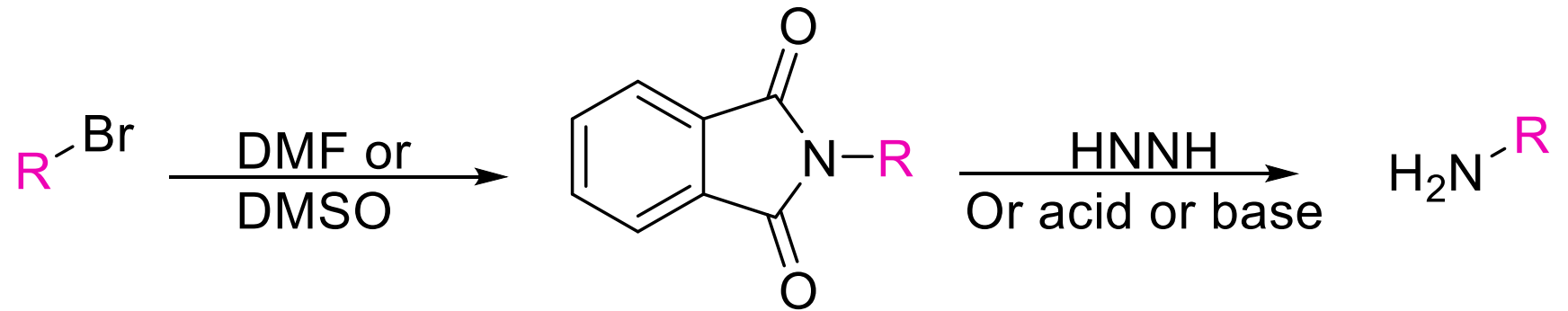
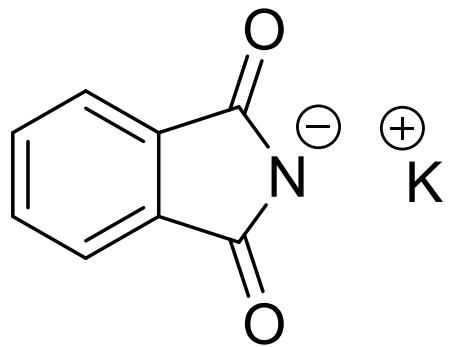
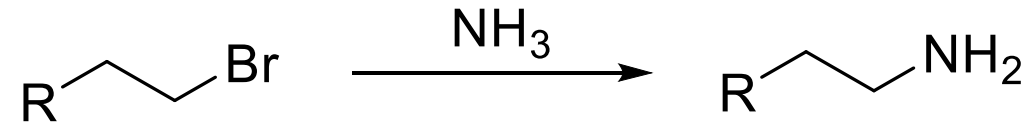


quinazoline

# Mechanism

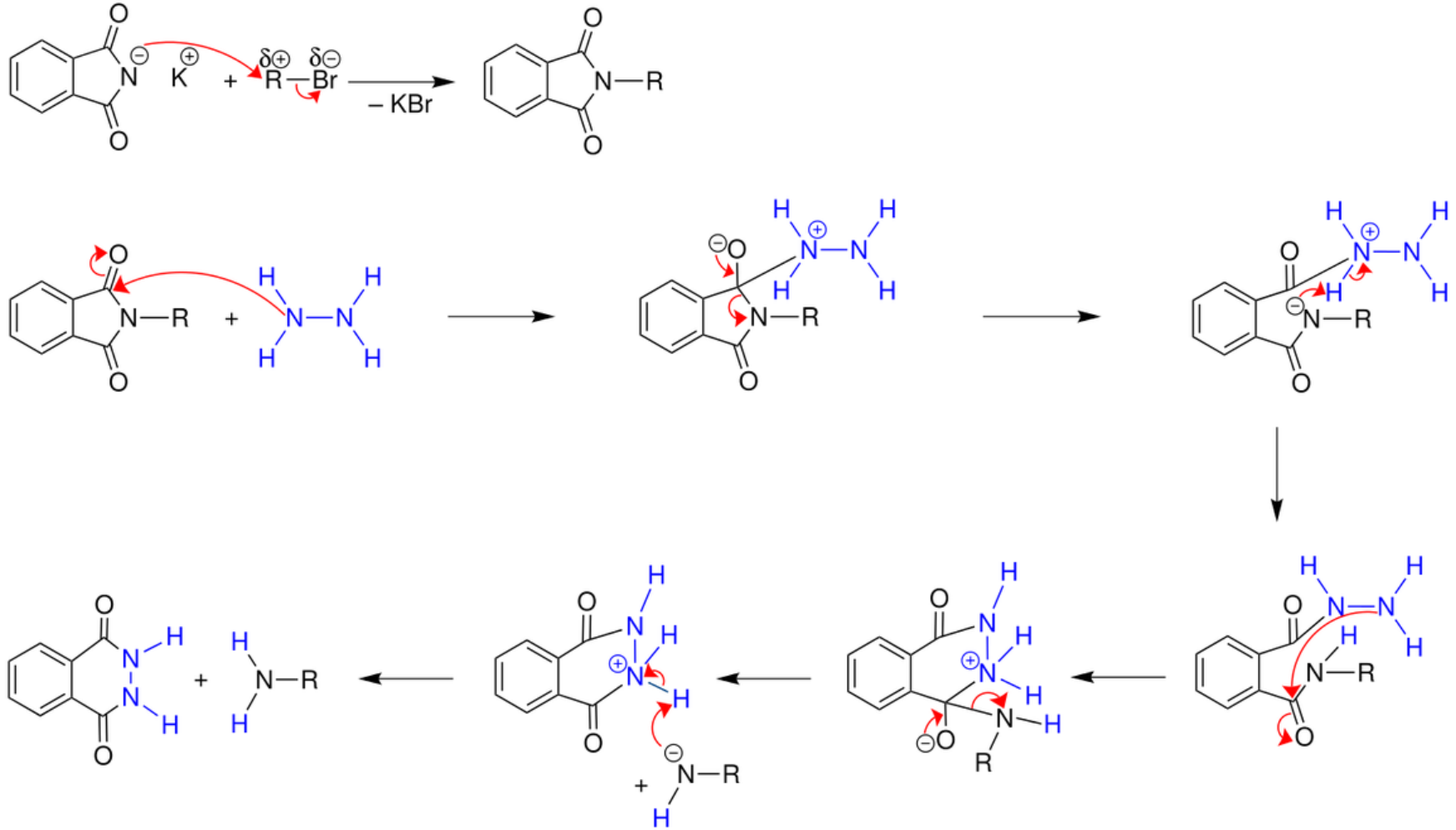


# So why is it use full ?

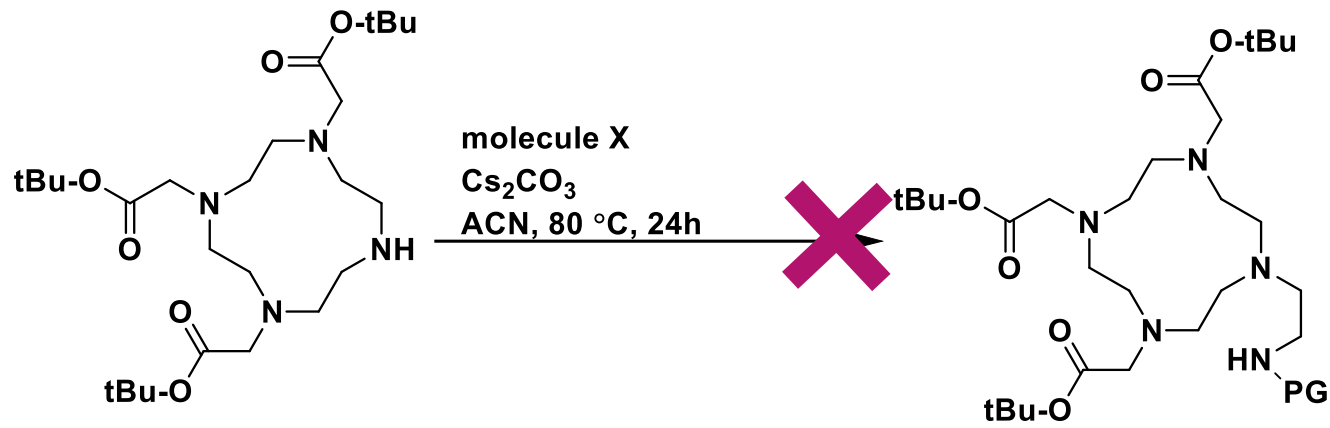


# Mechanism

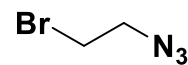
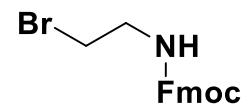
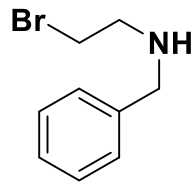
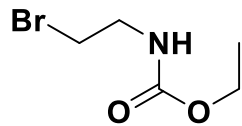
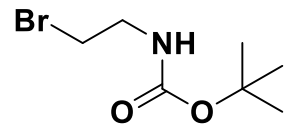
(Ing-Manske procedure)



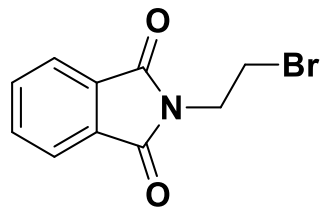
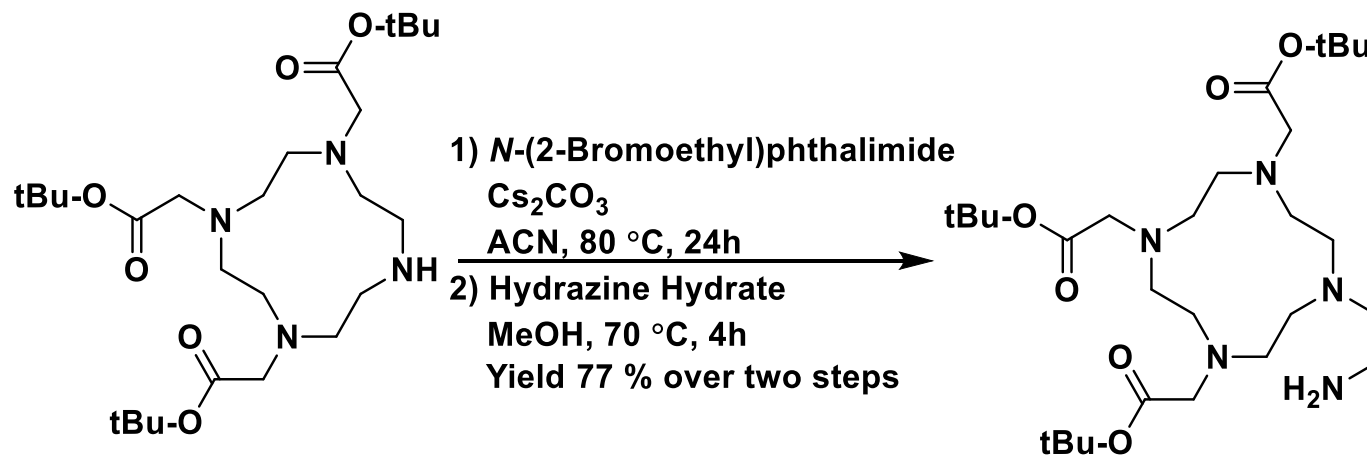
# An example of the use of the Gabriel synthesis



Molecule X:



# An example of the use of the Gabriel synthesis



*N*-(2-Bromoethyl)phthalimide

# Modified Gabriel synthesis

Use of Benzyl tert-butyl imidodicarbonate

