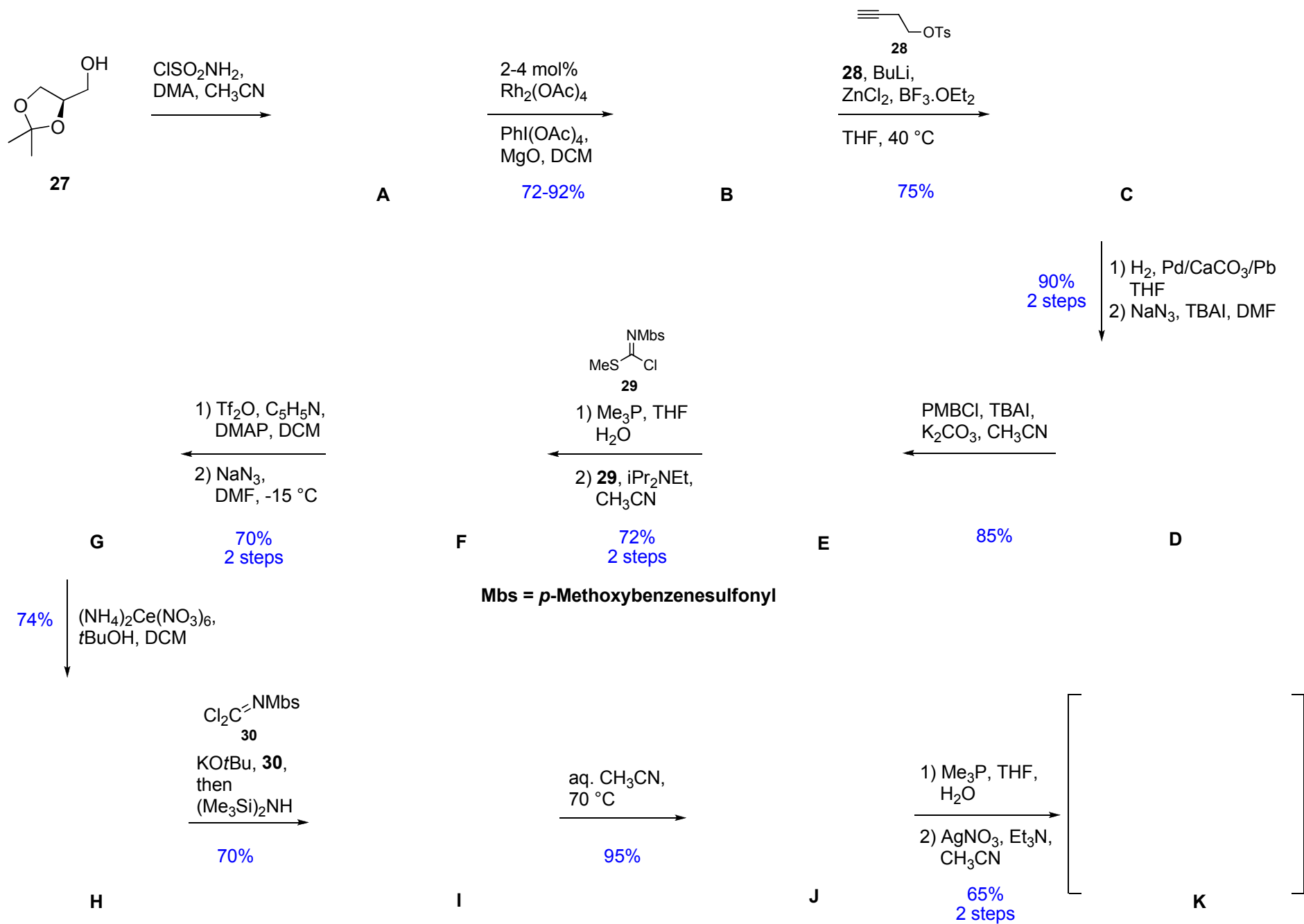
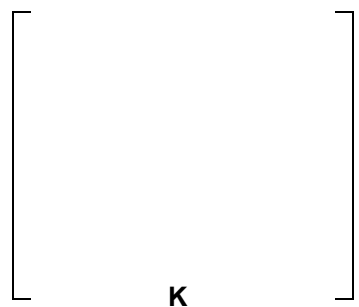


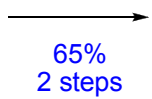
# A Synthesis of (+)-Saxitoxin

Du Bois, *J. Am. Chem. Soc.* **2006**, *128*, 3926-3927

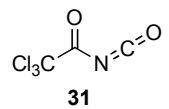




**K**



**L**



**31**, THF,  
CH<sub>3</sub>CN, -78 °C

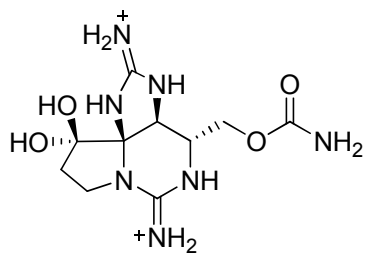
then K<sub>2</sub>CO<sub>3</sub>, MeOH

82%

**M**

57%

10 mol% OsCl<sub>3</sub>,  
Oxone, Na<sub>2</sub>CO<sub>3</sub>,  
EtOAc, CH<sub>3</sub>CN, H<sub>2</sub>O



(+)-Saxitoxin (1)

1) B(O<sub>2</sub>CCF<sub>3</sub>)<sub>3</sub>,  
CF<sub>3</sub>CO<sub>2</sub>H  
2) DCC, C<sub>5</sub>H<sub>5</sub>N,  
CF<sub>3</sub>CO<sub>2</sub>H, DMSO

57%  
2 steps

**O**

**N**