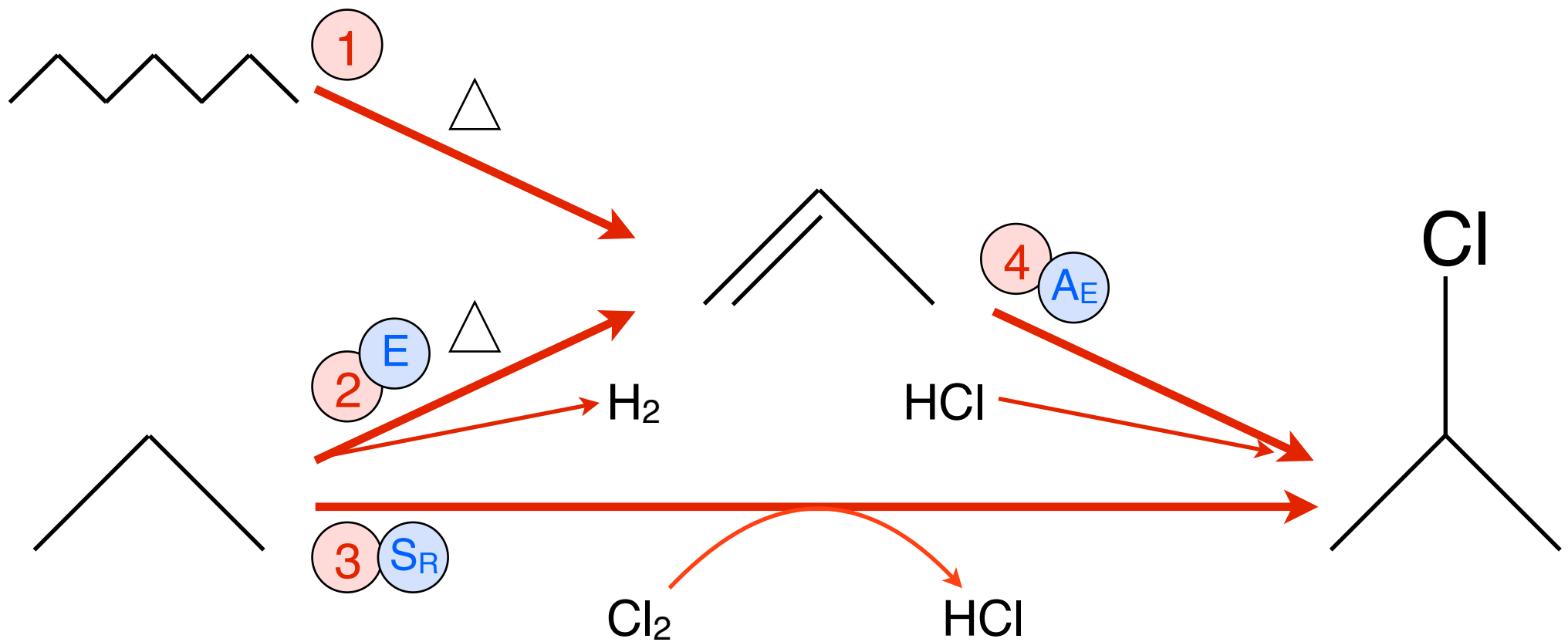


1 Steamcracken von längerkettigen Alkanen

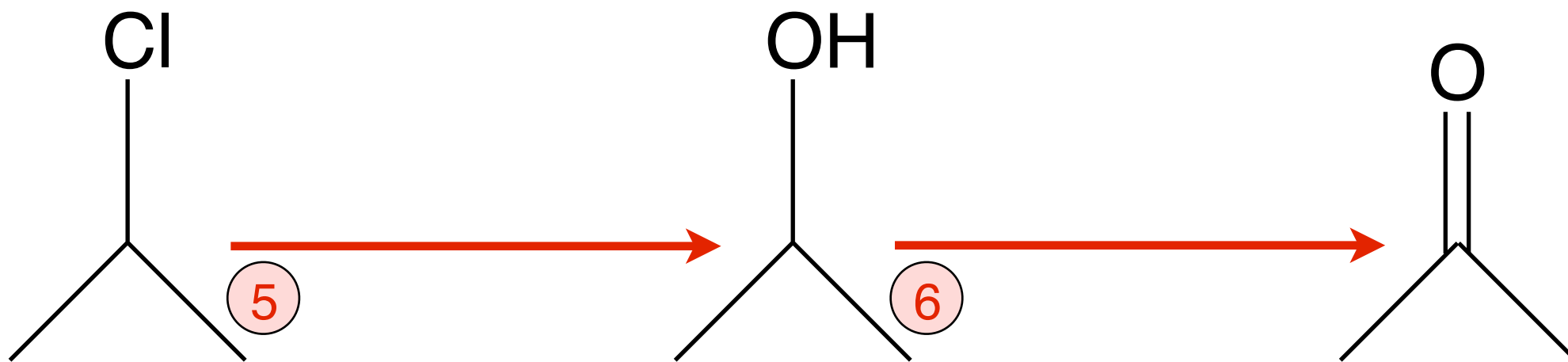
2 Dehydrierung von Propan ( )

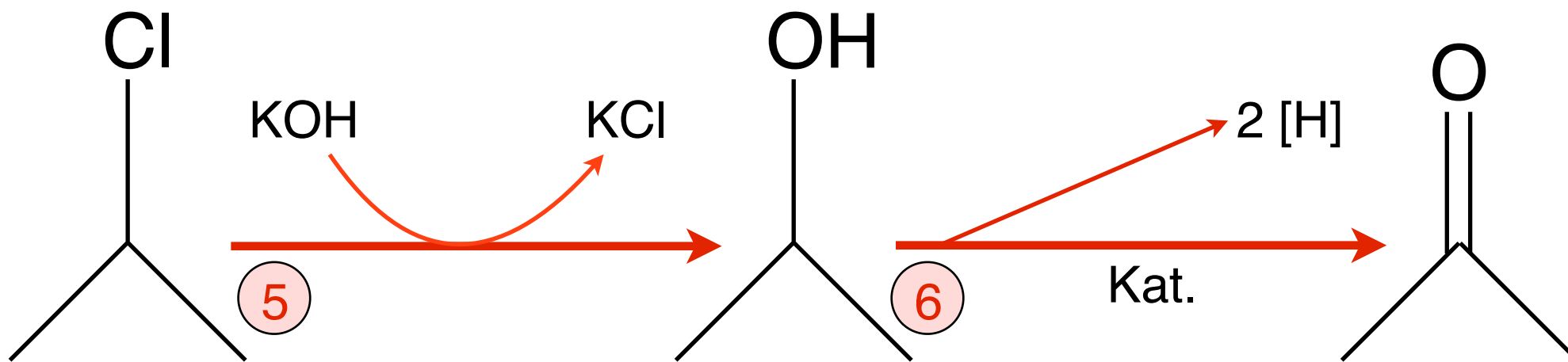
3 Chlorierung von Propan ( )

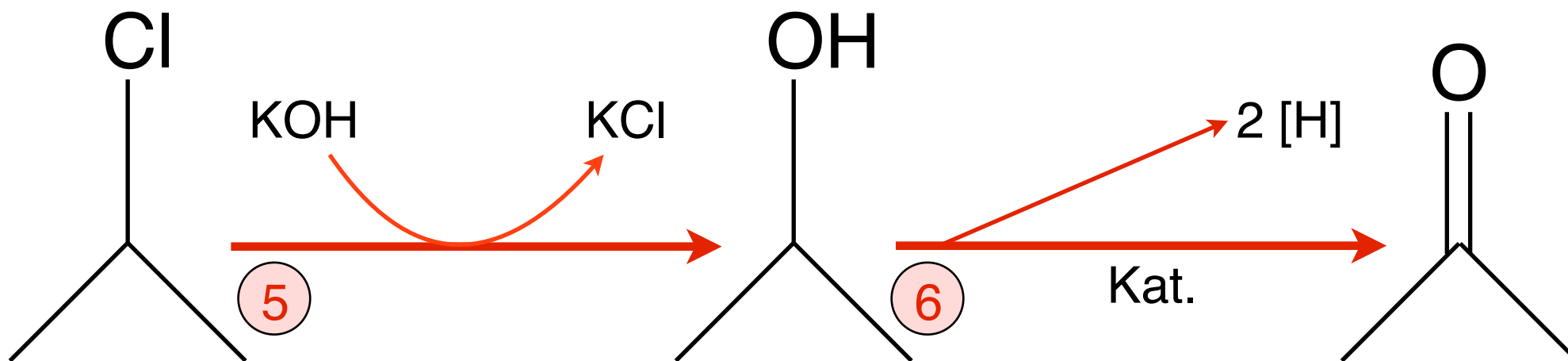
4 Hydrochlorierung von Propen ( )



- ① Steamcracken von längerkettigen Alkanen
- ② Dehydrierung von Propan ( **Eliminierung E** )
- ③ Chlorierung von Propan ( **Radikalische Substitution S<sub>R</sub>** )
- ④ Hydrochlorierung von Propen ( **Elektrophile Addition A<sub>E</sub>** )

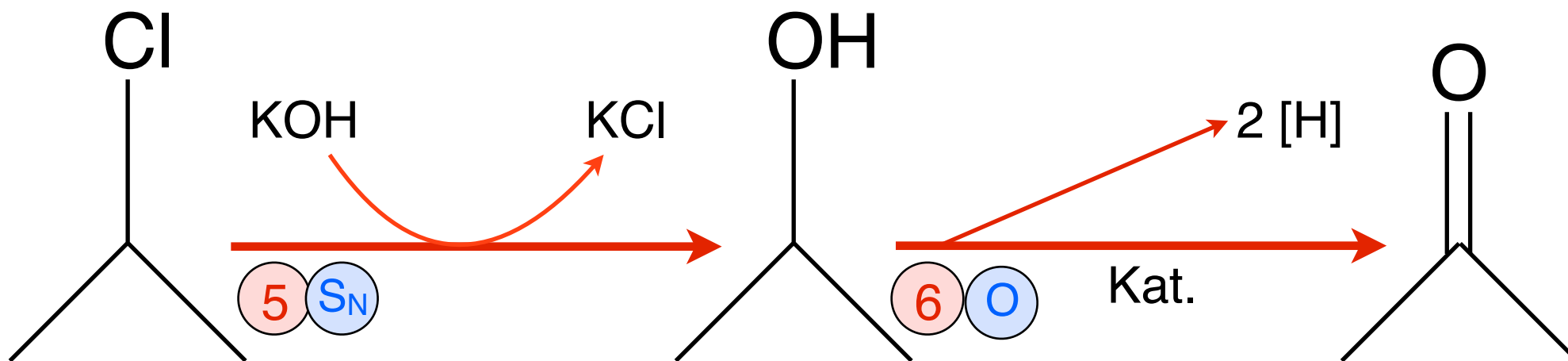






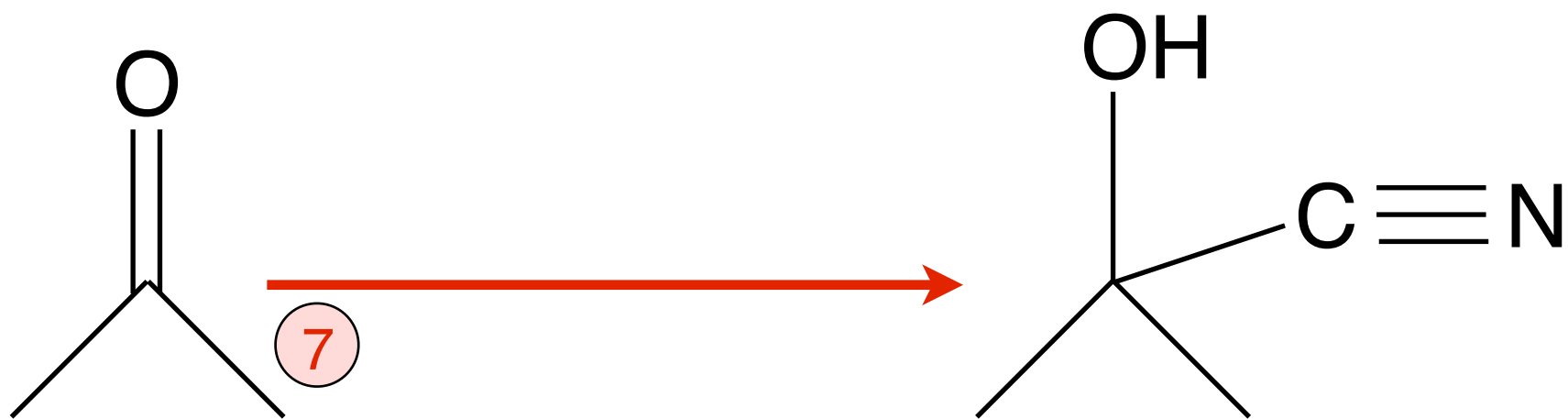
1 Reaktion mit Kalilauge ( )

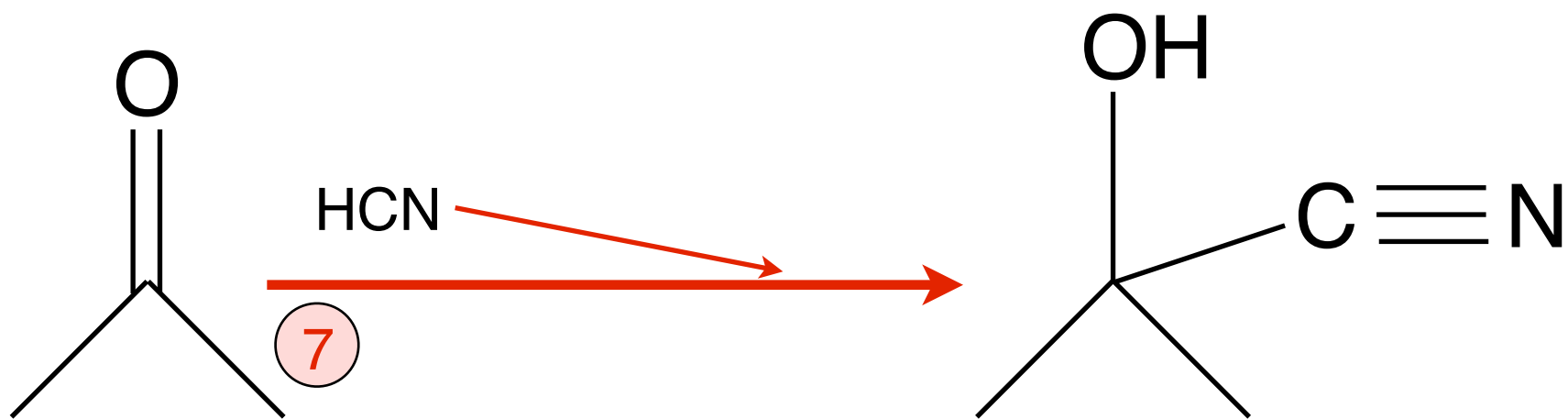
2 Katalytische Dehydrierung ( )

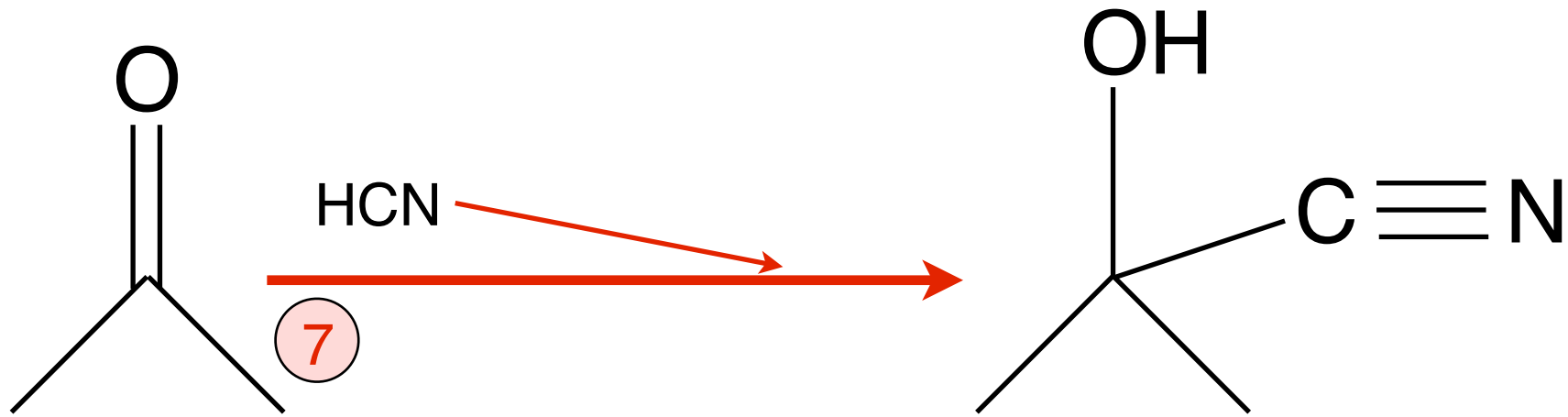


- 1 Reaktion mit Kalilauge ( Nucleophile Substitution S<sub>N</sub> )
- 2 Katalytische Dehydrierung ( Oxidation )

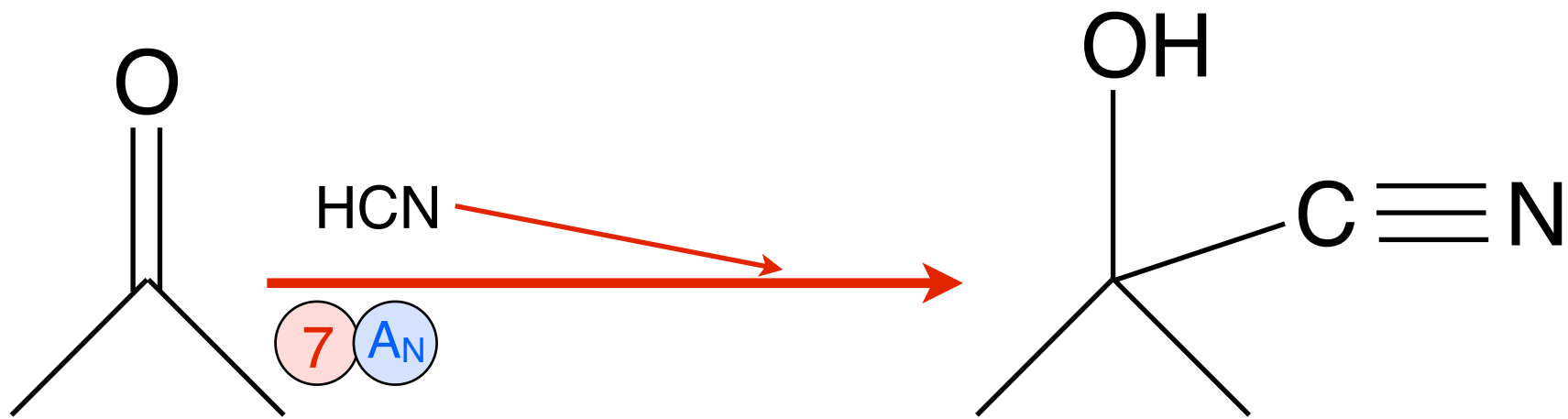




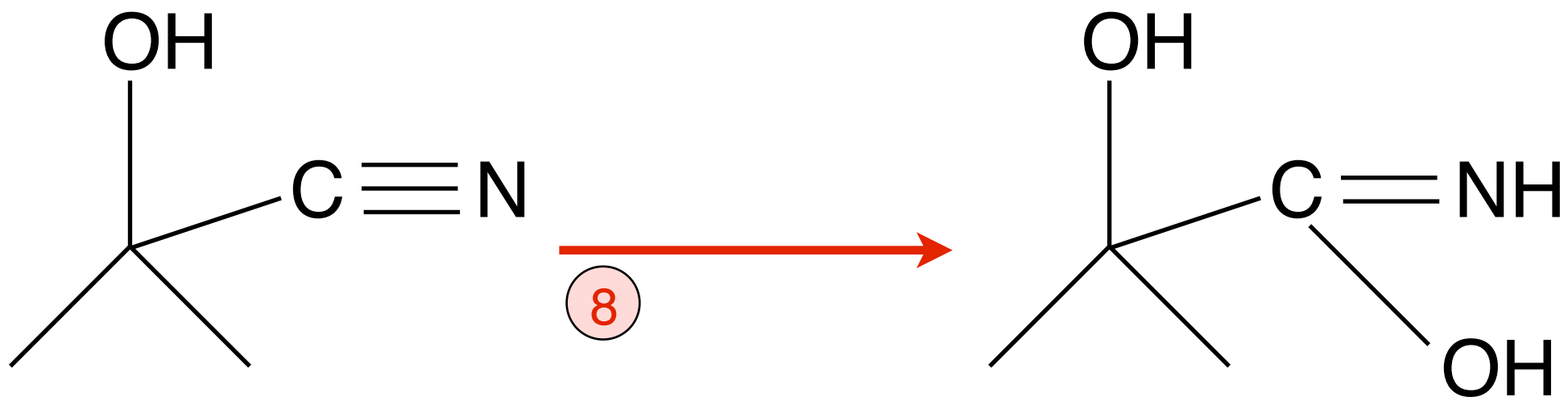


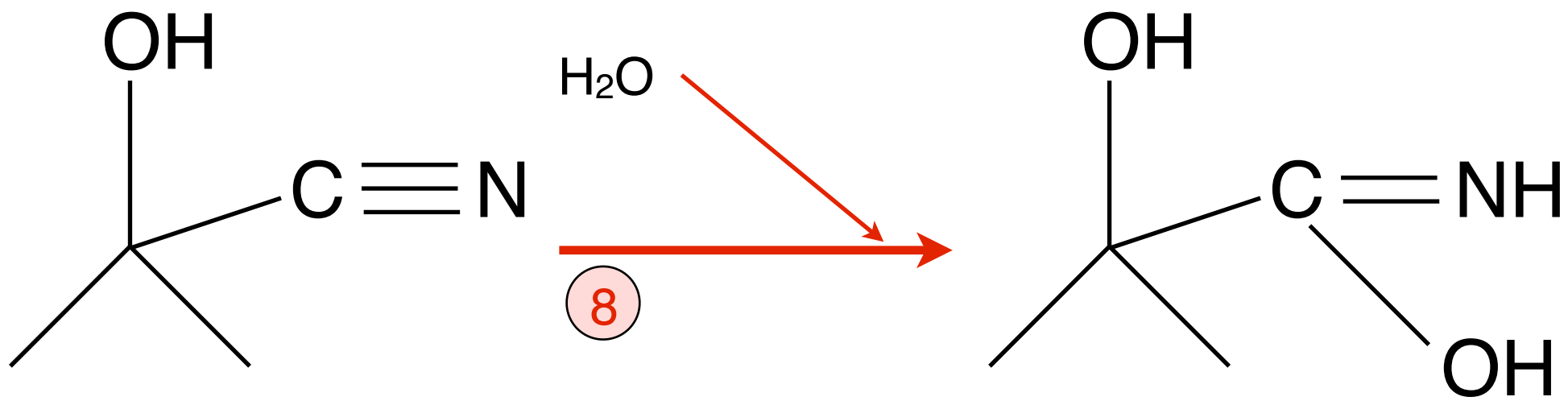


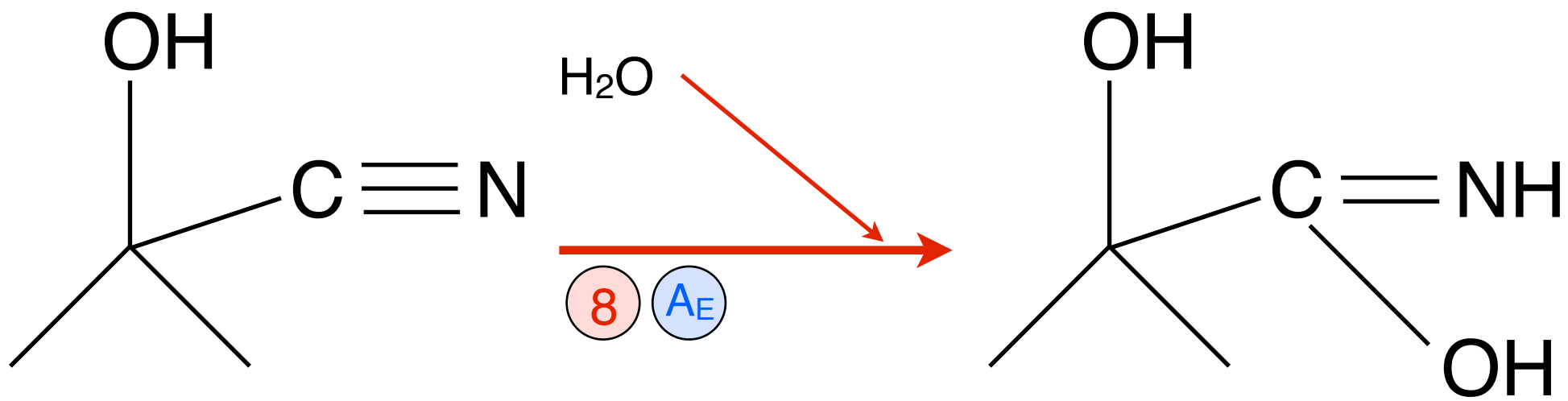
7 Reaktion mit Cyanwasserstoff ( )



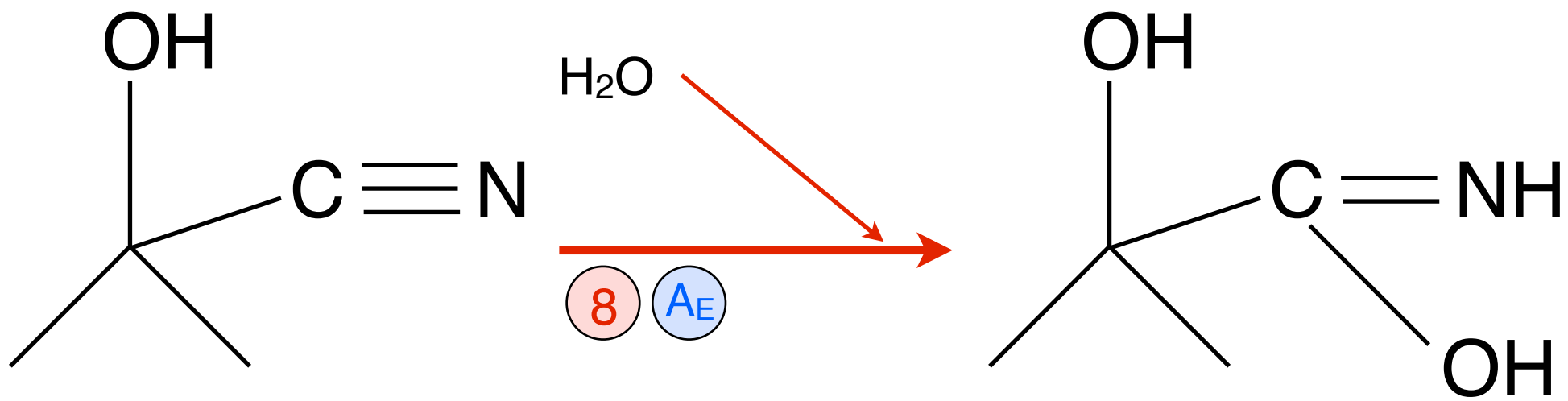
7 Reaktion mit Cyanwasserstoff ( Nucleophile Addition  $A_N$  )





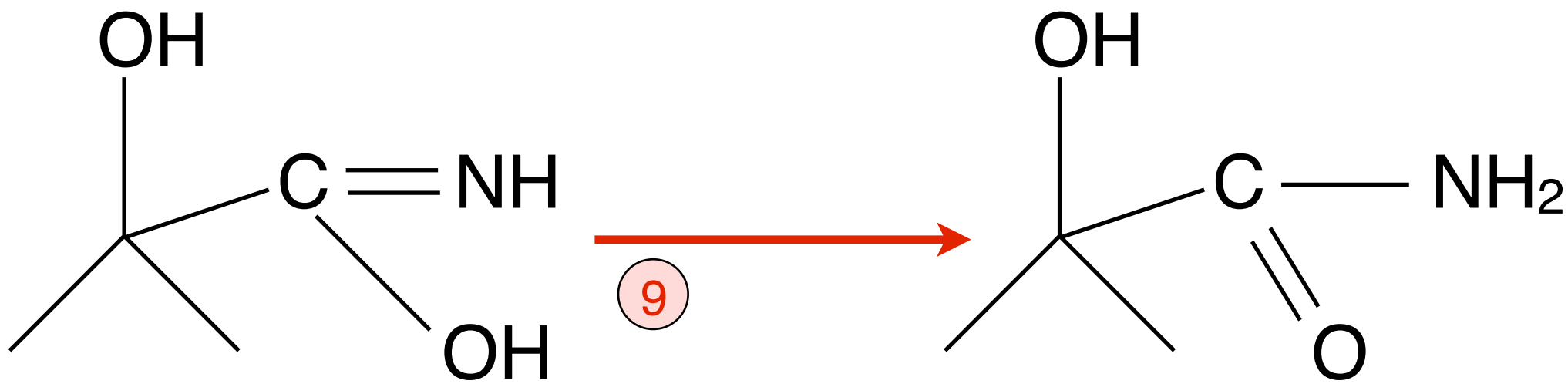


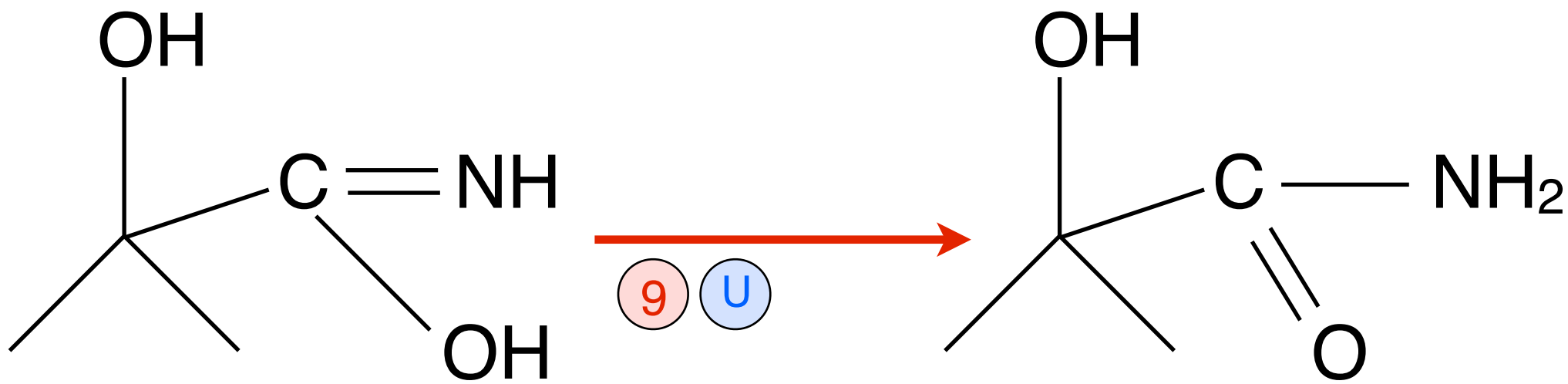
8 Addition von Wasser ( )



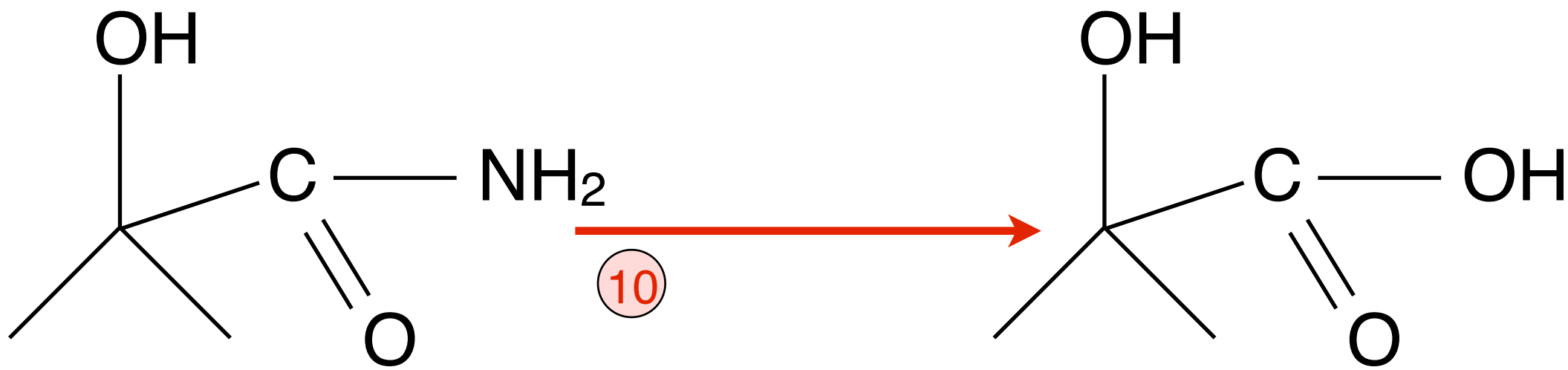
**8** Addition von Wasser ( **Elektrophile Addition  $\text{A}_E$**  )

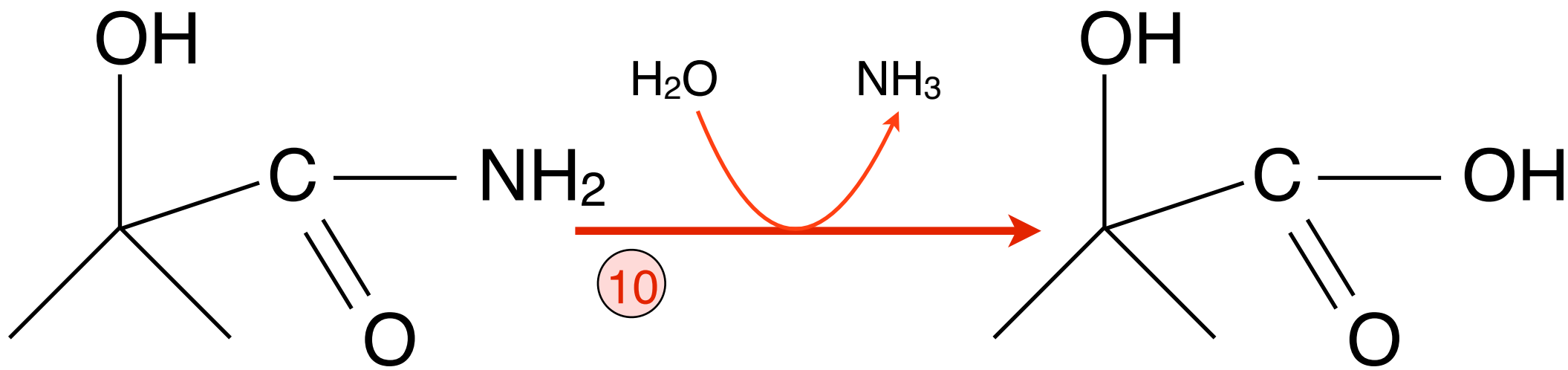


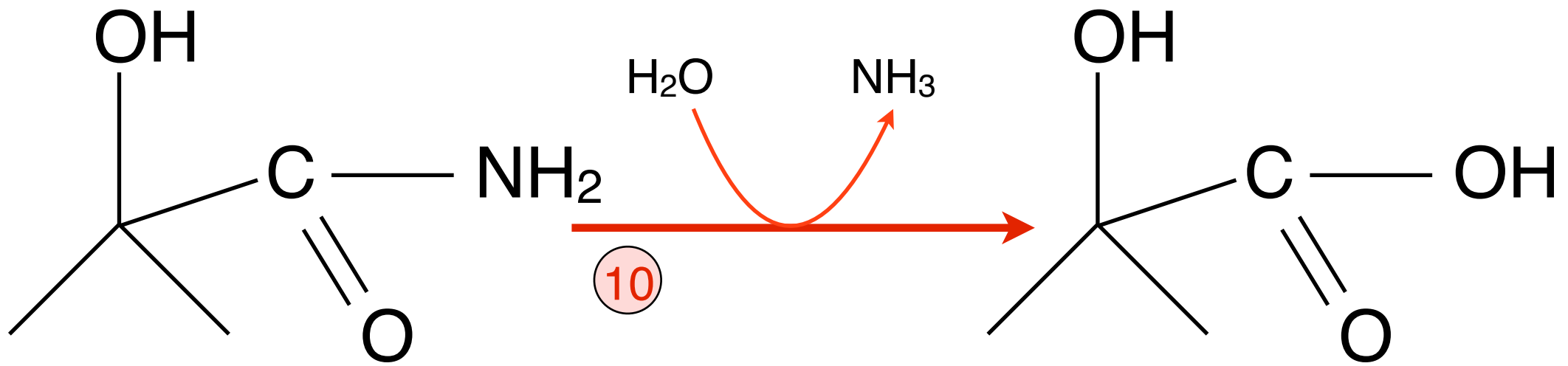




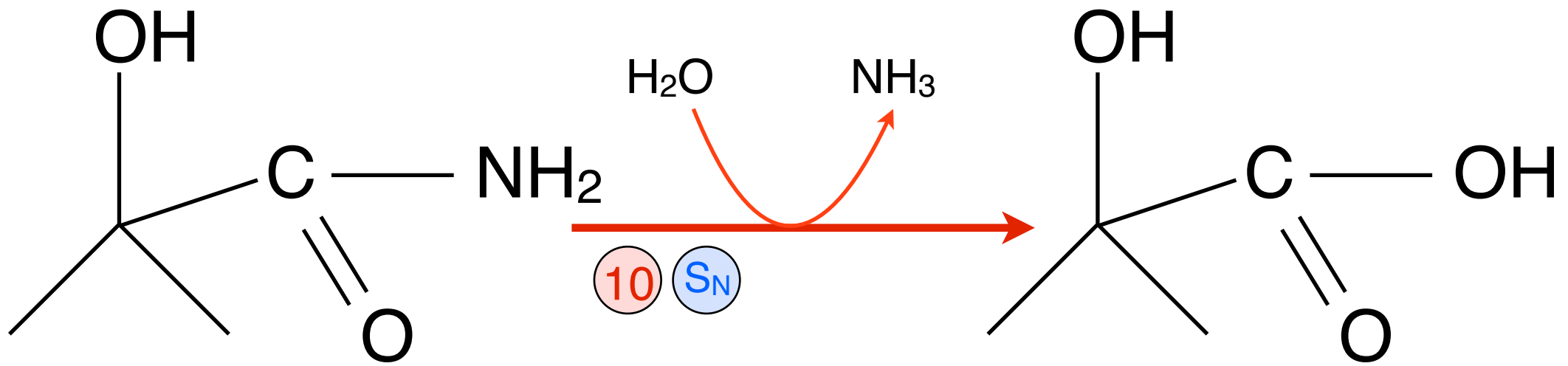
9 Umlagerung eines instabilen Zwischenproduktes



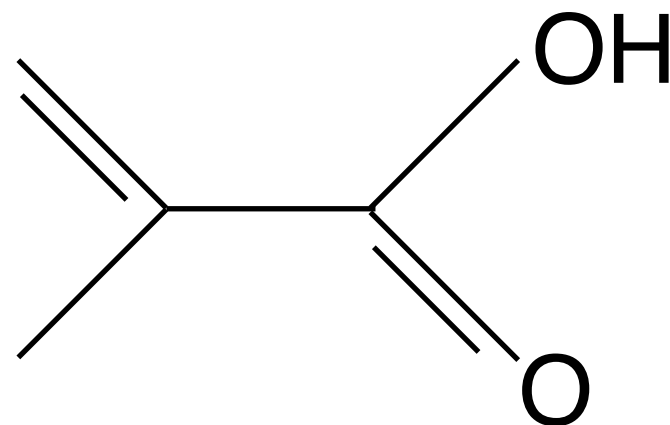
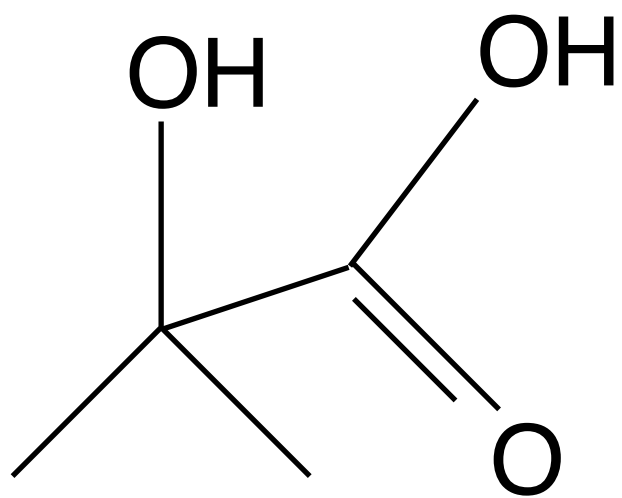


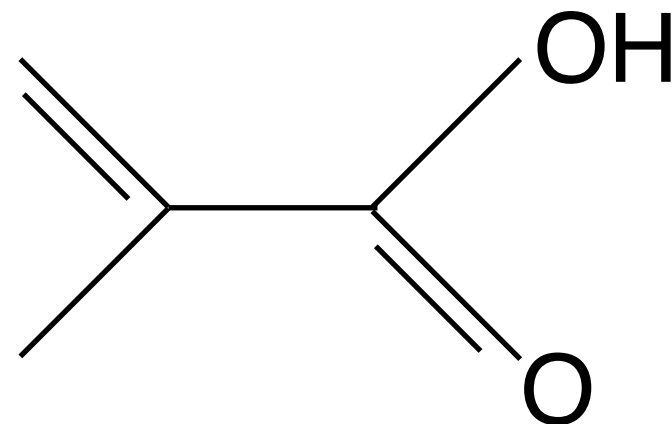
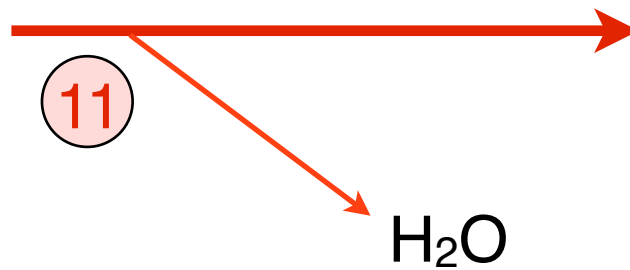
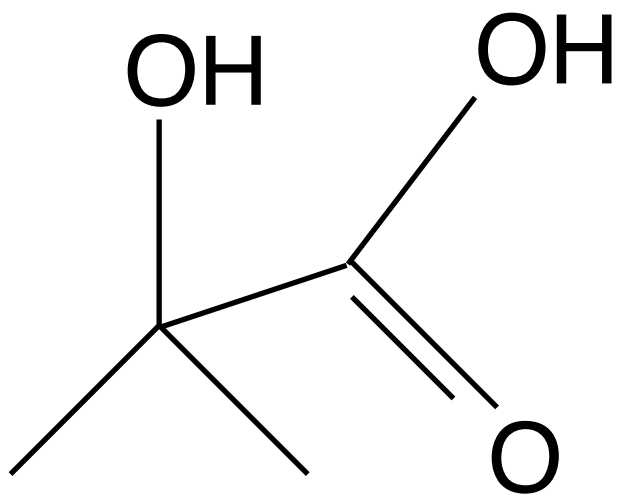


10 -NH<sub>2</sub> wird durch -OH ersetzt ( )

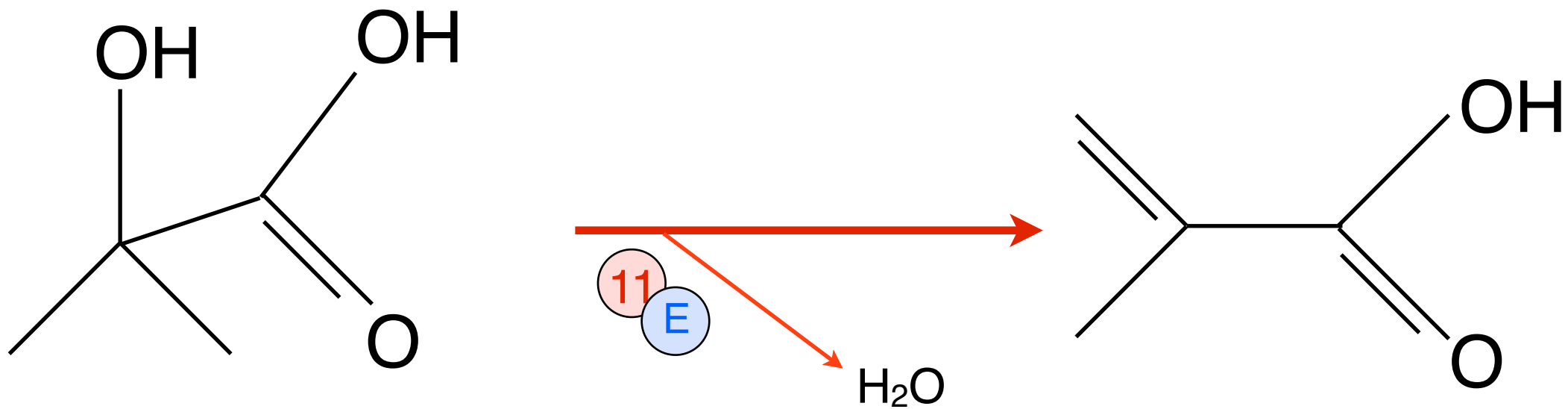


10 -NH<sub>2</sub> wird durch -OH ersetzt ( Nucleophile Substitution S<sub>N</sub> )

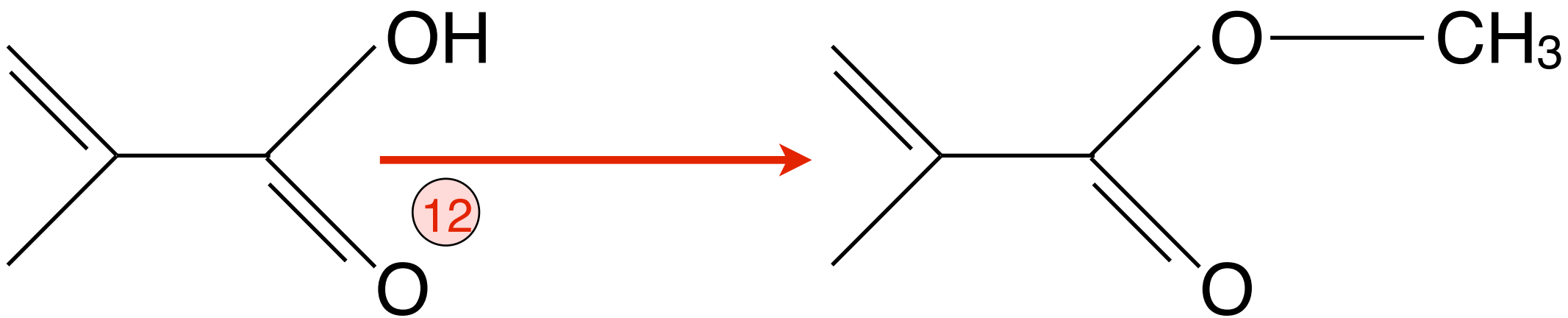


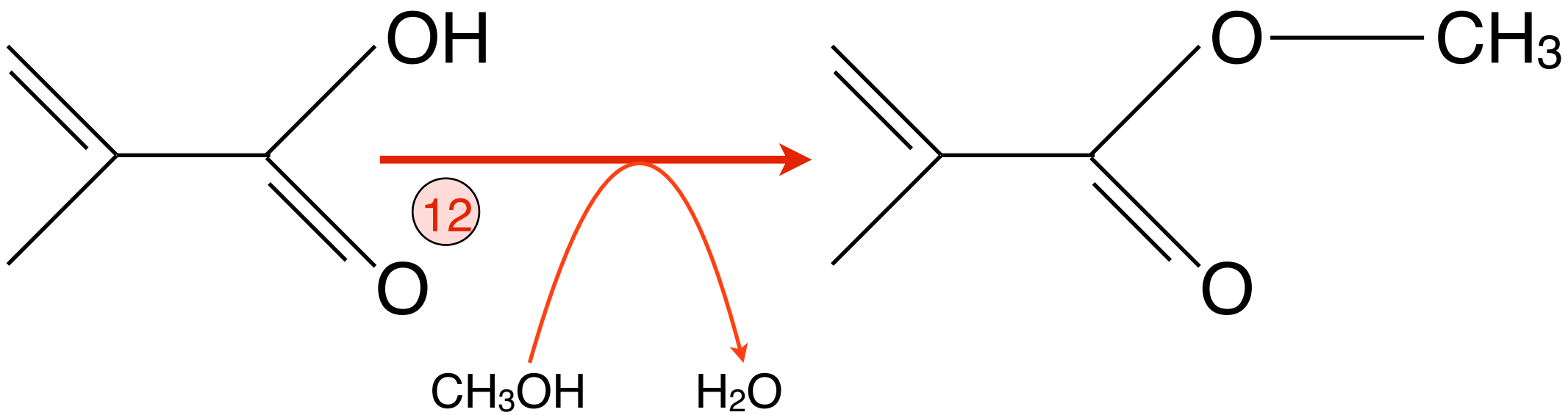


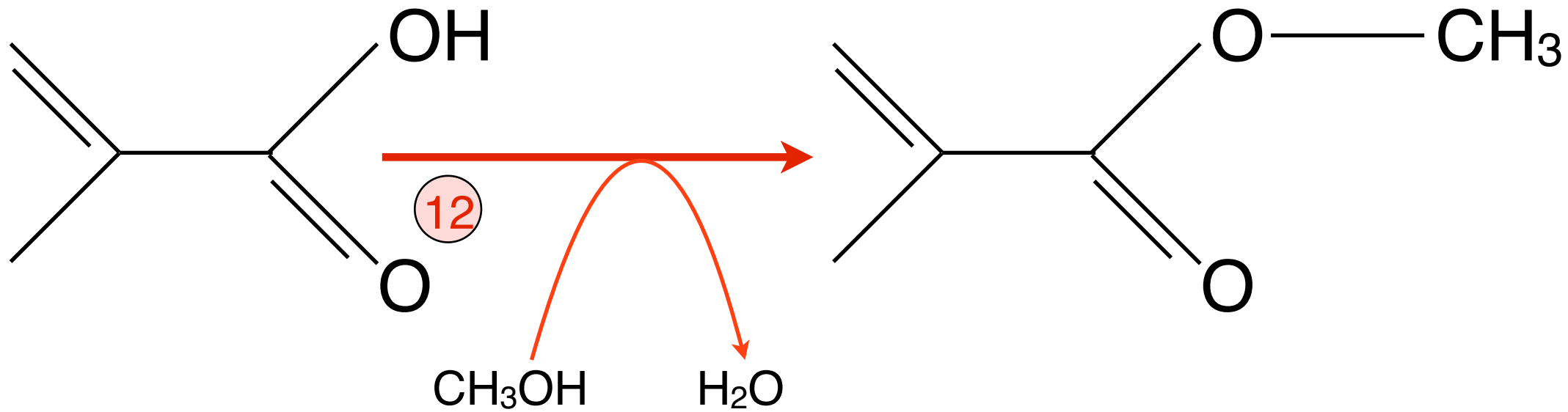




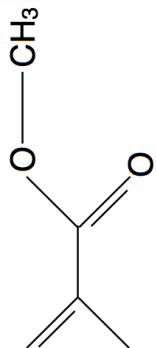
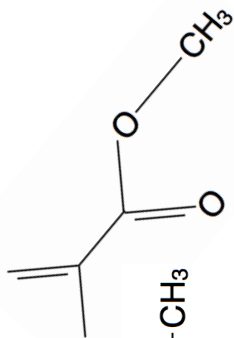
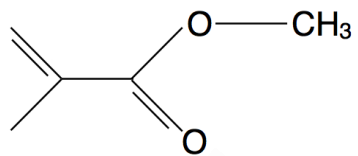
11 Dehydratisierung ( **Eliminierung E** )



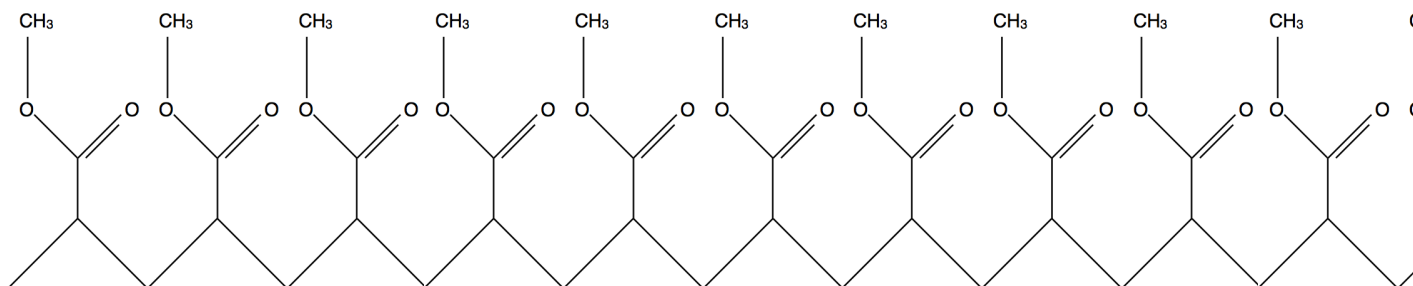


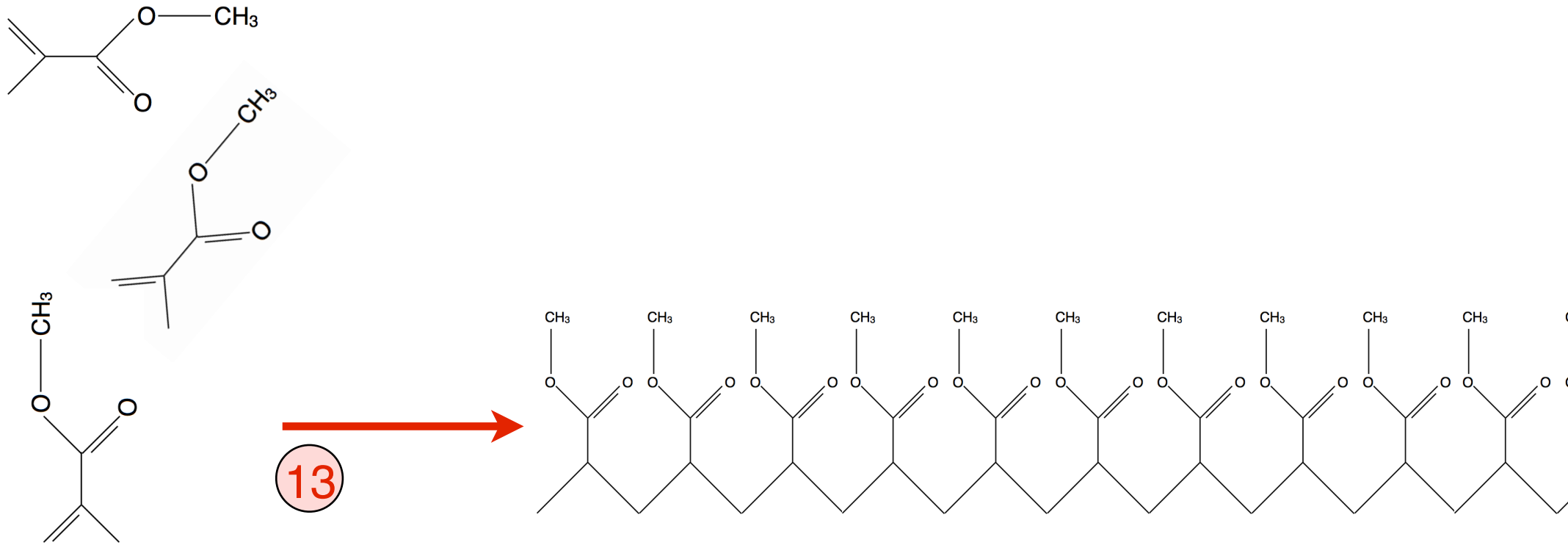


12 Veresterung ( komplexe Reaktion, mehrere Schritte )



13





**13** Polymerisation ( **Radikalische Polymerisation** )