CONCEPT: TYPES OF LEAVING GROUPS

Leaving Groups: Alkyl halides are the most common leaving groups of organic chemistry, but there are others.

□ Sulfonate Esters are the name given to a group of leaving groups with the general formula -SO₃R

Where
$$R =$$
 $CH_3 = Tosyl \text{ (tosylate)}$
 $Ts \text{ (-OTs)}$

Where $R =$
 $CH_3 = Mesyl \text{ (mesylate)}$
 $Ms \text{ (-OMs)}$

Sulfonate Ester

General Structure

Where $R =$
 $CH_3 = Tosyl \text{ (tosylate)}$
 $Ts \text{ (-OTf)}$

□ Water is also a common leaving group, usually formed after alcohol is *protonated* with a strong acid