Release of Trifluoroacetate from Hexafluoroacetone Hydrate

$$\begin{array}{c|c} \text{HO} & \text{OH} & \text{base} \\ \hline \textbf{F}_3\textbf{C} & \text{CF}_3 \end{array} \xrightarrow{\text{base}} \left[ \begin{array}{c} \circ \textbf{O} & \circ \\ \textbf{F}_3\textbf{C} & \text{CF}_3 \end{array} \right] \longrightarrow \quad \textbf{F}_3\textbf{C}^{\odot} \ + \quad \textbf{CF}_3\textbf{CO}_2^{\odot}$$

J. Org. Chem. 1968, 33, 2100-2102

Release of Trifluoroacetate to Generate  $\alpha, \alpha$ -Difluoroenolates

OHO OH
$$R \xrightarrow{\text{CF}_3} \text{CF}_3 \xrightarrow{\text{base}} \left[ \begin{array}{c} O \circ O \circ \\ R \xrightarrow{\text{F}} F \end{array} \right] \xrightarrow{R} F + CF_3CO_2^{\circ}$$

$$R = \text{alkyl, aryl} \qquad \alpha, \alpha \text{-diffluoroenolate}$$

J. Am. Chem. Soc. 2011, 133, 5802-5805

Release of Fluoroform to Generate Difluoroacetic Acids