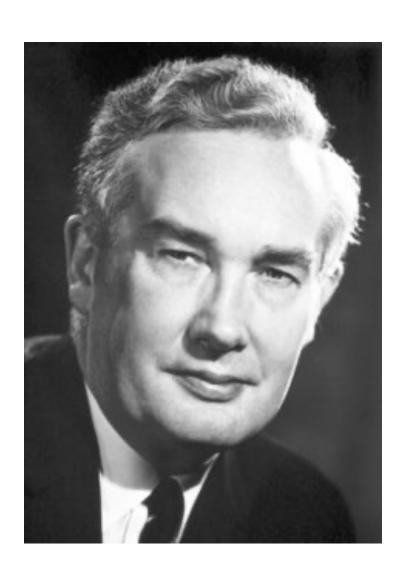
# Barton Nitrite Ester Reaction (Barton Reaction)

HO 
$$C R$$
  $NOCI, pyr$   $ON-O C R$   $H_2$   $hv$   $HO R$   $R$   $\gamma$ -Hydroxy oxime

Veronica O'Connor

Synthesis Club September 29<sup>th</sup>, 2021

### Sir Derek Barton



Jointly awarded the Nobel Prize in Chemistry in 1969 "for their contributions to the development of the concept of conformation and its application in chemistry."

## Reaction and Mechanism

HO 
$$C_R$$
 NOCI, pyr ON-O  $C_R$  Ho  $R$  HO  $R$  HO  $R$  nitrite ester  $\gamma$ -Hydroxy oxime

# Synthetic Applications

#### Konoike, T.; Takahashi, K.; Araki, Y.; Horibe, I. 1997:

#### Corey, E.; Hahl, R. 1989:

## Selectivity Issues

#### Sejbal, J.; Klinot, J.; Vystrčil, A. 1988: