Propose a mechanism for the following transformations:

1) Tf$_2$O, 2-fluoropyridine,   2) K-selectride
CH$_2$Cl$_2$, 0°C, 12h   then H$_2$O

1) Li (6 eq.), EtNH$_2$ 4) O$_3$, thiourea
2) IBX, DMSO, rt   CH$_2$Cl$_2$, −78°C to rt
3) NaClO$_2$, tBuOH   5) AcOH (cat.) CH$_2$Cl$_2$,
NaH$_2$PO$_4$ PDC

$\left[E \right]$
C$_{21}$H$_{36}$O$_3$Si

$\left[F \right]$
C$_{21}$H$_{34}$O$_5$Si
^{1}H NMR 5.88 (s, 1H)...