1. Kerrigan, the Queen of Blades, needs many nitriles for reasons. Propose a mechanism for the following transformation to assist her:

$$\begin{array}{c|c}
\hline \\ = | = \\
\hline EDG
\end{array}$$
R
$$\begin{array}{c|c}
NIS, TMS-N_3 \\
\hline = | = \\
\hline EDG$$

$$\begin{array}{c|c}
\hline = | = \\
\hline EDG
\end{array}$$
NIS, TMS-N₃

2. Darkstalker Kaathe shows you this relatively simple transformation. He suggests you provide an explanation/model for the high diastereo- and enantioselectivity before ending the Age of Fire.

Cat. VIII: