1. Dead Cthulhu, awakened at last from his (semi-)eternal slumber, demands a plausible mechanism for the following transformation. Ph'nglui mglw'nafh Cthulhu R'lyeh wgah'nagl fhtagn.

EWG = RC(O), ROC(O), RNHC(O), CN

2. King Leoric, undead Lord of Khanduras, desires the living to explain themselves (and this reaction mechanism, include diastereoselectivity).

$$O = CH_2N_2, \qquad CI = O$$

$$CI = CI$$

$$O =$$