Chem 128/228 Problem set 8

1.

How? Hint: think 'fragmentation' Total synthesis of hinesol ... J.A. Marshall & W.T. Brady, *TL*, **1969**, 1387

2. Account for the following sequence. Provide a detailed mechanism for the fragmentation, paying particular attention to stereochemistry and to providing an accurate stereochemical rendering.

J.A. Marshall & W.T. Brady, *JACS*, **1966**, 4291

3. Draw the product of a thermally promoted [1,3]C~ si of syn-7-methylbicyclo[2.2.1]hep-2-ene. Do the same for the "sr" mode. Formulate a cyclic array for each. Which correspondes to a Möbius array? Which is allowed?