## **Group Meeting Questions**

1) How would you convert this bromoaldehyde chemoselectively into the two products shown?

2) The following is a general reaction for the formation of pyrroles. In this condensation, any of the three reaction constituents may be widely varied. (Ono, "The Nitro Group in Organic Synthesis" Wiley-VCH, 2001. Chapter 10, pp 326-328).

Provide a plausible mechanism for this transformation.

$$Me$$
 $NO_2$ 
 $NH_3$ 
 $Me$ 
 $NH_3$ 
 $NH_3$ 

3). The oxidation of acetals by electrophilic ozone is known to be sensitive to structure. Two striking examples of different reactivity are detailed in the questions below.

Using clear three-dimensional drawings provide a rationale for the observation that rigid glycoside **A** readily undergoes oxidation but glycoside **B** does not. Be sure to indicate all relevant stereoelectronic interactions.

Deslongchamps, Can. J. Chem. 1974, 3651-3664.