

1. OXIDATION*

1*. Read the paper written by Zhao, M. M., Li, J., Mano, E., Song, Z. J., Tschaen, D. M. from *Org. Synth.* **2005**, 81,195 (DOI:10.15227/orgsyn.081.0195) and discuss: (a) safety warnings/cautions, (b) limitations and advantages of the procedure described by the authors. Present the catalytic cycle for the TEMPO/NaOCl catalyzed oxidation.

2*. Read the paper written by Boeckman, Jr., R. K., Shao, P., Mullins, J. J. from *Org. Synth.* **2000**, 77,141 (DOI:10.15227/orgsyn.077.0141) and discuss: (a) safety warnings/cautions, (b) limitations and advantages of the Dess-Martin periodinane (DMP) oxidation, in particular the advantages of DMP over chromium(VI)- and DMSO-based oxidants.