

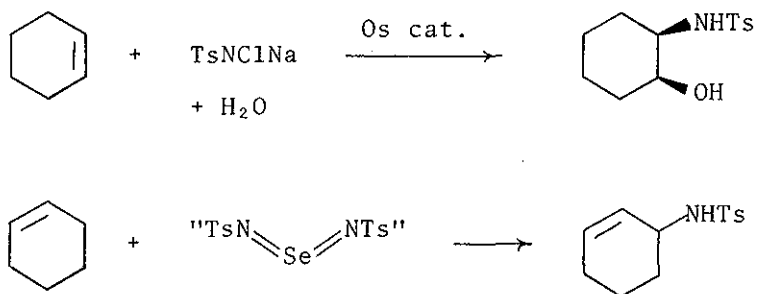
METAL CATALYSIS IN THE SYNTHESIS OF HETEROCYCLES

K. Barry Sharpless

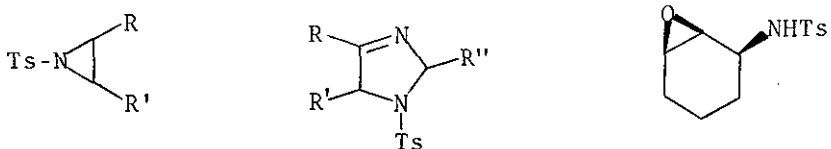
Department of Chemistry  
 Massachusetts Institute of Technology  
 Cambridge, Massachusetts 02139 USA

Olefins can now be readily transformed to vicinal hydroxy-sulfonamides<sup>1</sup> and allylic sulfonamides<sup>2</sup>:

e.g.



The conversion of these derivatives to heterocycles such as those shown below will be described.<sup>3</sup>



### References

1. K. B. Sharpless, A. O. Chong and K. Oshima, J. Org. Chem., 41, 177 (1976).
2. (a) K. B. Sharpless, T. Hori, L. K. Truesdale and C. O. Dietrich, J. Amer. Chem. Soc., 98, 269 (1976); (b) K. B. Sharpless and T. Hori, J. Org. Chem., 41, 176 (1976).
3. J.-E. Bäckvall, K. Oshima and R. E. Palermo, unpublished results.