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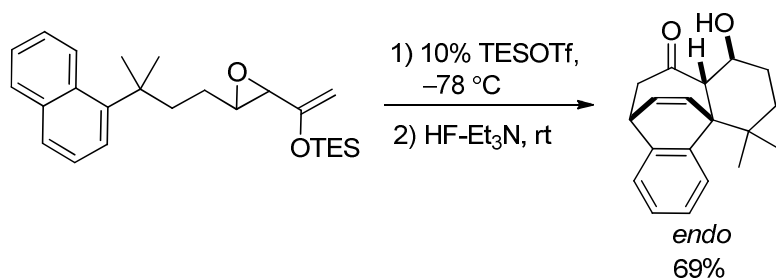
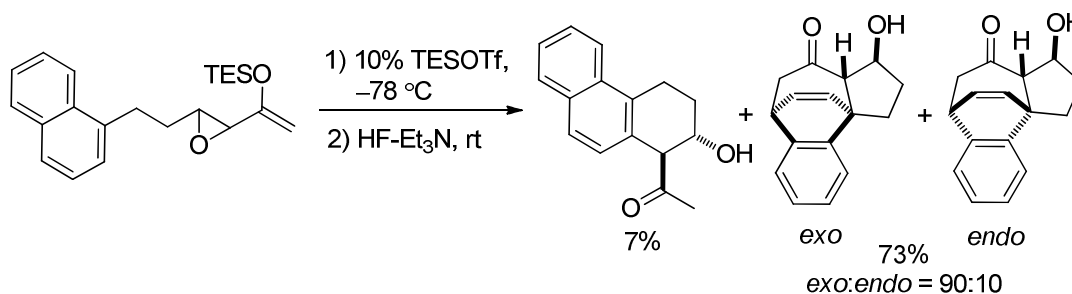
Dearomatizing (4+3) cycloadditions of arenes with epoxy and aziridinyl enolsilanes

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Epoxy and aziridinyl enolsilanes react as dienophiles in (4+3) cycloadditions with conventional dienes such as furan and cyclopentadiene, to generate 7-membered rings in high yields and with good stereoselectivity.<sup>[1]</sup>

Recently, we extended the scope of this cycloaddition to carbocyclic aromatics, which are generally not very reactive as dienes, and whose chemistry typically results in restoration of aromaticity. While Friedel-Crafts type of reactions also occur,<sup>[2]</sup> (4+3) cycloadditions with arenes are surprisingly general, and concomitantly dearomatizes them to afford polycyclic olefins, which could be useful intermediates for synthesis.



References

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