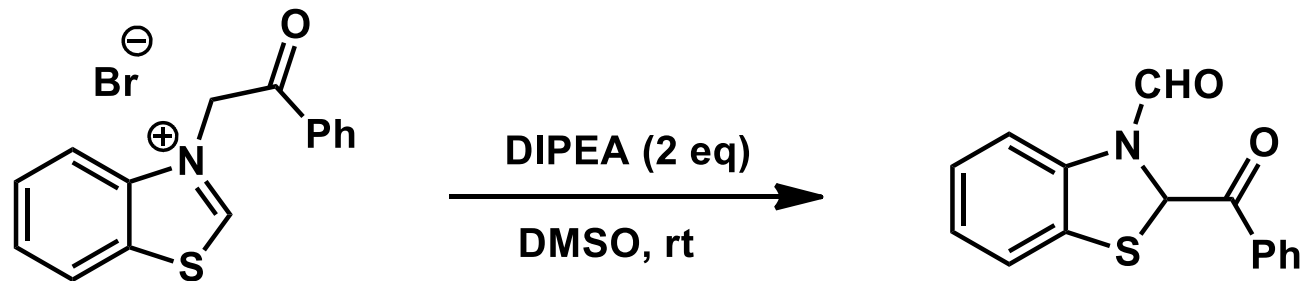
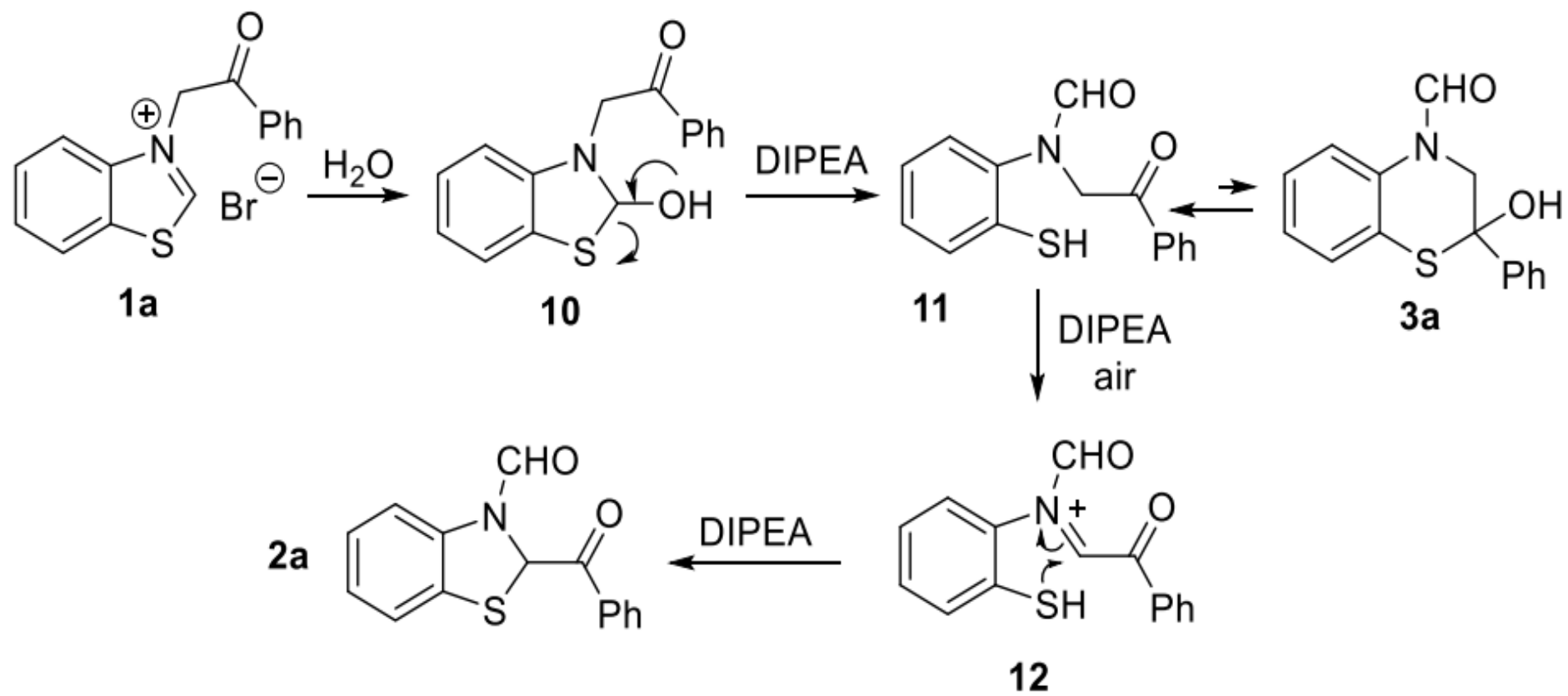


1.

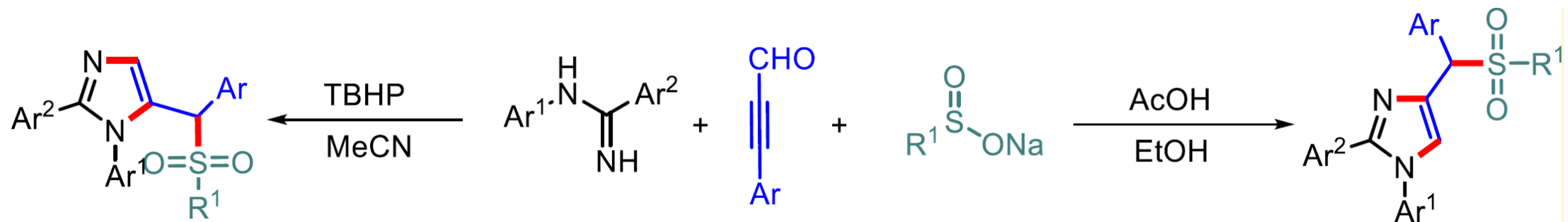


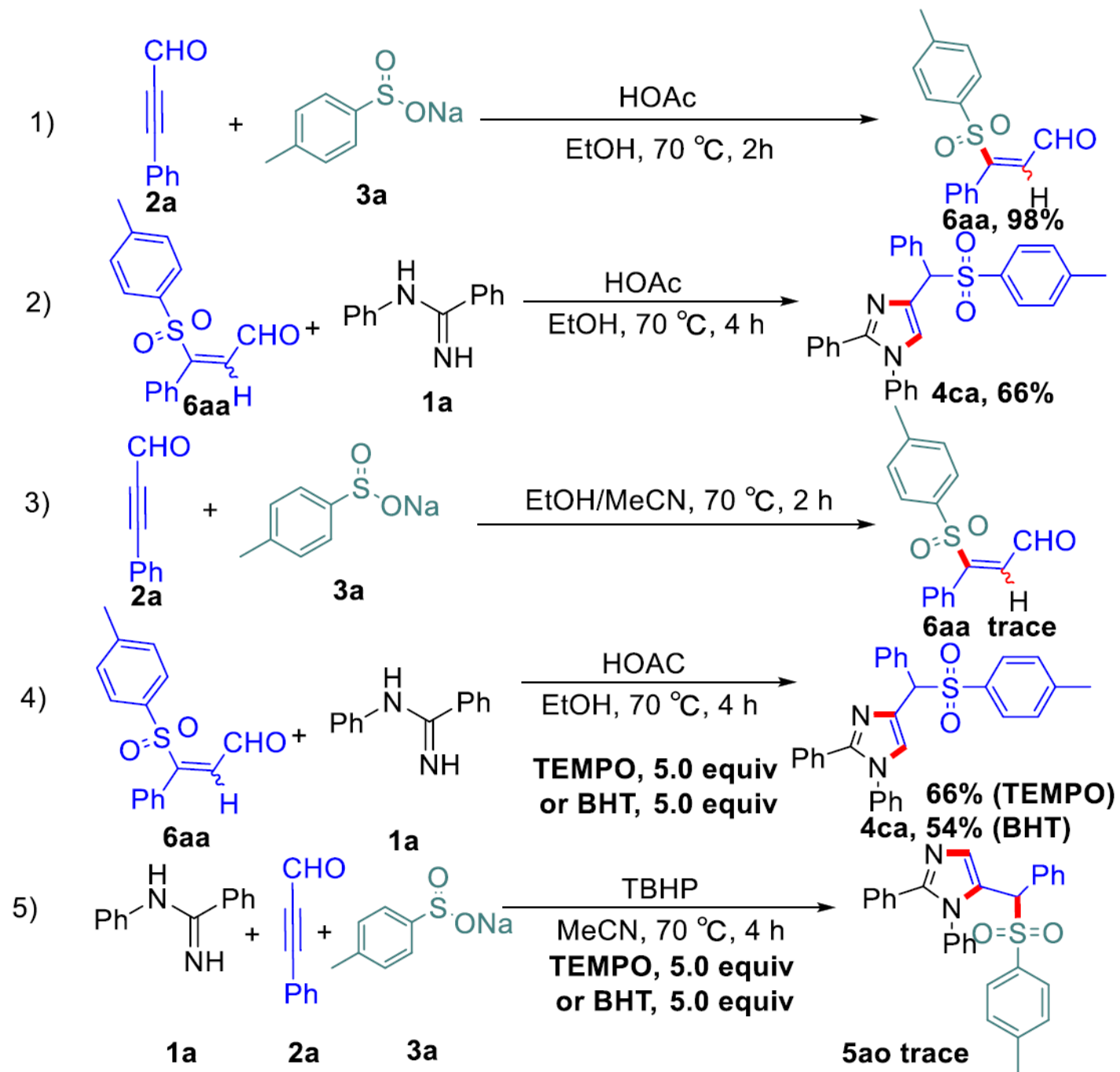
90% yield

DOI: [10.1021/acs.orglett.9b01990](https://doi.org/10.1021/acs.orglett.9b01990)

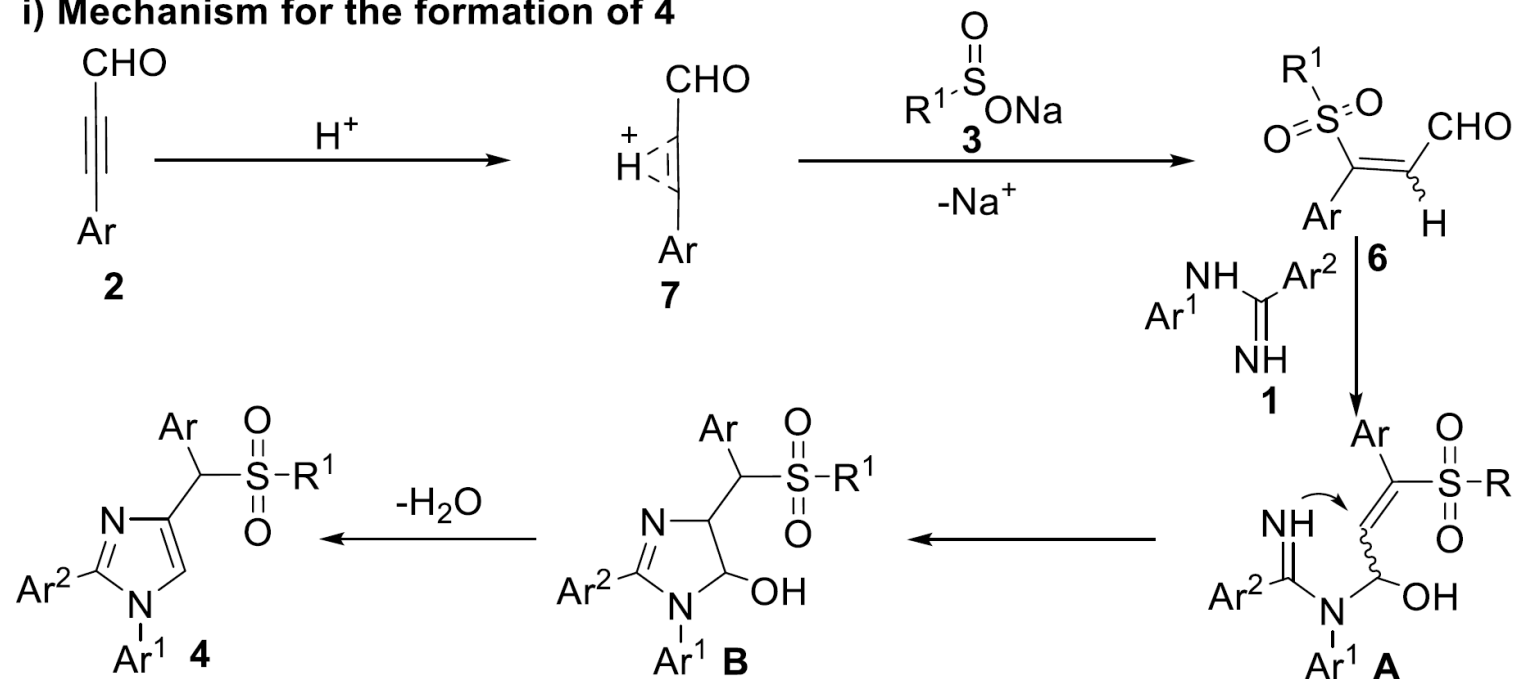


2.

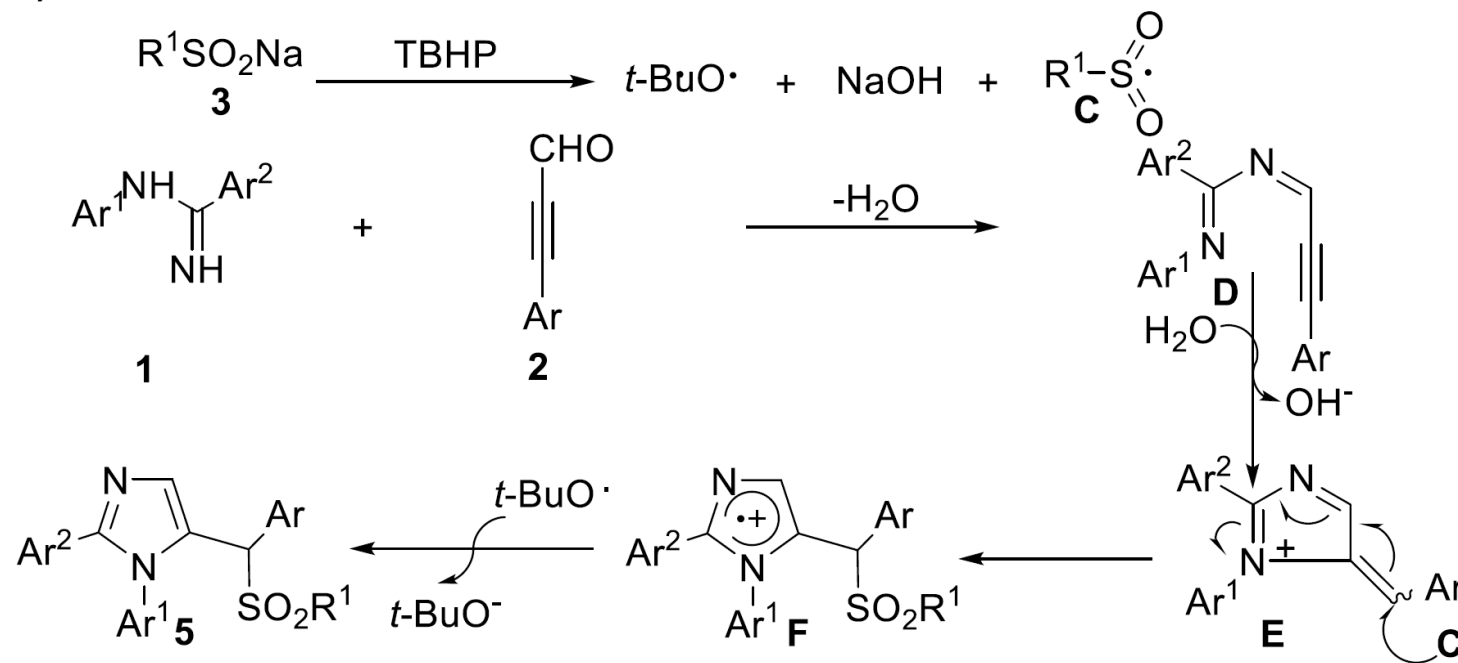




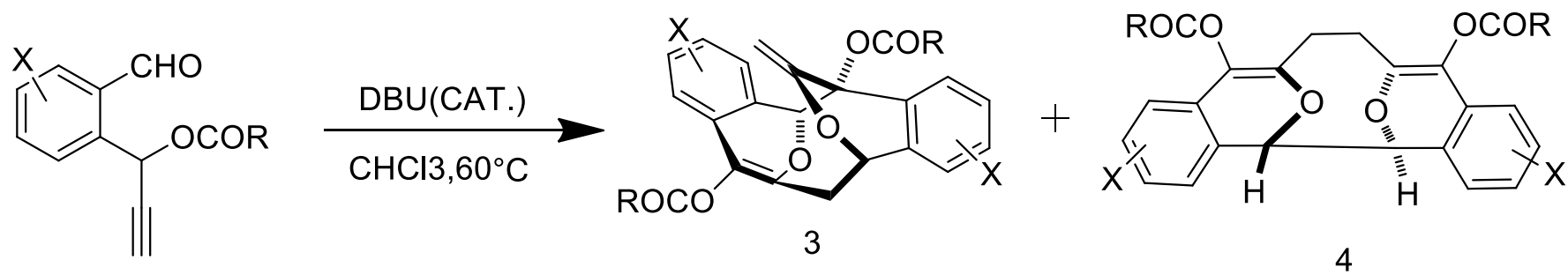
i) Mechanism for the formation of 4



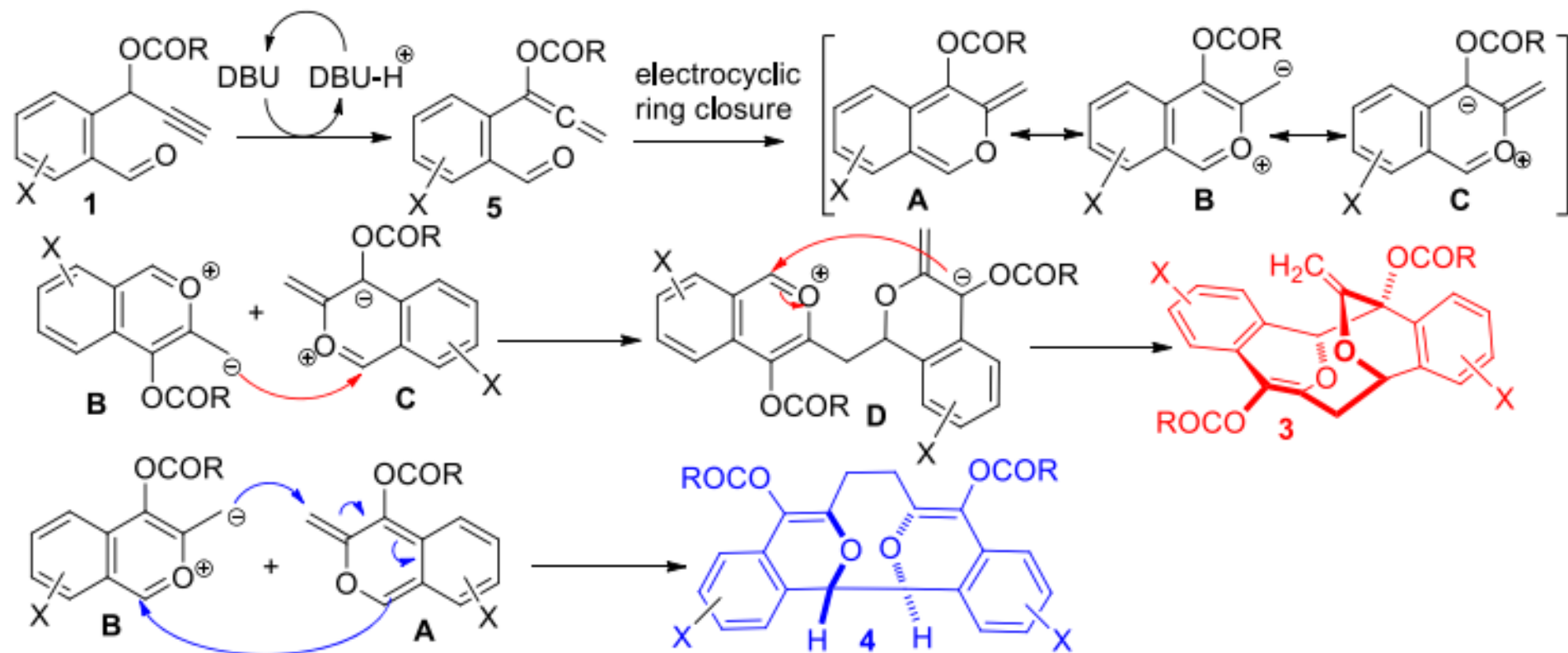
ii) Mechanism for the formation of 5



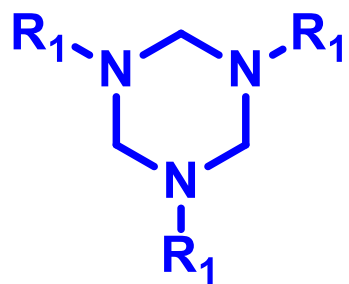
3.



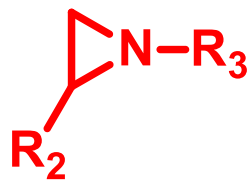
DOI: 10.1021/acs.joc.9b01677.



4.



+



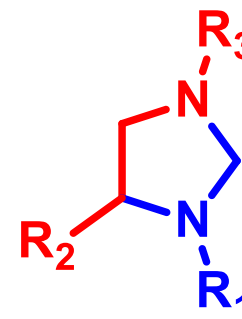
ZnBr₂



toluene

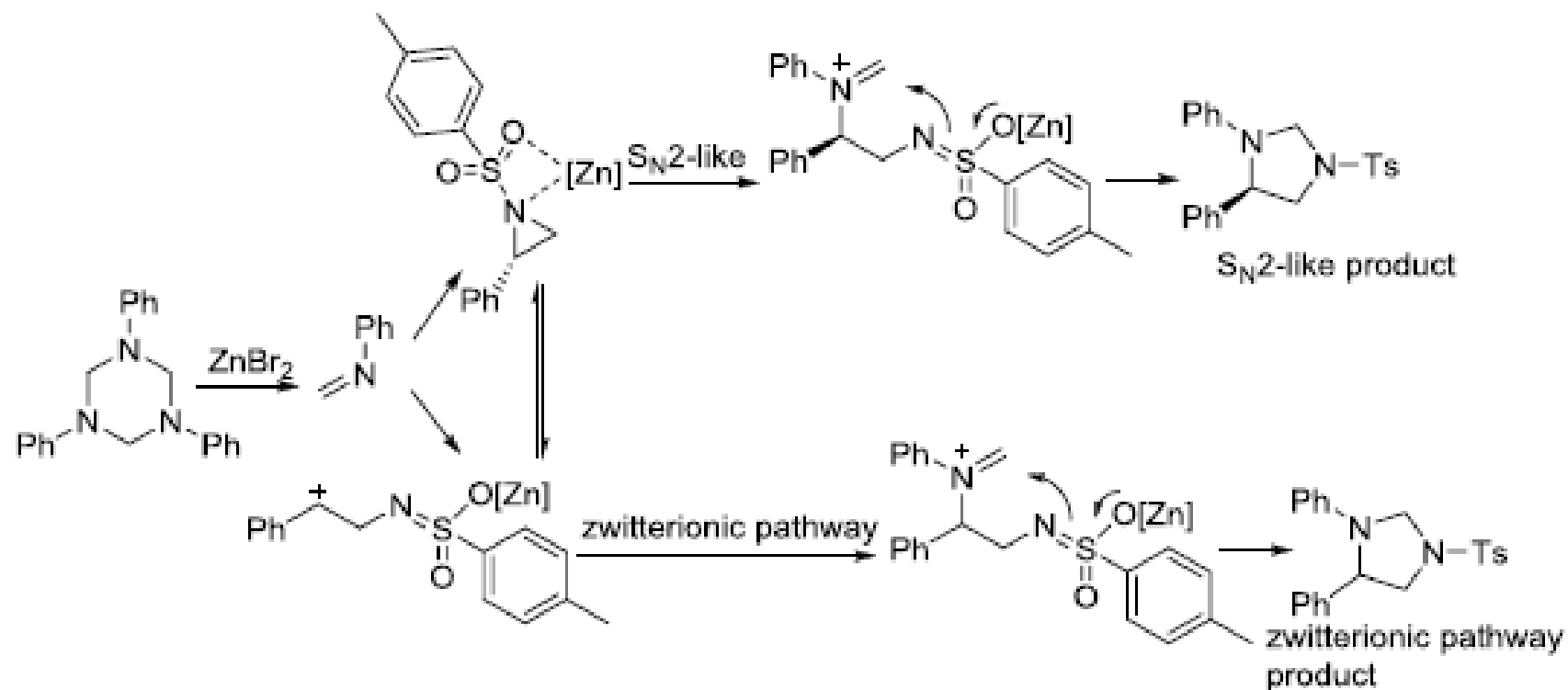
80 °C

36 h

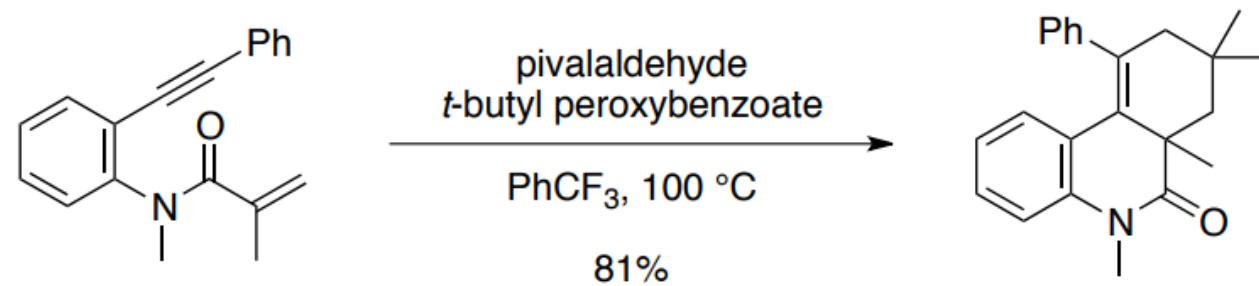


DOI: 10.1021/acs.joc.9b01959.

Scheme 6. Plausible Reaction Mechanism



5.



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