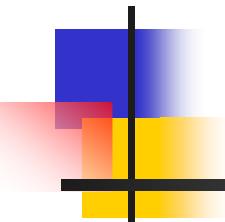


*E-mail: bred@nioch.nsc.ru



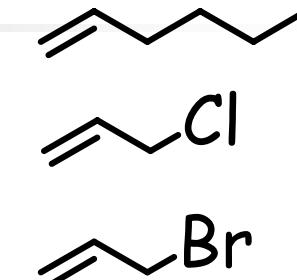
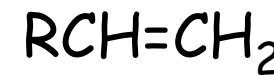
Transformations of polyfluoroarenesulfonyl halides with alkenes, polyfluoroarenethiols and alkali metal halides

**Roman A. Bredikhin*, Alexander M. Maksimov
and Vyacheslav E. Platonov**

*N.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry of
the Siberian Branch of Russian Academy of Sciences*

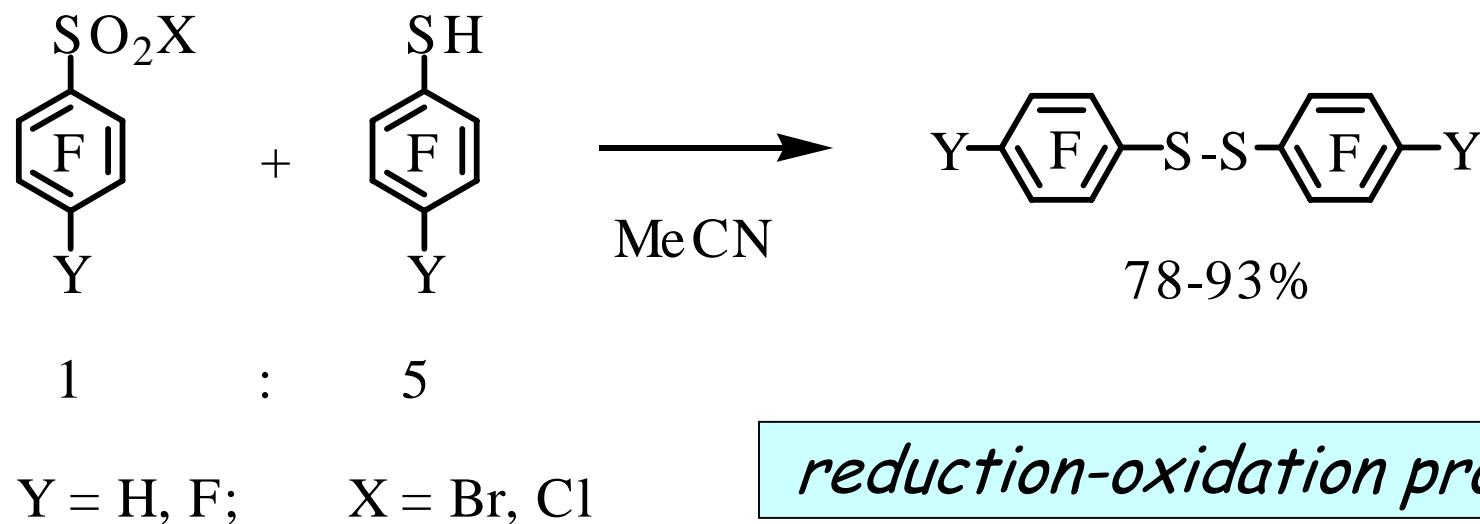
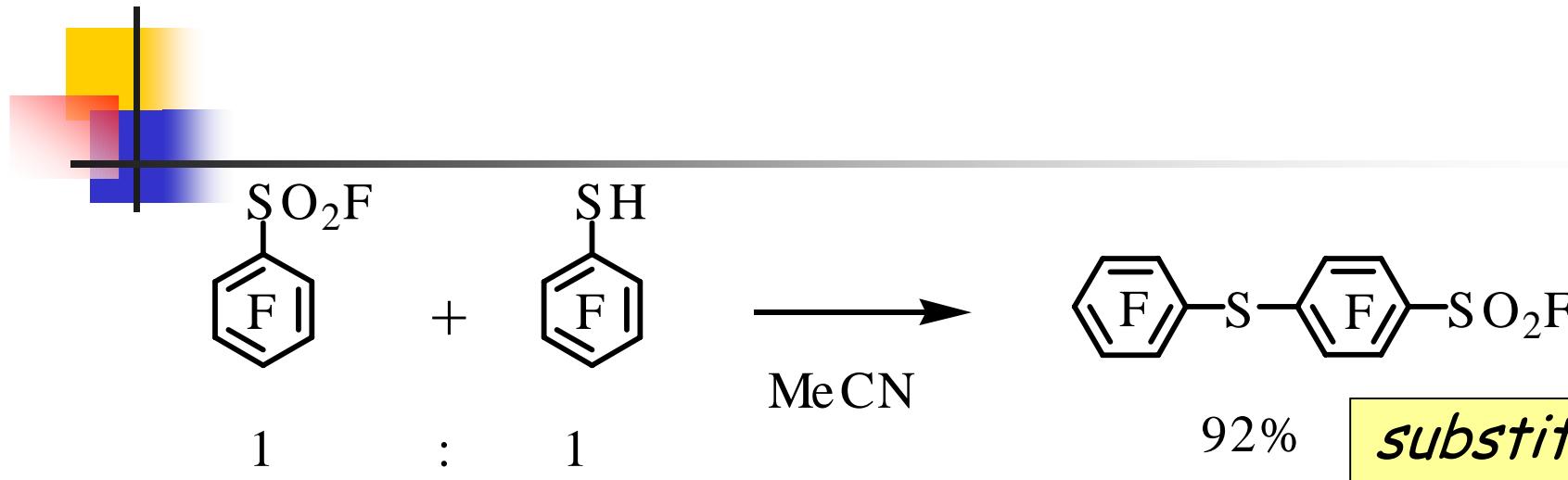
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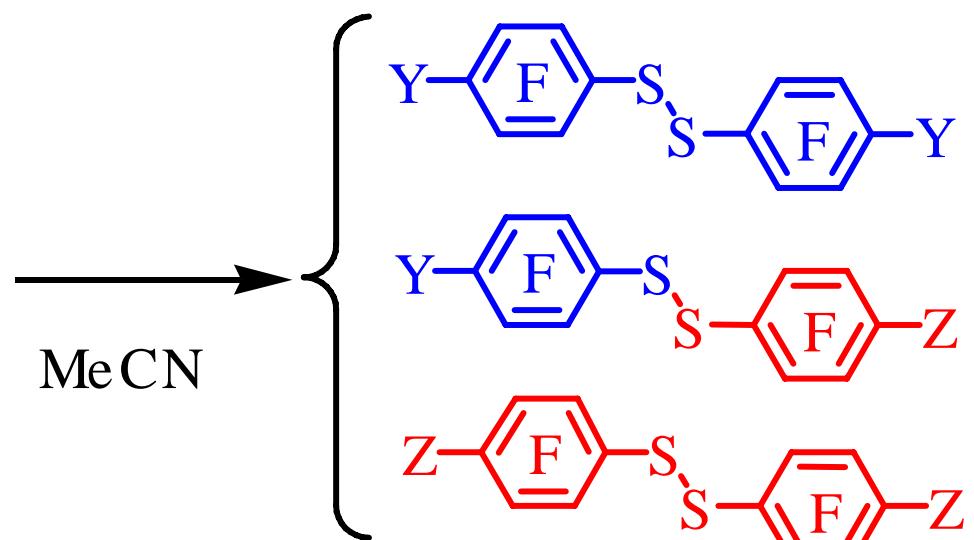
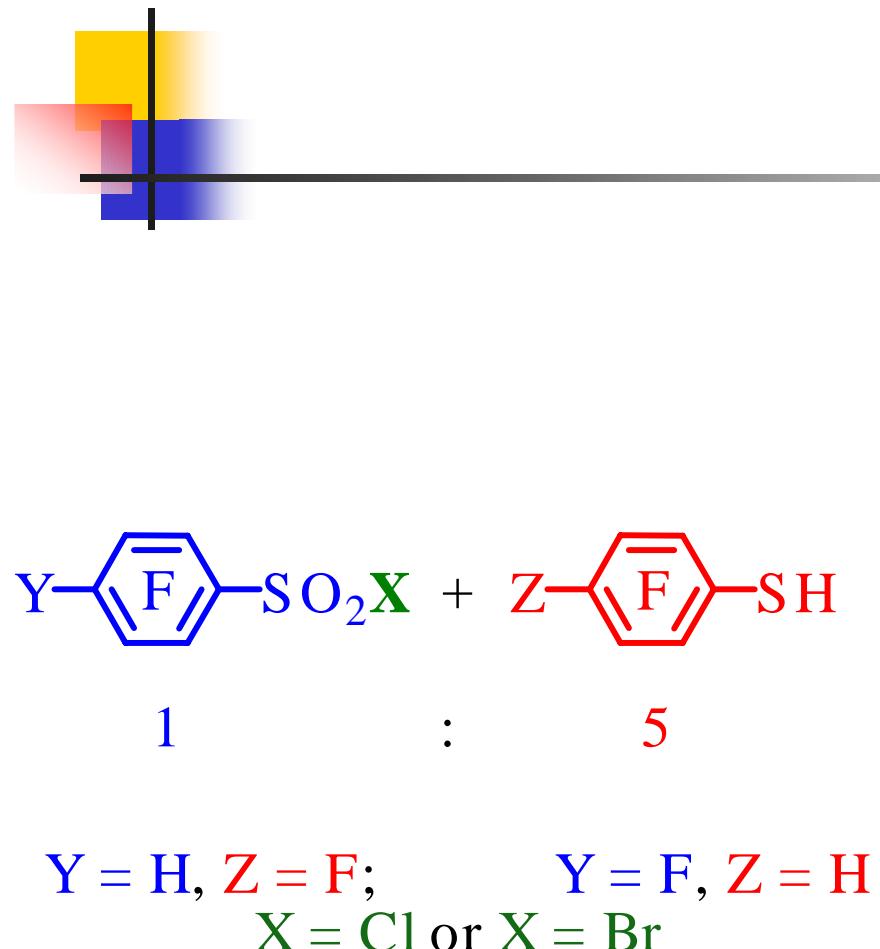
Radical addition to alkene double bond

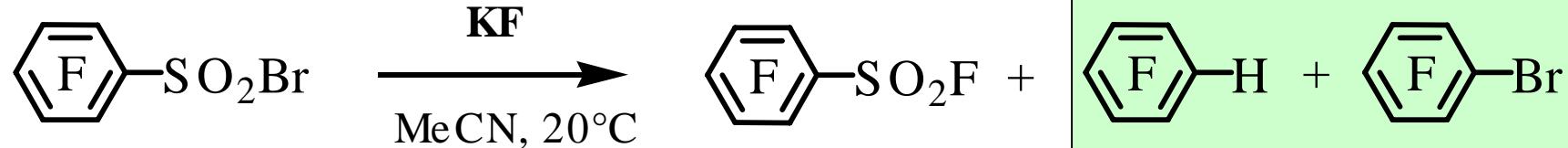


Reactions with
polyfluoroarenethiols

Reactions with
metal halides



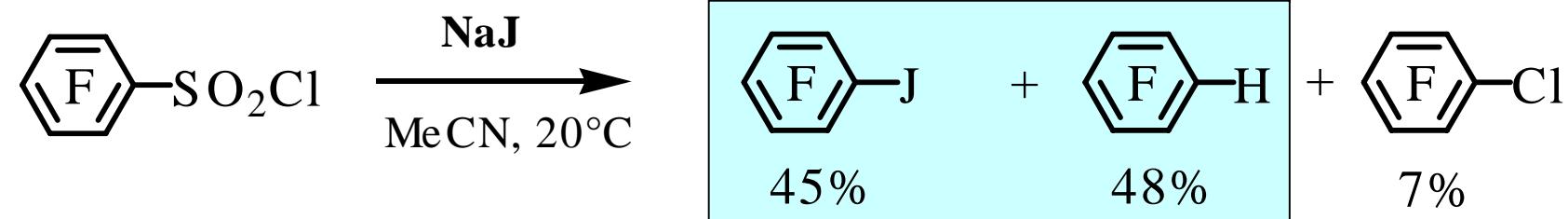
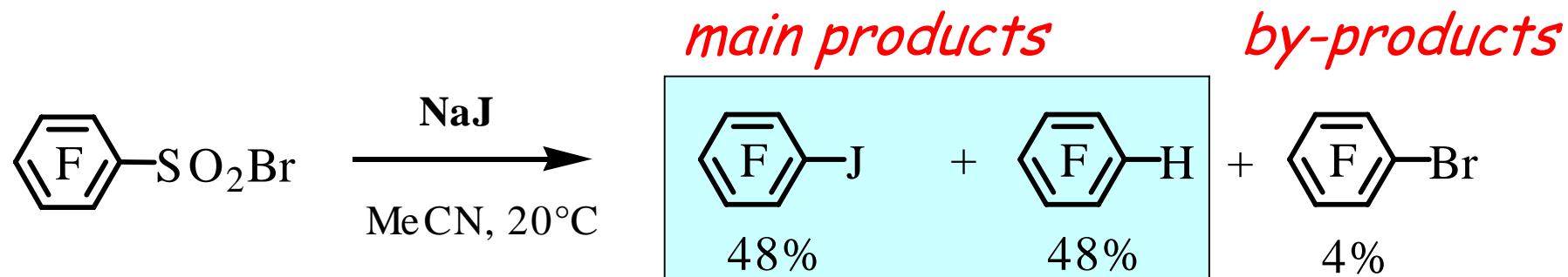


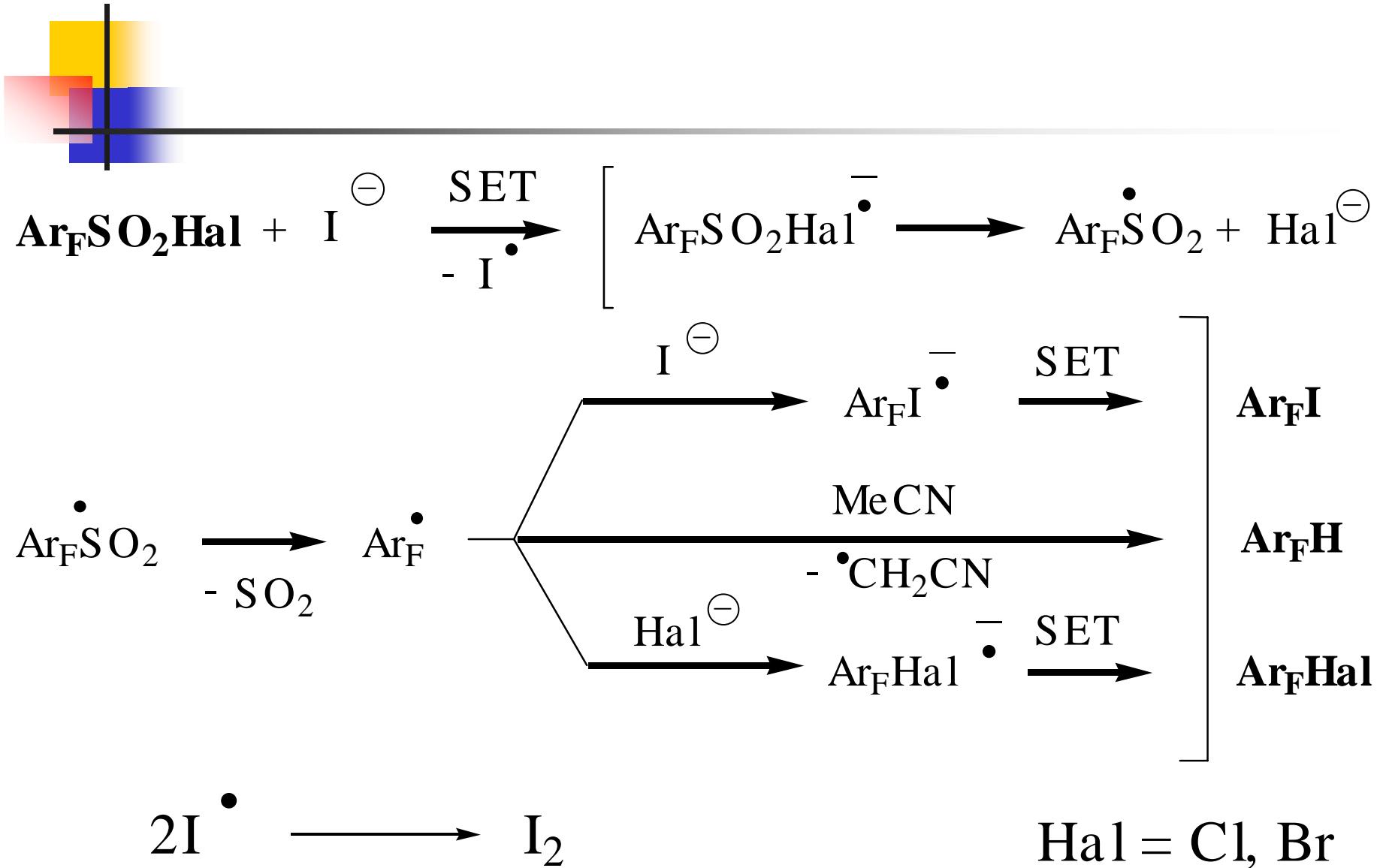


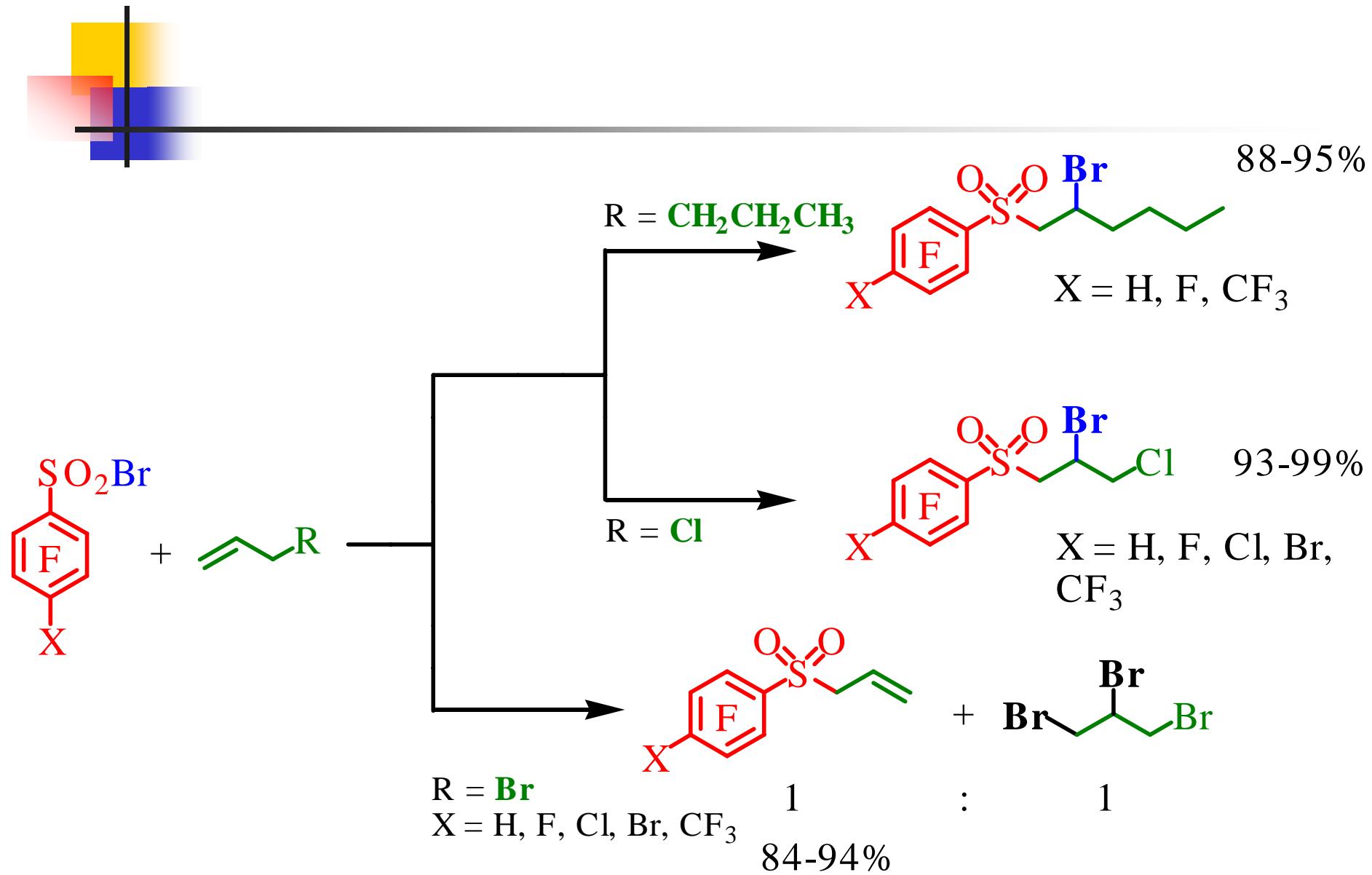
substitution

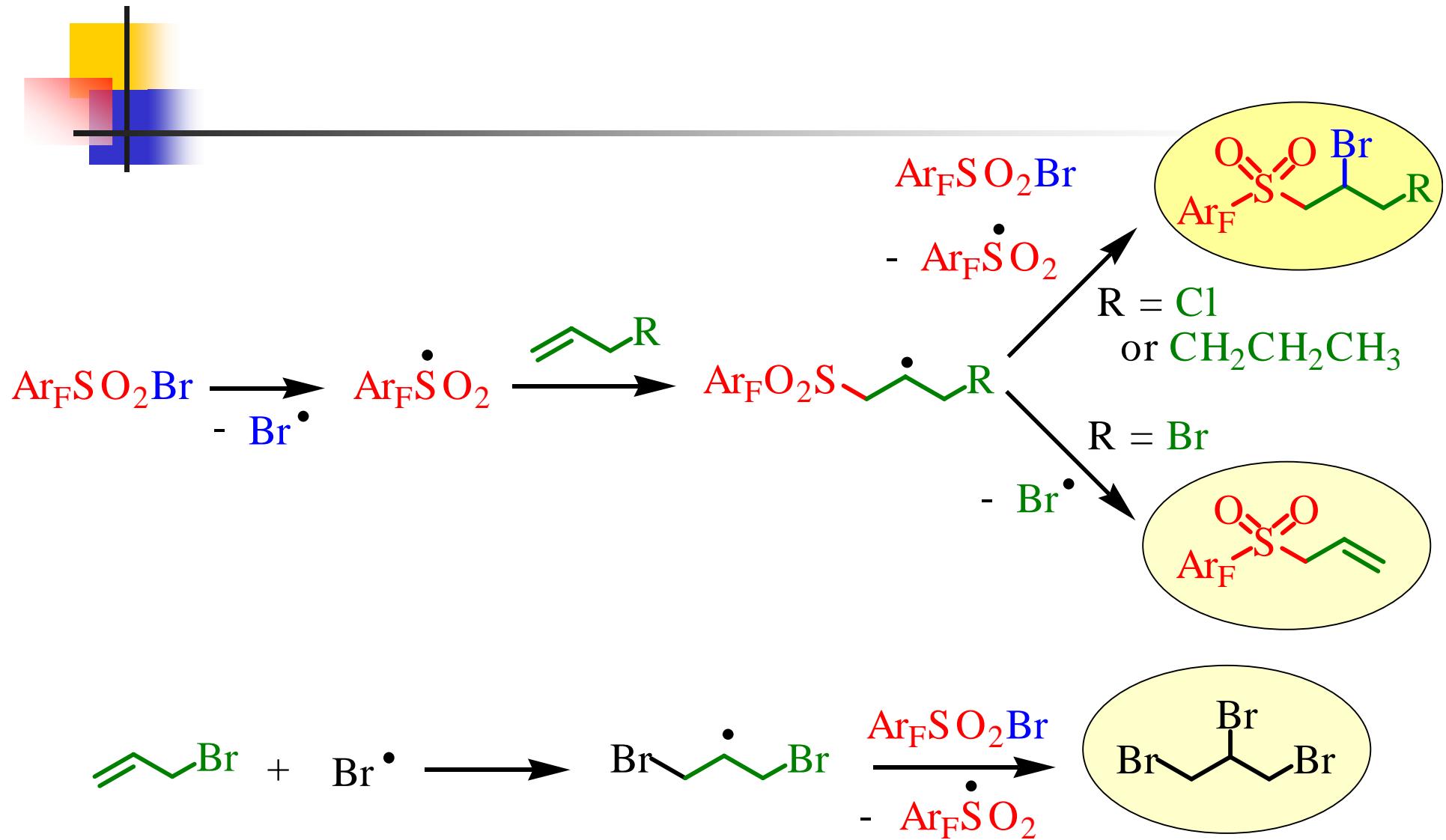
vs.

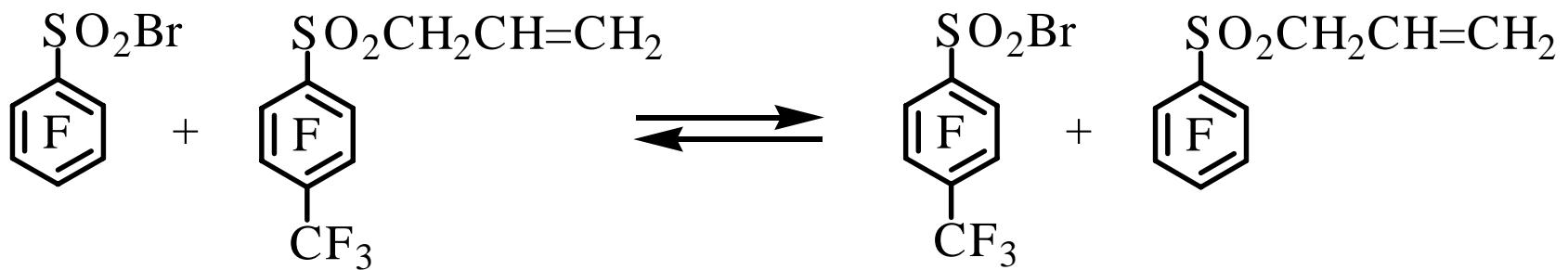
decomposition







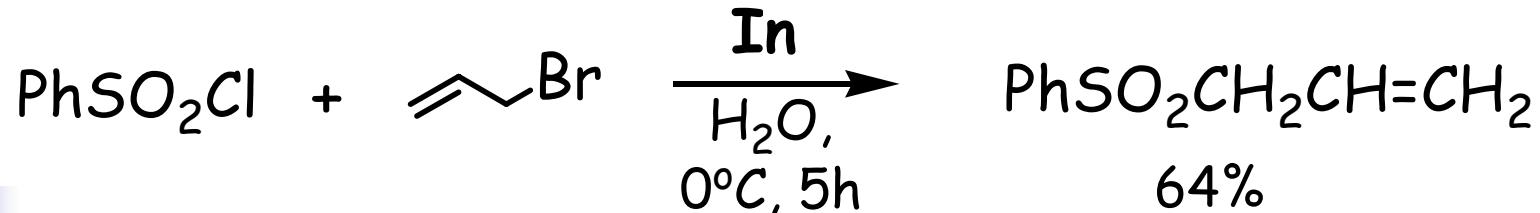




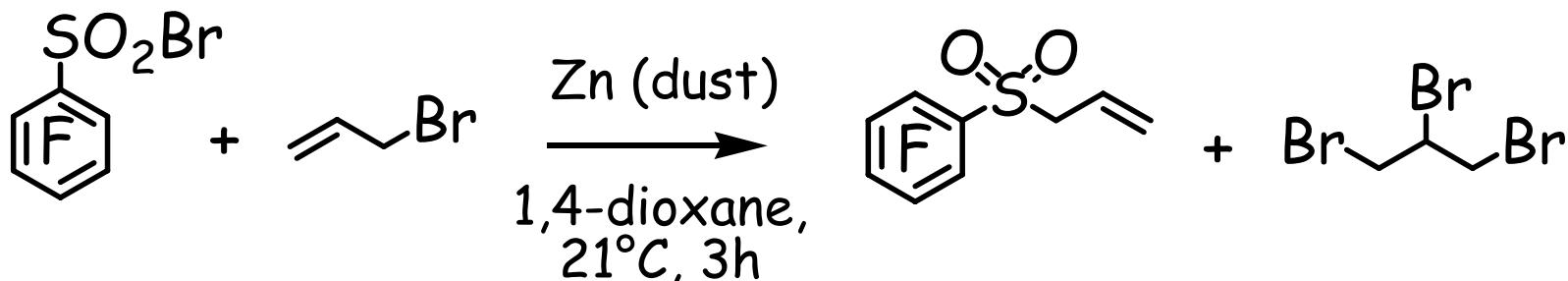
reversible addition

How to avoid tribromopropane formation?

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Wang L., Zhang Y. *J. Chem. Res. (S)*. (2008), 588-589



<u>$\text{Ar}_\text{F}\text{SO}_2\text{Br}$</u>	<u>AlBr</u>	<u>Zn</u>	<u>$\text{C}_6\text{F}_5\text{H}$</u>		
1.0	4.0	1.0	<0.1	1.0	0.3
1.0	1.2	1.1	0.1	1.0	0.1
1.0	1.1	0.1	conversion is 10%		
1.0	1.1	1.1	conversion is 100%, 70% isolated yield		

