

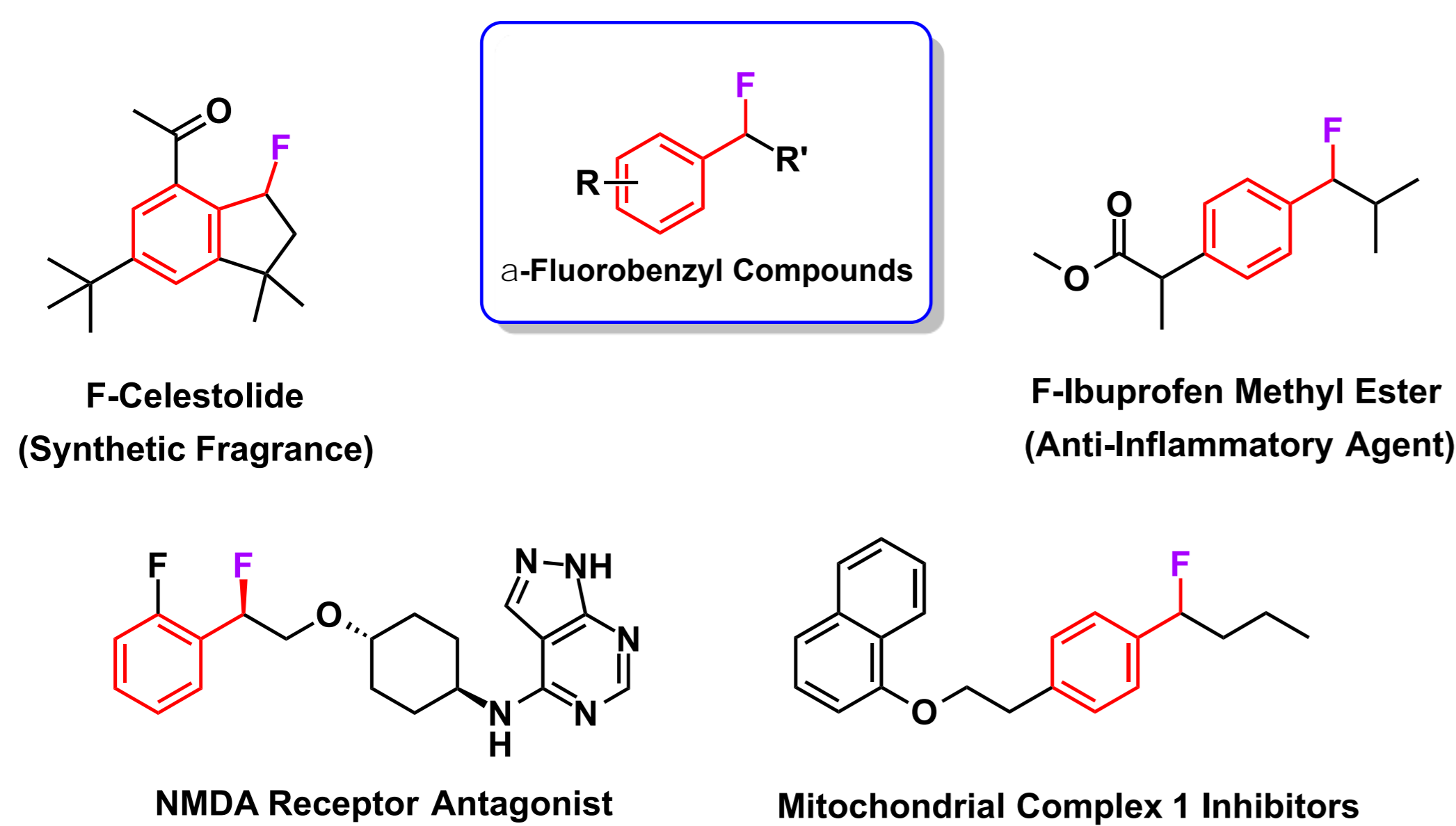
多官能性フルオロアルキル求核種の発生と連続変換反応

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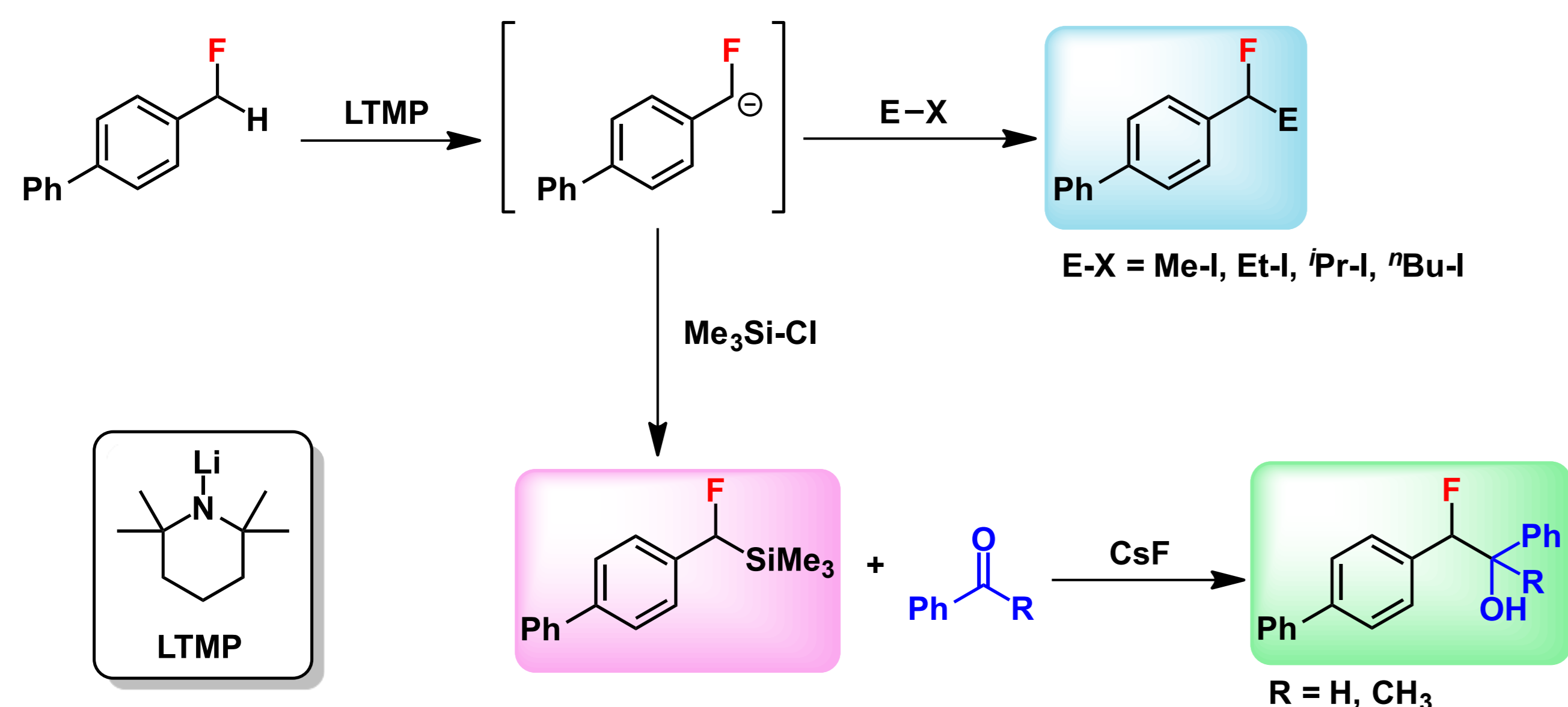


1. Introduction

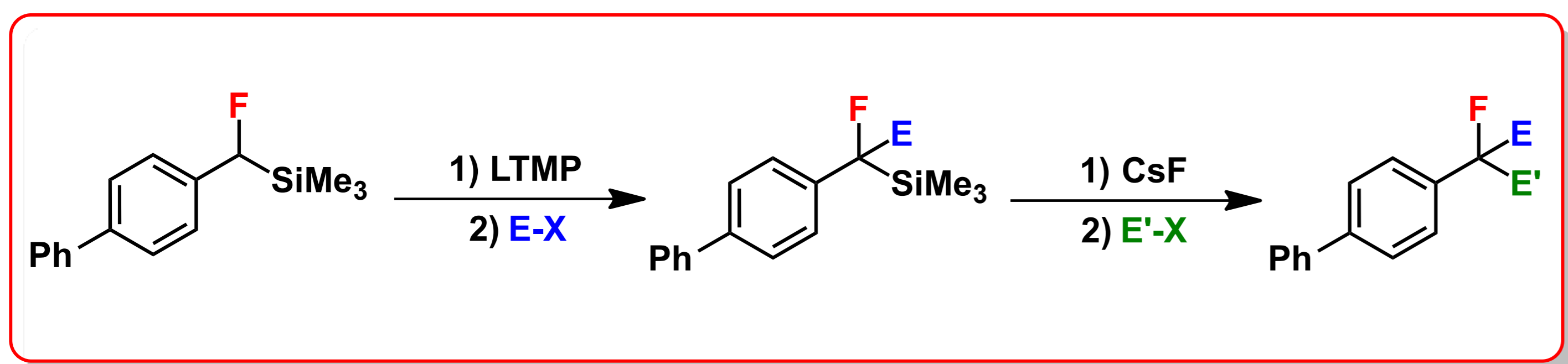
Biologically Active α -Fluorobenzyl Compounds



Synthesis of α -Fluorobenzyl Compounds

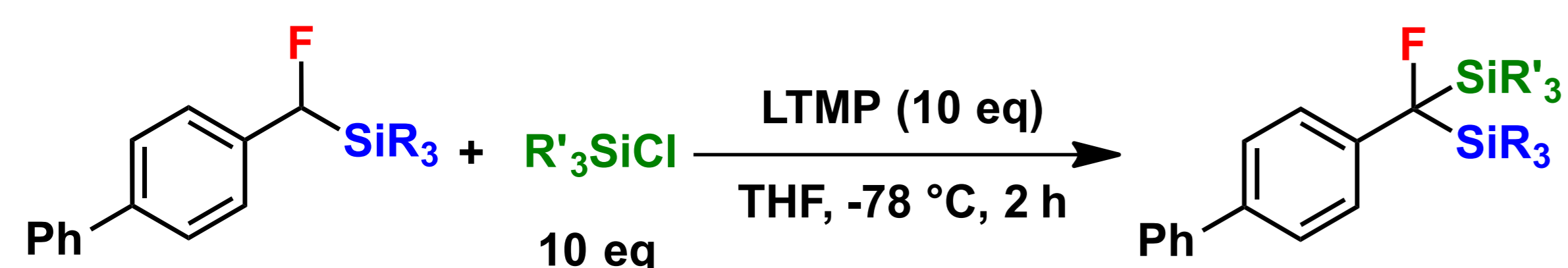


2. Research Outline



3. Results

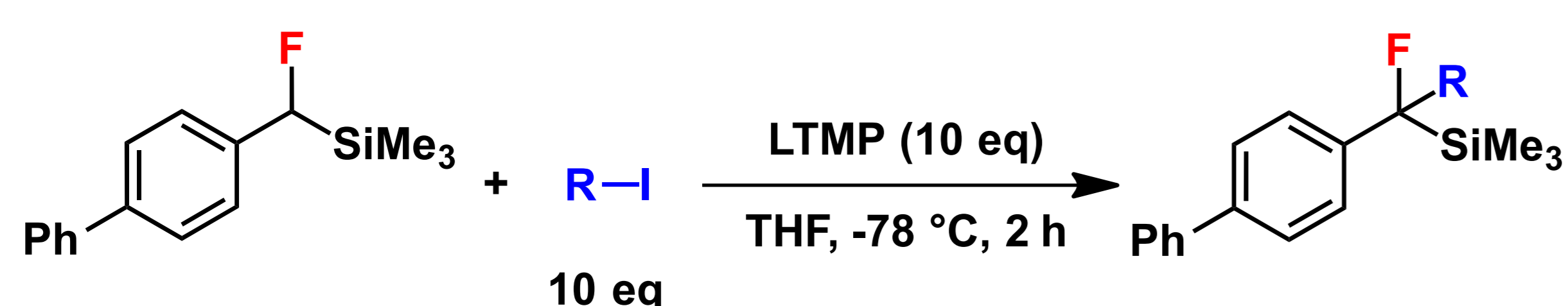
I. (i) Reactions with Chlorosilanes



entry	$R_3\text{Si}$	$R'_3\text{Si}$	yield / % ^a
1	Me_3Si	Me_3Si	87
2	Me_3Si	Et_3Si	87
3	Me_3Si	$t\text{-BuMe}_2\text{Si}$	0
4	Et_3Si	Me_3Si	38
5	Et_3Si	Et_3Si	27
6	Et_3Si	$t\text{-BuMe}_2\text{Si}$	0

^aDetermined by ¹⁹F NMR analysis using 1,3-bis(trifluoromethyl)benzene as an internal standard.

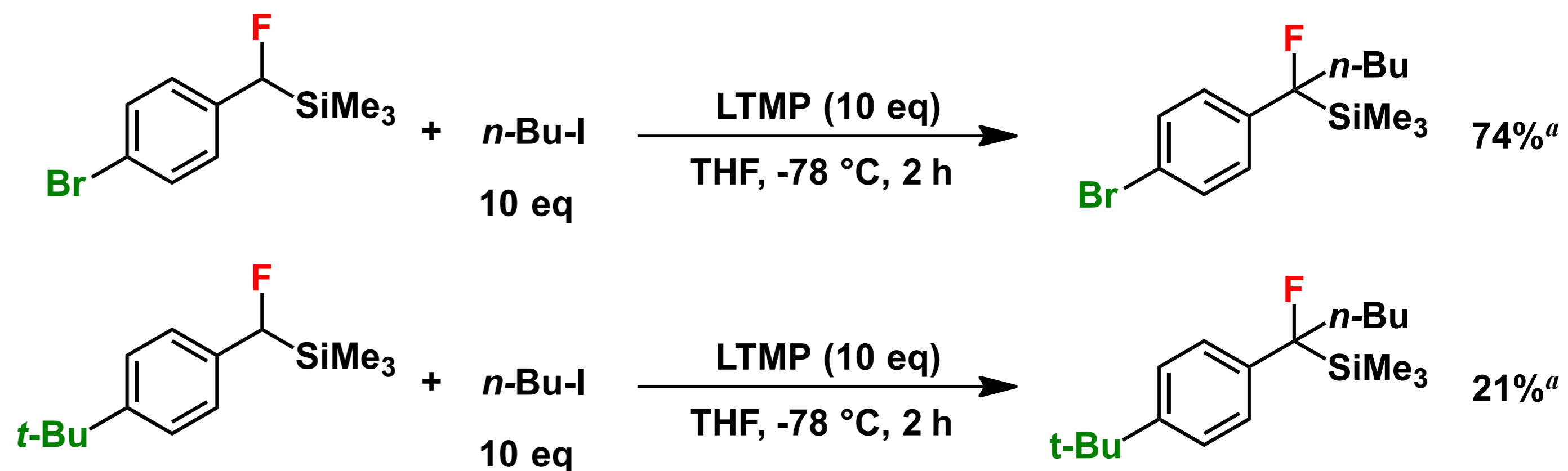
I. (ii) Reactions with Alkyl Iodides



entry	$R\text{-I}$	yield / % ^a
1	Me-I	0
2	Et-I	76
3	$n\text{-Bu-I}$	96
4	$i\text{-Pr-I}$	40
5	$t\text{-Bu-I}$	0

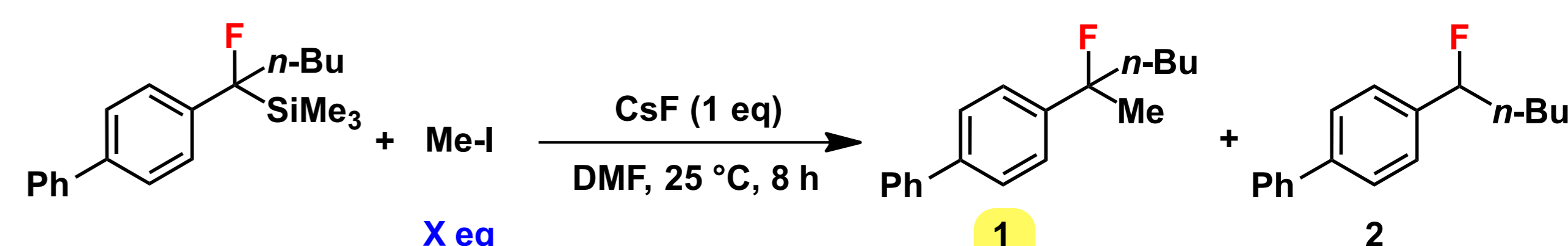
^aDetermined by ¹⁹F NMR analysis using 1,3-bis(trifluoromethyl)benzene as an internal standard.

Scope of Substrates



^a Determined by ¹⁹F NMR analysis using 1,3-bis(trifluoromethyl)benzene as an internal standard.

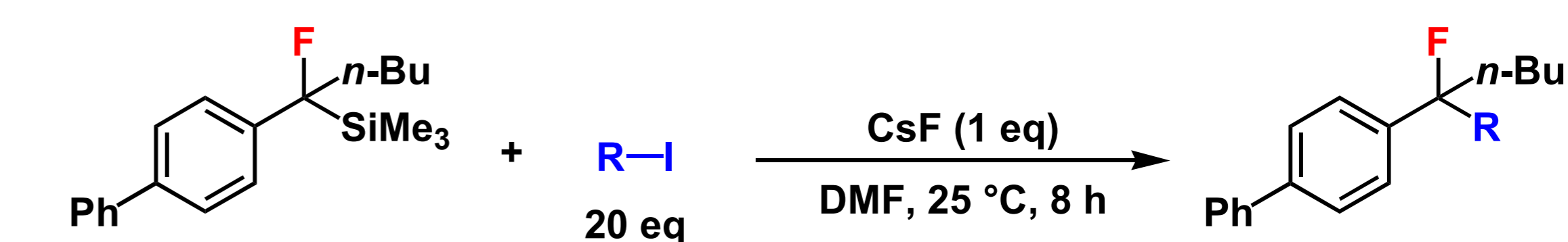
II. (i) Reactions with Alkyl Iodides



entry ^a	X / eq	yield / % ^a	
		1	2
1	5	36	37
2	20	78	8

^a Determined by ¹⁹F NMR analysis using 1,3-bis(trifluoromethyl)benzene as an internal standard.

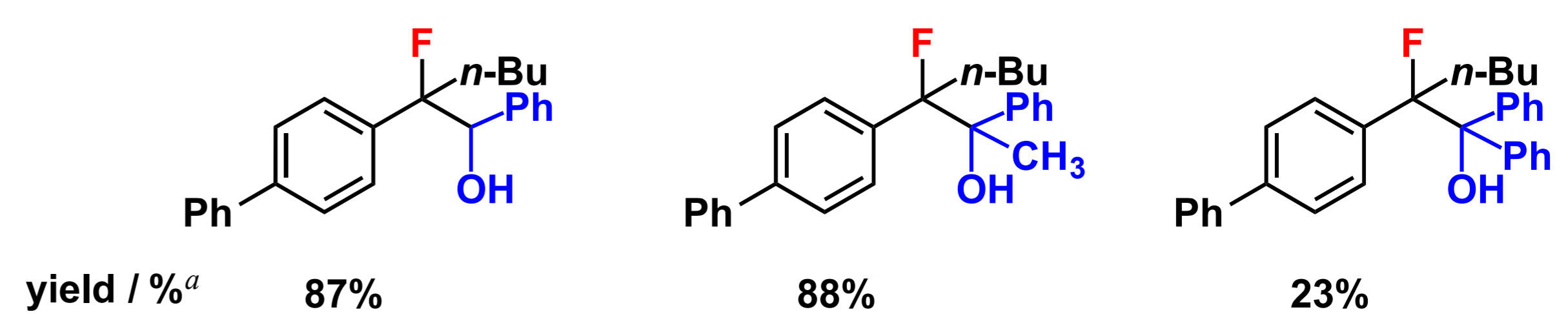
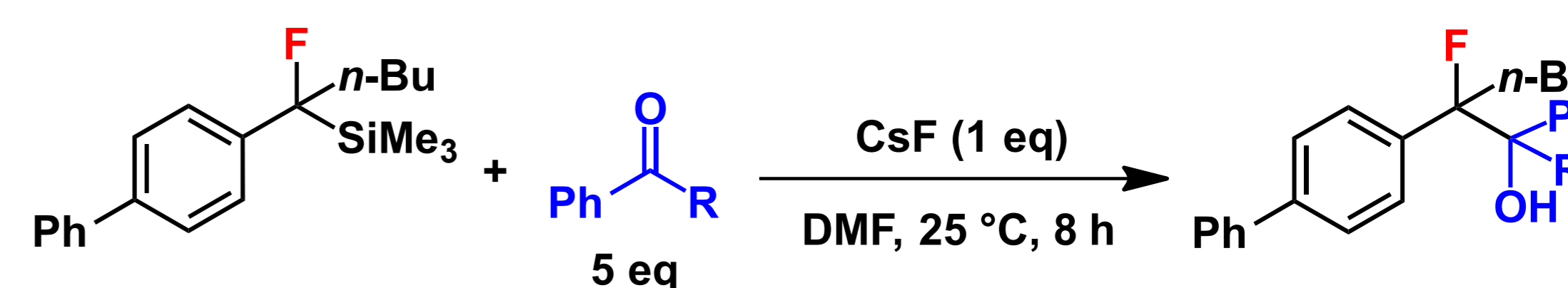
Scope of Substrates



entry	product	yield / % ^a	entry	product	yield / % ^a
1		78%	3		0%
2		35%	4		12%

^aDetermined by ¹⁹F NMR analysis using 1,3-bis(trifluoromethyl)benzene as an internal standard.

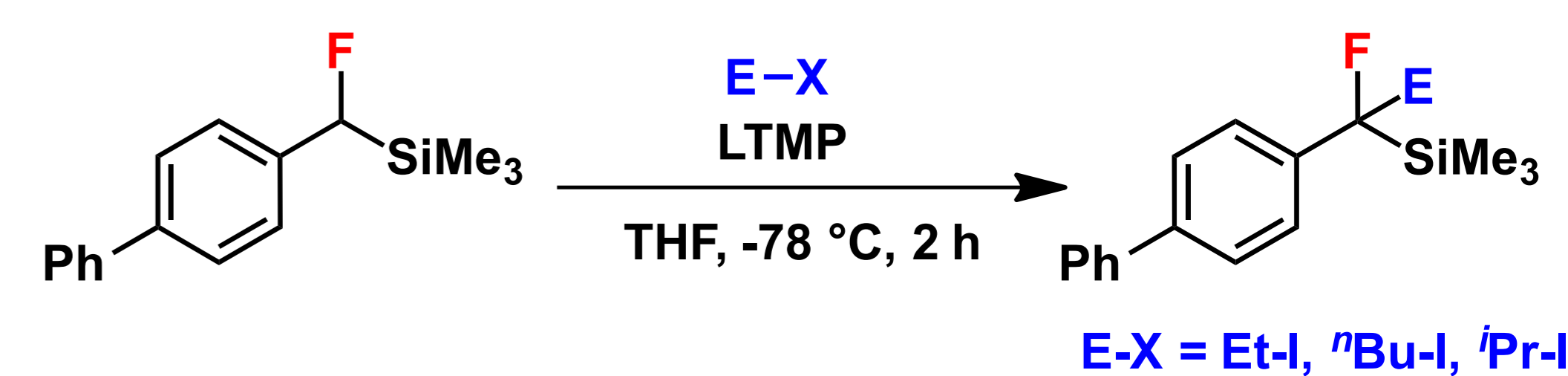
II. (ii) Reactions with Carbonyl Compounds



^aDetermined by ¹⁹F NMR analysis using 1,3-bis(trifluoromethyl)benzene as an internal standard.

4. Summary

1. Reactions of α -Fluorobenzyl Anion by Deprotonation



2. Reactions of α -Fluorobenzylsilanes

