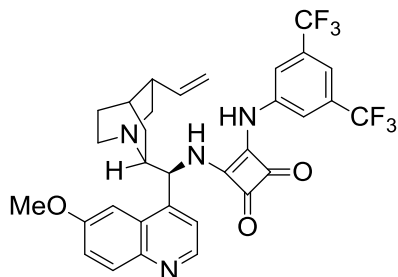
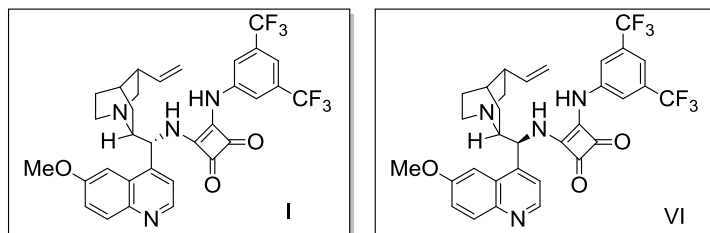
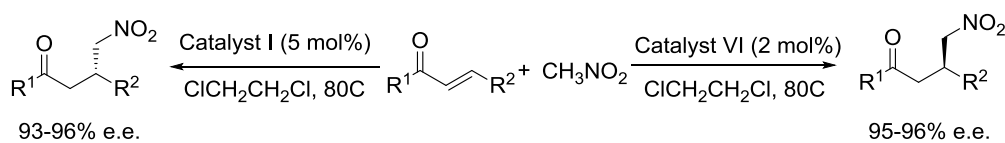


Catalog # 07-8436 3-[[3,5-Bis(trifluoromethyl)phenyl]amino]-4-[[[(8 $\alpha$ ,9S)-6'-methoxycinchonan-9-yl]amino]-3-cyclobutene-1,2-dione

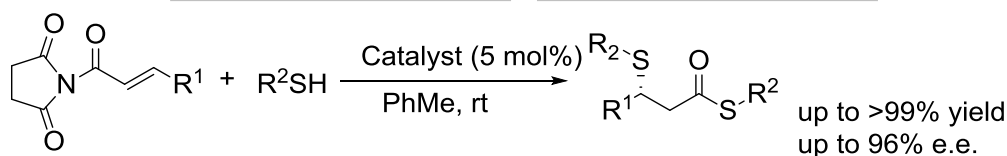


#### Technical Notes:

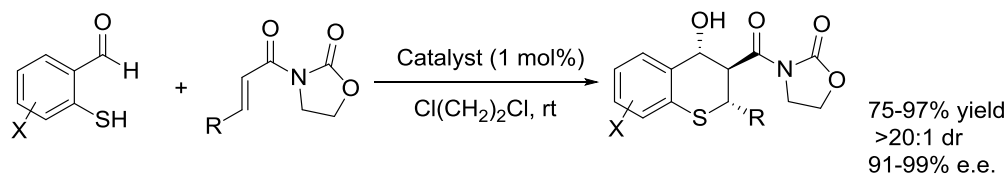
- Michael Addition:** A series of squaramide-based organocatalysts were facilely synthesized and applied as hydrogen bonding organocatalysts in the enantioselective Michael addition of nitroalkanes to chalcones.
- Sulfa-Michael Addition/Thioesterification:** A novel highly enantioselective one-pot dithiolation through sulfa-Michael addition/thioesterification of thiols with  $\alpha,\beta$ -unsaturated N-acylated succinimides catalysed by squaramide has been developed.
- Michael-Aldol Reaction:** Highly enantio- and diastereoselective tandem Michael-aldol reactions, efficiently catalyzed by a cinchona alkaloid thiourea via synergistic noncovalent hydrogen-bonding activation of both the Michael donor and acceptor, have been developed.
- Sulfa-Michael/Aldol Cascade Reaction:** A bifunctional squaramide catalyzed sulfa-Michael/aldol cascade reaction between 1,4-dithiane-2,5-diol and chalcones with a low catalyst loading has been developed.
- The organocatalyzed enantioselective synthesis of a series of chiral 2-amino-5,6,7,8-tetrahydro-5-oxo-4H-chromene-3-carbonitriles was achieved using bifunctional squaramides as the catalysts.
- Cascade Reaction:** The reaction features a new activation mode of organocatalytic dynamic kinetic resolution involving a Michael-retro-Michael-Michael-Michael cascade.
- A powerful cascade reaction was developed for the synthesis of chromeno[4,3-b]pyrrolidines with high yields and excellent stereoselectivities.



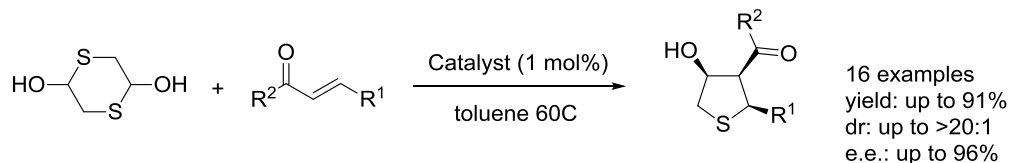
**Tech Note (1)**  
**Ref. (1)**



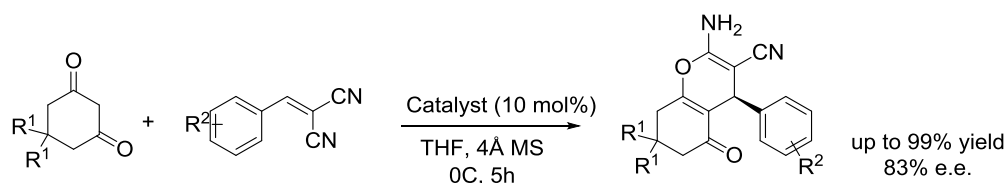
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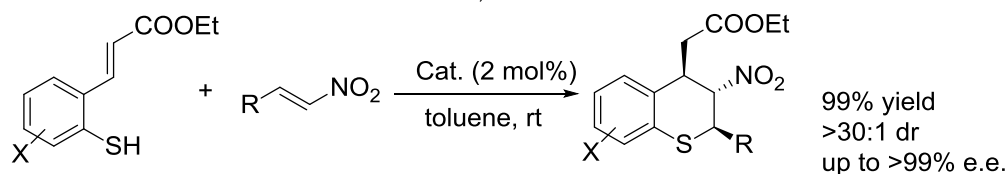
**Tech Note (3)**  
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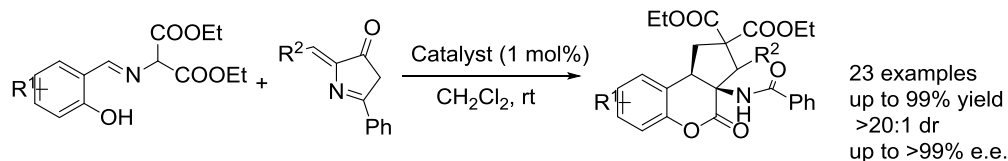
**Tech Note (4)**  
**Ref. (4)**



**Tech Note (5)**  
**Ref. (5)**



**Tech Note (6)**  
**Ref. (6)**



**Tech Note (7)**  
**Ref. (7)**

## References:

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