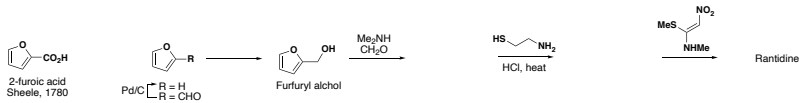
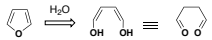
Lecture 5: Furans and Thiophenes

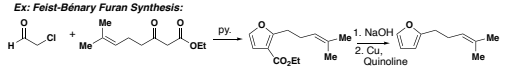


Furan ring synthesis analysis:

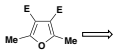
1,4 dicarbonyl logic



Ex: Feist-Bénary Furan Synthesis:

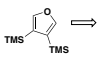


Cycloaddition

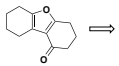


POD #1

A



B



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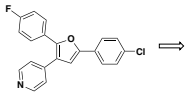

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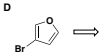

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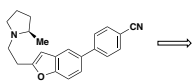
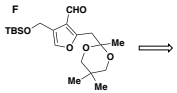


ABT-239

F



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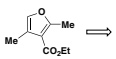
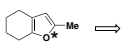
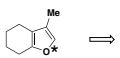


POD #2

A



B



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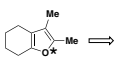
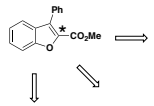
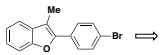


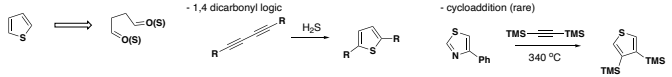
Benzofuran synthesis



Consulting Corner



Thiophenes



Go-to methods:

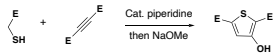
- 1,4 dicarbonyl logic

- cycloaddition (rare)

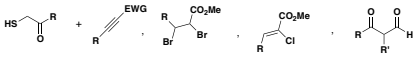
Most popular: Fiesselmann + Analogs, Gewald

Fiesselman

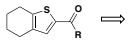
POD #3



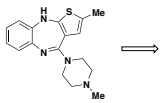
Fiesselmann equivalents:



ex:



POD #4

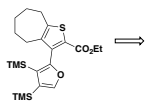


POD #5

A



B



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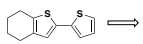
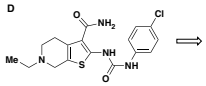
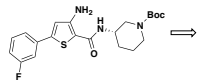


D

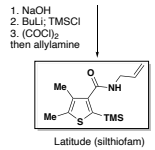


E

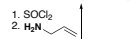


Discovery chemistry

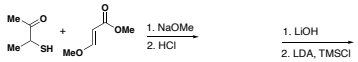




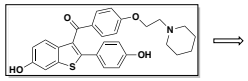
Latitude (silthiofam)



Process chemistry

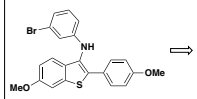


Synthesis of Evista:

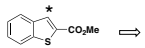


Evista (raloxifene)

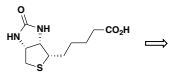
Consulting Corner



J. Med. Chem. **1997**, *40*, 1407

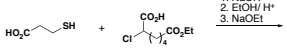


POD #6



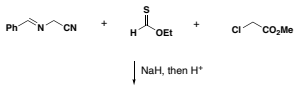
A

Parke-Davis (1945):

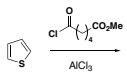




BASF (1981):



Fabrilhnyl (1965): From thiophene









A

