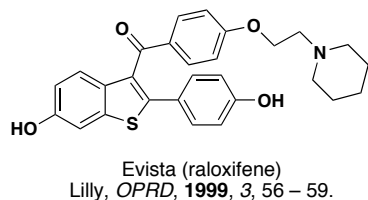
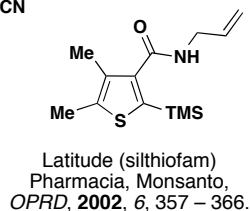
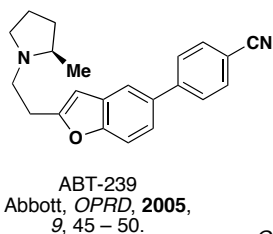
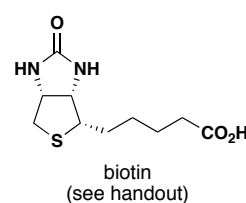
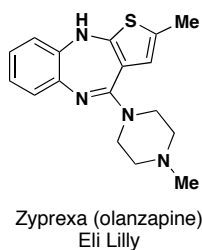
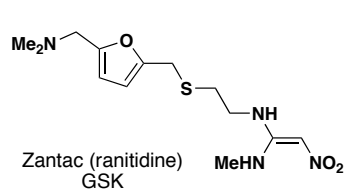


Friday, April 4th, 2008**Background music:** Handel, water music (suites 1-3)**Syntheses discussed:***Reading assignment:* Li, Chapters 4, 5; HC, Chapters 14, 15; handouts**Partial list of concepts/transforms discussed:**

General guidelines for ring synthesis vs. ring substitution

Types of cyclization reactions

Paal-Knorr furan/thiophene synthesis

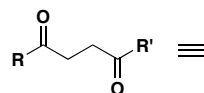
Feist-Benary furan synthesis

Fiessmann thiophene synthesis

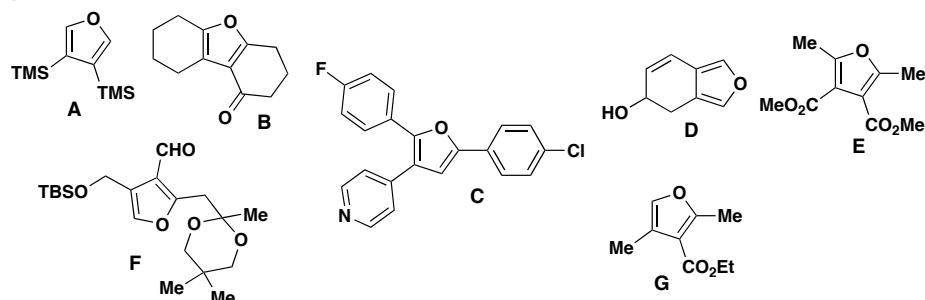
Gewald aminothiophene synthesis

Problems of the day:

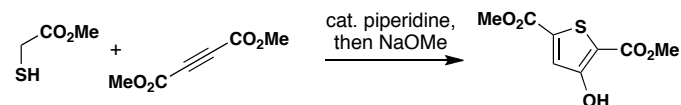
- 1 Propose 5 or more conceptual equivalents to a 1,4-diketone:



- 2 Propose practical syntheses of the following furans:

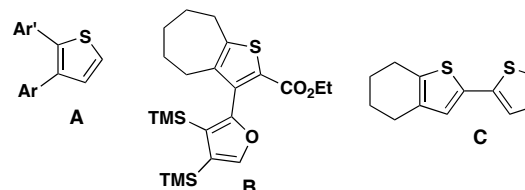


- 3 Provide a mechanism for the following thiophene synthesis:



- 4 How would you synthesize olanzapine?

- 5 Propose practical syntheses of the following thiophenes:



- 6 Devise a biotin synthesis from a thiophene-based starting material