Pyridine Chemistry in the Preparation of Two Medicinal Agents: Rosoxacin and Amrinone

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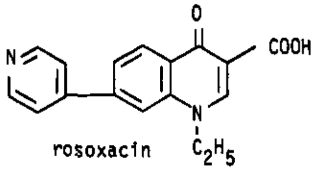
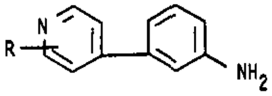
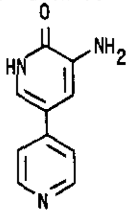
In this talk I will cover the chemistry involved in the development of the antibacterial agent rosoxacin. The emphasis here will be on the variety of ways that were employed to prepare the anilino-pyridine intermediates.


rosoxacin


anilino-pyridine

This will be followed by a description of the chemistry used in the preparation of amrinone, a new cardiotonic agent, and a variety of related compounds. The chemistry covered in both of these areas will generally be that used to build pyridine rings and manipulate attached functionality. A minimum of biology will be presented to justify why we were doing what we were doing.


amrinone

Halogenated Pyridines: Their Synthesis and Applications to Several Areas of Crop Protection

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This talk will be concerned with the synthesis and chemistry of a number of biologically active pyridine derivatives. The emphasis will be mainly on halogenated pyridine carboxylic acids, pyridinols and their precursors.

Polyactivated Polychlorinated Pyridines

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The chemistry of pentahalogenopyridines is well explored, and is, dominated by reactions involving nucleophilic substitution in the α- and γ-positions. Even intramolecular substitution at a β-position of pentachloropyridine has been observed in only a few cases. We have studied the possibility that a strongly electron-withdrawing group at the γ- (or an α-) position would activate the β-positions sufficiently