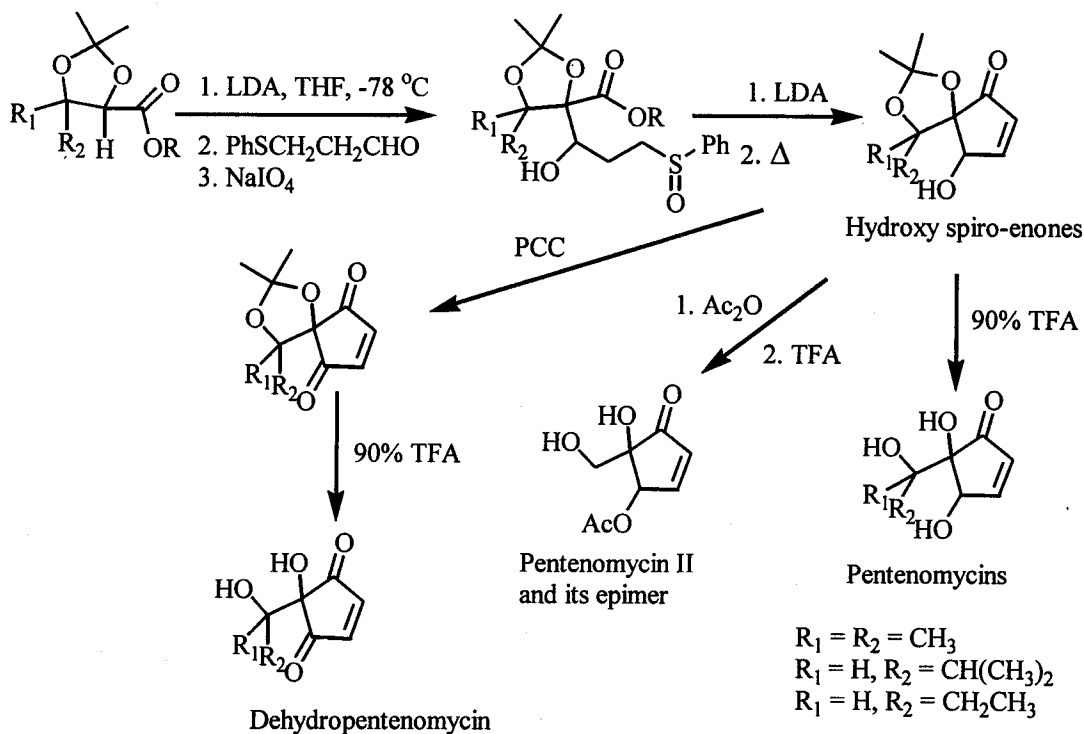


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KEY WORDS : PENTENOMYCIN, DEHYDROPENTENOMYCIN,  $\alpha$ -SULFINYL CARBANION, ACYLATION.

THITI JUNPIROM : SYNTHESIS OF 4-DEHYDROPENTENOMYCIN AND ANALOGUES. THESIS ADVISOR : MANAT POHMAKOTR, Dr.rer.nat., PATOOMRATANA TUCHINDA, Ph.D., 105 P. ISBN 974-665-082-3.

4-Dehydropentenomycin and its analogues as well as some pentenomycin analogues were synthesized. The syntheses of these compounds were based on the intramolecular acylation of the  $\alpha$ -sulfinyl carbanions followed by pyrolysis of the resulting products leading to the hydroxy spiro-enone intermediates. Oxidation of these compounds with pyridinium chlorochromate (PCC) followed by hydrolysis with 90% TFA provided the expected dehydropentenomycins. Hydrolysis of hydroxy spiro-enones with 90% TFA gave pentenomycins. Attempts to synthesize pentenomycin II and its epimer were also studied.



$R_1 = R_2 = \text{H}$  (4-dehydropentenomycin)  
 $R_1 = R_2 = \text{CH}_3$   
 $R_1 = \text{H}, R_2 = \text{CH}(\text{CH}_3)_2$   
 $R_1 = \text{H}, R_2 = \text{CH}_2\text{CH}_3$

} analogues