REISSERT TYPE'S REACTION BY USE OF PHOSPHITE (II)

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Reaction of benzo[f]quinoline, 1,7-phenanthroline and 4,7-phenanthroline with acyl chloride followed by the addition of trimethyl phosphite and sodium iodide gave the N-heterocyclic α -phosphonates(1,4,6) and γ -phosphonates(2,5,7) respectively. The position of these phosphonates(1,2,4-7) was confirmed by comparison of 1 H-NMR spectral data of phosphonate reported in literature and synthesized phosphonates (8,9). The same reaction of acridine gave the corresponding phosphonates(10) of Reissert type's compounds which were not obtained in the Reissert reaction.

$$\frac{R \overset{\circ}{\text{CcL}}, P(\text{och}_3)_3, NaI}{\text{in } \text{CH}_3 \text{CN}} + \frac{P(\text{och}_3)_2}{P(\text{och}_3)_2} + \frac{P(\text{och}_3)_2}{P(\text{och}_3)_2}$$

$$\frac{R}{\text{in } \text{CH}_3 \text{CN}} + \frac{P(\text{och}_3)_2}{P(\text{och}_3)_2} + \frac{P(\text{och}_3)_2$$

* K.Akiba, T.Kasai, M.Wada, <u>Tetrahedron Lett.</u>, <u>23</u>, 1709(1982).