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Intramolecular Rearrangements of α -Acylamino-Phosphites

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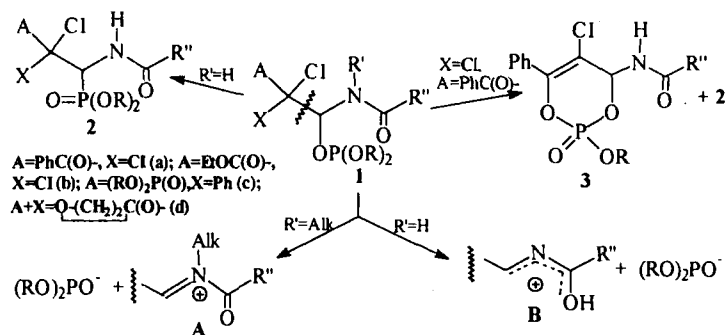
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Intramolecular Rearrangements of α -Acylamino-Phosphites

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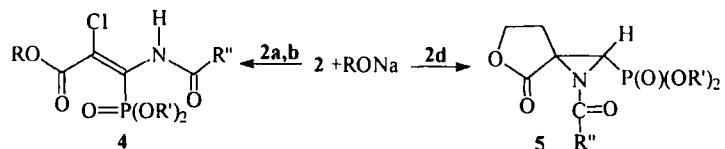
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For the first time we have found out the regularity of rearrangements in a number of α -acylamino phosphites. Phosphites (1) transform to phosphonates (2) if there is a proton at nitrogen atom, in the case of alkyl substituent this rearrangement does not take place.



Carbonylsubstituted phosphites undergo intramolecular Perkow's reaction and phosphite-phosphonate rearrangement at the same time to form phosphonate (2) and phosphorinene (3) [1]. We suppose the dissociative mechanism of this rearrangement to take place due to relatively greater stability of B than A cation.

We have also shown that it is possible to use compounds (2) for the synthesis of unsaturated phosphonates (4) and phosphorus containing aziridines (5).



References

- [1] Guseinov F.I., Burangulova R.N. Zh. Obsh. Khim., 67, No 1, 163 (1997).