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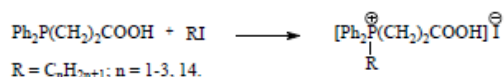
3-(DIPHENYLPHOSPHINO)PROPIONIC ACID QUARTERNIZATION WITH ALKYL HALIDES

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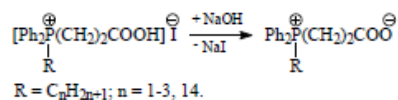
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Organophosphorus compounds are one of the most important group of modern antimicrobial agents, due to their high antifungal and antibacterial activity. Various types of organophosphorus compounds have been synthesized and their biological activities have been tested.

The alkylation reaction of 3-(diphenylphosphino)propionic acid with alkyl halides proceeds by heating in excess of alkyl halides, which is used as a solvent. As a result of reaction corresponding phosphonium salt is formed. Synthesized compound composition and structure were proved by elemental analyses, IR, ^1H NMR, ^{13}C NMR and ^{31}P NMR spectral studies.



This reaction allows to enter different convenient radicals to phosphorus atom. Corresponding new phosphobetaines can be obtained by treatment of synthesized phosphonium salts by 1 M aqueous solution of sodium hydroxide. Further these new phosphobetaines can be alkylated on their carboxylate group:



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