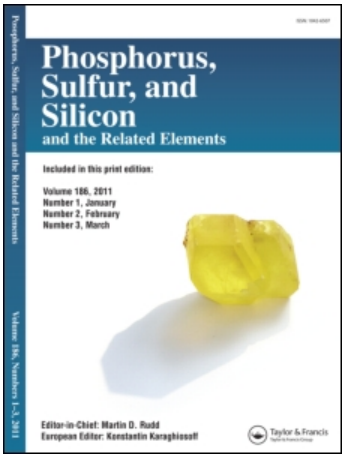

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New Cyclotriphosphazenes with P-C_{Ar} Bonds

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NEW CYCLOTRIPHOSPHAZENES WITH P-C_{Ar} BONDS.

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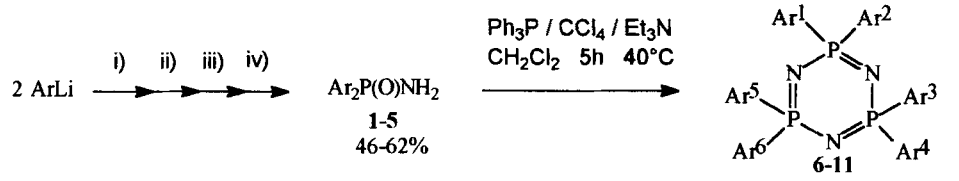
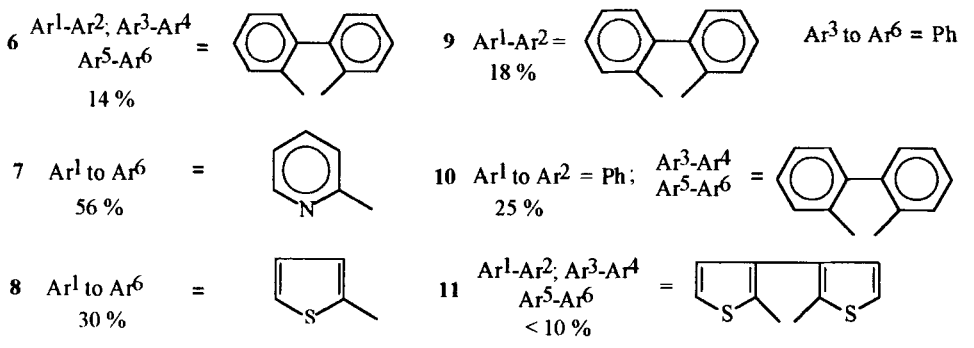
Abstract We describe some new cyclotriphosphazenes in which the phosphorus substituents are either free rotating aromatic or heteroaromatic groups, or rigid spirobiaryl units.

Key words *Arylcyclotriphosphazenes ; Phosphinamides.*

As compared with cyclotriphosphazenes having P-O or P-N side groups, cyclotriphazenes having P-C bonds are much less currently described[1]. However, both better chemical and thermal stabilities[2] and, in the case of spirocyclic phosphazenes, interesting physico-chemical properties, as solid-state inclusion[3] or magnetic field effects, could be expected for these P-C compounds.
The new compounds **6-11** are obtained through phosphinamide precursors **1-5** which are synthesized from aryllithium species.





i) $Et_2NP(O)Cl_2$ or Et_2NPCl_2 then H_2O_2 ii) HCl 37% iii) PCl_5 or SO_2Cl_2 iv) NH_3 aq or gaz

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