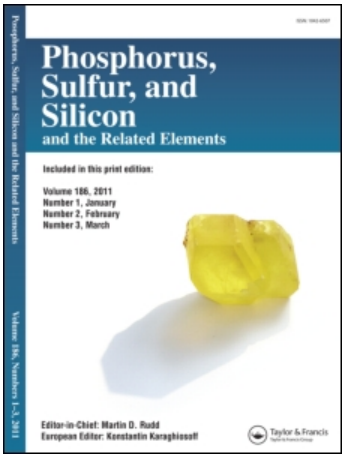

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Synthesis of Bis(Phosphonates) Pyrrolidines Derivatives

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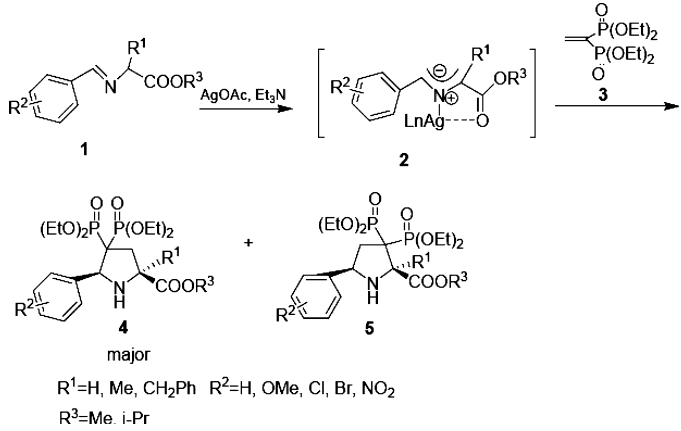
The cycloadditon of azomethine ylides with electronic-deficient olefins provides an efficient method for synthesizing substituted pyrrolidines contained in many biologically active compounds.[1] Many studies have been done in this field in recent years. However, few results have been reported about the reaction of azomethine ylides with vinylphosphonates.[2] We present our results on the reaction between *in situ*-generated azomethine ylides **2** and tetraethyl vinylidenebis (phosphonates) **3**.



N-metallated azomethine ylides **2** were generated by the reaction of arylidene imines **1** with AgOAc and triethylamine. These azomethine ylides undergo cycloaddition to **3** at room temperature with good regioselectivity and yields. The main product is compound **4**. The structures

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of the two cycloadducts were confirmed by ^{1}H NMR, ^{31}P NMR, and elemental analysis.

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