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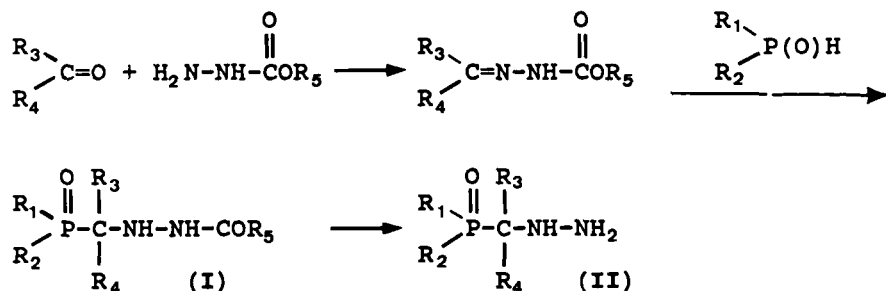
# Preparation of Hydrazinomethylphosphonates, -Phosphinates, -Phosphine Oxides and Derivatives Thereof

Peter J. Diel\* and Ludwig Maier

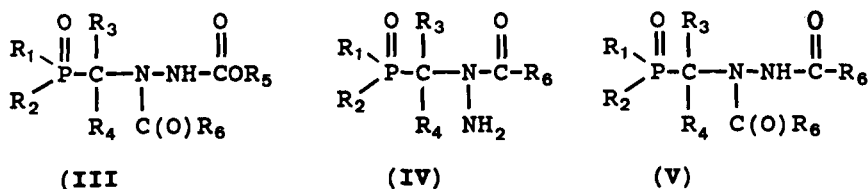
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CH-4002 Basel, Switzerland.

Aminomethylphosphonates, -phosphinates, -phosphin oxides and many derivatives therefrom are well known compounds. The corresponding hydrazino compounds have not been described in the literature. We will present the synthesis of hydrazinomethylphosphonates, -phosphinates and -phosphin oxides II starting from an aldehyde or ketone, a phosphite, a phosphonous acid ester or a sec. phosphin oxide and a protected hydrazine. Cleavage of the protecting group affords the desired hydrazine.



In such a way these so far unknown hydrazines are available and represent useful intermediates for a great number of derivatives. For example, the intermediate I can be acylated to compound III. Deprotection leads to IV. The diacylated product V is obtained from II.



Chemical, physical and spectral data shall be presented. Some of these compounds show interesting biological activity.