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## Stereochemistry of Asymmetric Kabachnik-Fields and Pudovik Reactions

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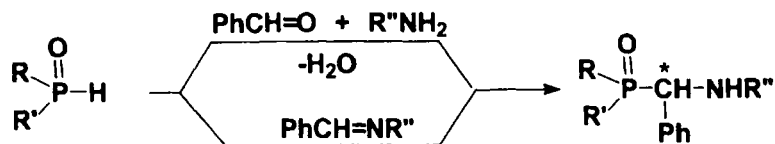
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## Stereochemistry of Asymmetric Kabachnik-Fields and Pudovik Reactions

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Kabachnik-Fields and Pudovik reactions were studied with the use of chiral initial reagents. In all cases the products of these reactions represent a mixture of diastereomers.



$\text{R}, \text{R}' = \text{MeO}; \text{R}'' = \text{C}^*\text{H}(\text{Me})(\text{Ph}), \text{C}^*\text{H}(\text{Me})(\text{Et})$

$\text{R} = \text{Et}, \text{R}' = \text{EtO}; \text{R} = \text{Me}, \text{R}' = \text{i-PrO}; \text{R} = \text{Ph}, \text{R}' = \text{EtO}; \text{R}'' = \text{Ph}$

The analysis of diastereomeric composition of final products by NMR  $^{31}\text{P}$  spectroscopy shows that the same diastereomer predominates in both reactions, the ratio of diastereomers being approximately identical. The data obtained can be used for the elucidation of the mechanism of these reactions.