Crotylmetal Additions to $\alpha$-Chiral Aldehydes

- Substrate Control: Addition of Achiral Allylmetals to $\alpha$–Chiral Aldehydes
- Reagent Control: Addition of Chiral Allylmetals to Achiral Aldehydes
- Reagent Control: Addition of Allylmetals to Achiral Aldehydes (w/ Chiral Lewis Acids)
- Addition of Chiral Allylmetals to $\alpha$–Chiral Aldehydes
- Crotylmetal Additions: 3,4-Stereochemistry (Intrinsic Diastereoselection)
- Crotylmetal Additions to $\alpha$–Chiral Aldehydes

Crotylation with Leighton Reagents
Hackman, B. M.; Lombardi, P. J.; Leighton, J. L. Org. Lett. 2004, 6, 4375

Tables removed due to copyright reasons.
## Construction of Stereotriads

<table>
<thead>
<tr>
<th>Retron</th>
<th>C-4/C-5</th>
<th>C-3/C-4</th>
<th>C-3/C-5</th>
<th>Best Reagent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retron</td>
<td>Felkin</td>
<td>Anti</td>
<td>No Gauche Pentane</td>
<td>![ Felkin Anti No Gauche Pentane ]</td>
</tr>
<tr>
<td>Anti-Felkin</td>
<td>Anti</td>
<td>Felkin</td>
<td>Anti</td>
<td>![ Anti-Felkin Antif Felkin Anti Pentane ]</td>
</tr>
<tr>
<td>Anti-Felkin</td>
<td>Syn</td>
<td>Felkin</td>
<td>Syn</td>
<td>![ Anti-Felkin Syn Felkin Pentane ]</td>
</tr>
<tr>
<td>Felkin</td>
<td>Syn</td>
<td>Felkin</td>
<td>Syn</td>
<td>![ Felkin Syn Felkin Pentane ]</td>
</tr>
</tbody>
</table>

![ Felkin Anti No Gauche Pentane ]

![ Anti-Felkin Antif Felkin Anti Pentane ]

![ Anti-Felkin Syn Felkin Pentane ]

![ Felkin Syn Felkin Pentane ]

+ BF₃-Et₂O
Case Study: Addition of Crotylmetal Compounds to Aldehydes


Figures removed due to copyright reasons.