ABSTRACTS

<table>
<thead>
<tr>
<th>R</th>
<th>$k_s \cdot 10^6$ at $0^\circ$ HCl, 0.1614M ethanol.</th>
<th>Eact. kcal./mole</th>
<th>log PZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ac-</td>
<td>0.0789</td>
<td>18.8</td>
<td>11.9</td>
</tr>
<tr>
<td>Me-</td>
<td>.163</td>
<td>20.0</td>
<td>13.2</td>
</tr>
<tr>
<td>Et-</td>
<td>.176</td>
<td>20.2</td>
<td>13.4</td>
</tr>
<tr>
<td>t-Pr-</td>
<td>.290</td>
<td>19.4</td>
<td>13.0</td>
</tr>
<tr>
<td>H-</td>
<td>1.33</td>
<td>18.4</td>
<td>12.8</td>
</tr>
</tbody>
</table>

The effects of the compositions of the solvent and the concentrations of hydrochloric acid on the rates have been explained in term of the activities of the acid. In the presence of perchloric acid, it has been demonstrated that R in the addition compound can be replaced by the solvent without decomposition. On the basis of these observations, the following mechanism is proposed:

\[
\begin{align*}
\text{CH}_2\text{—CH}_2 + & \quad \text{H}^+ \quad \text{CH}_2\text{—CH}_2 \\
\text{OR HgCl} & \quad \text{HOR HgCl} \\
\text{CH}_2\text{—CH}_2 + & \quad \text{HOR HgCl} \\
\text{HOR HgCl} & \quad \text{HgCl} \\
\text{CH}_2\text{—CH}_2 + & \quad \text{Cl}^- \quad \text{R.D.} \rightarrow \text{CH}_2\text{CH}_2 + \text{HgCl}_2
\end{align*}
\]

A Novel Synthesis of $\alpha$-Methylmuconic Acid

Shuji INAMASU, YUZO INOYUE and MINORU OHNO

Botyu-Kagaku (Chemistry of Insect Control), 25, 108 (1960)

$o$-Methylcatechol was prepared from $o$-cresol through $3$-nitro-$o$-cresol, $3$-nitro-$2$-methoxy-toluene, $3$-amino-$2$-methoxy-toluene and $3$-hydroxy-$2$-methoxy-toluene. Peracetic acid oxidation of $\alpha$-methylcatechol afforded $\alpha$-methyl-$cis,cis$-muconic acid in a higher yield than that obtained by direct peracid oxidation of $o$-cresol.

Blätteraldehyd: Eine einfache Synthese und Konfiguration

Akikazu HATANAKA and Minoru OHNO


Blätteraldehyd wurde durch die einfachste, ergiebigste Synthese dargestellt. Demnach wurde es aufgeklärt, dass die Konfiguration des natürlichen Blätteraldehyds trans-Form ist.