

The example article using konwterter

Piotr Wawrzyniak

06/03/2005

1 Preface

In this document I present some wonderful features of konwterter. If you see the source of this file, you will be able to more understand how this program works. The reaction.ps file, is the original file, with labels, that was not preprocessed by konwterter. Why it is ps file, not dvi? Because konwterter changes also eps files, and the dvi file strongly depends on it. It is just demonstration how all looks like before processing. Of course you can easily restore original format of eps files calling konwterter with -ntl option. The reaction.tex.auto.tex is the file, that was already processed. That file one should compile using latex, and after that one will get reaction.tex.auto.dvi file, that contains already not labels but numbers. The result that I've got one can see in the reaction.tex.auto.ps file.

Before working one should create a special command form label inserting - \nrzw{}. Here is what I did:

```
\newcommand{\nrzw}[1]{\textbf{#1}}
```

Here in this case all compounds numbers will be presented in bold. In fact konwterter does not care what this command does, so you can define it as you only wish.

To see how the konwterter works, please run it as follows:

```
konwterter reaction.tex
latex reaction.tex.auto.tex
dvips -o reaction.tex.auto.ps
gv reaction.tex.auto.ps
```

The first command, converts all labels to numbers. As a result you get the new reaction.tex.auto.tex file, that should be compiled with L^AT_EX. The third command is the converting from dvi file to postscript, and the final command is seeing a result.

Have a great fun, using the konwterter.

Piotr Wawrzyniak

2 The acyloin condensation - arabic numbering.

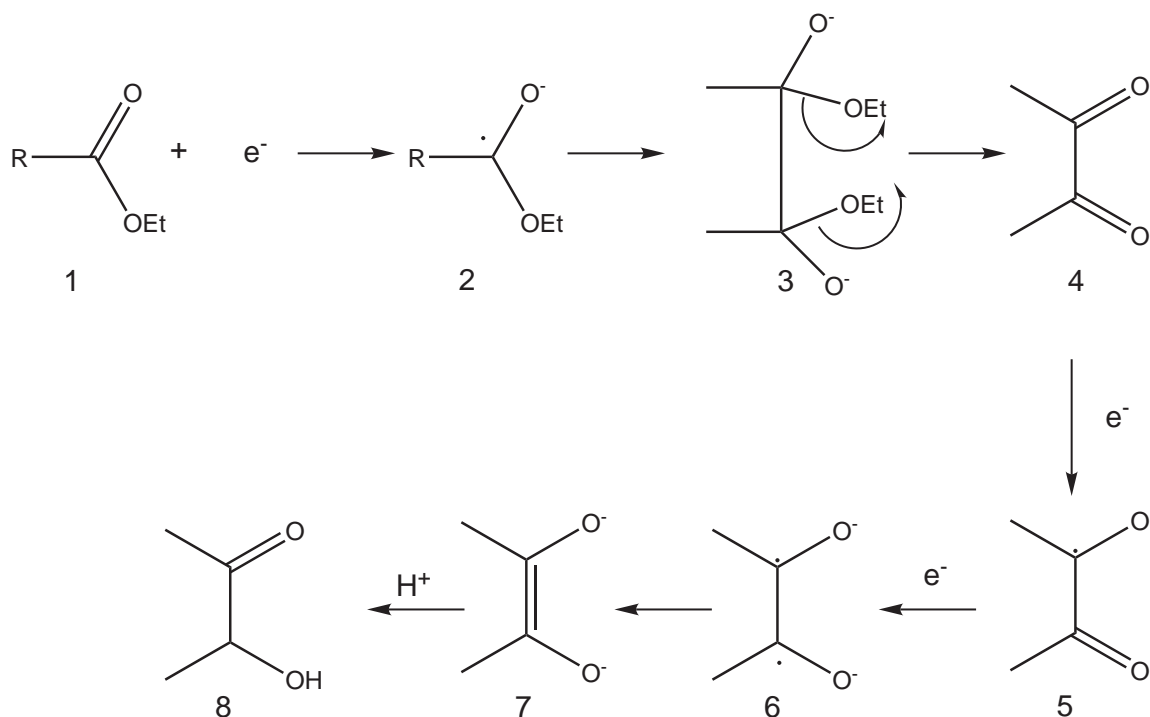


Figure 1: The acyloin condensation mechanism.

Above we have the mechanism of the acyloin condensation. It is just great example of attack of the electron on the carbonyl group. The ester **1** is attacked by an electron, forming the anion radical **2**. Two particles of **2** can combine together, forming dianion **3**, that after two OEt group removing forms diketone **4**. The next step of the reaction is once again attack of the electron and forming the compound **5**, that undergoes another electron attack, forming dianion radical **6**. This particle can undergoes rearrangement to a compound **7**, that after protonation gives α hydroxyketone **8**.

3 The acyloin condensation - roman numbering.

We are starting numbering from 5: –set-r-to 5.

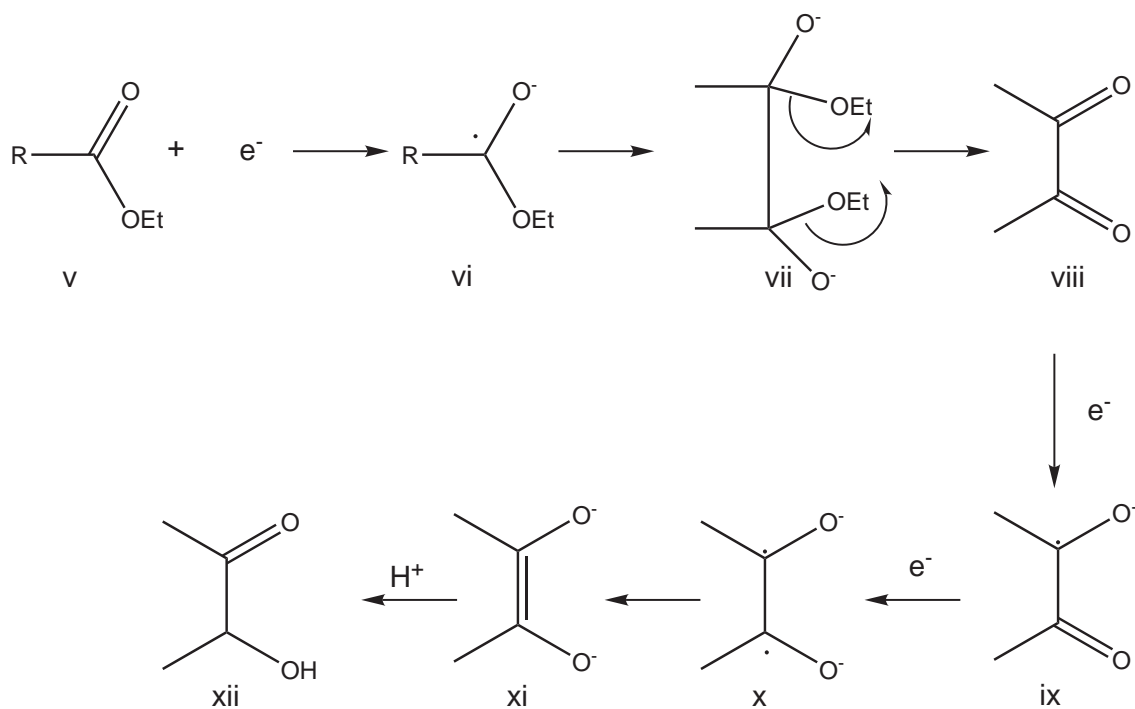


Figure 2: The acyloin condensation mechanism.

Above we have the mechanism of the acyloin condensation. It is just great example of attack of the electron on the carbonyl group. The ester **v** is attacked by an electron, forming the anion radical **vi**. Two particles of **vi** can combine together, forming dianion **vii**, that after two OEt group removing forms diketone **viii**. The next step of the reaction is once again attack of the electron and forming the compound **ix**, that undergoes another electron attack, forming dianiondiradical **x**. This particle can undergoes rearrangement to a compound **xi**, that after protonation gives α hydroxyketone **xii**.

4 The acyloin condensation - letters numbering.

We are starting numbering from 10: -set-L-to 10.

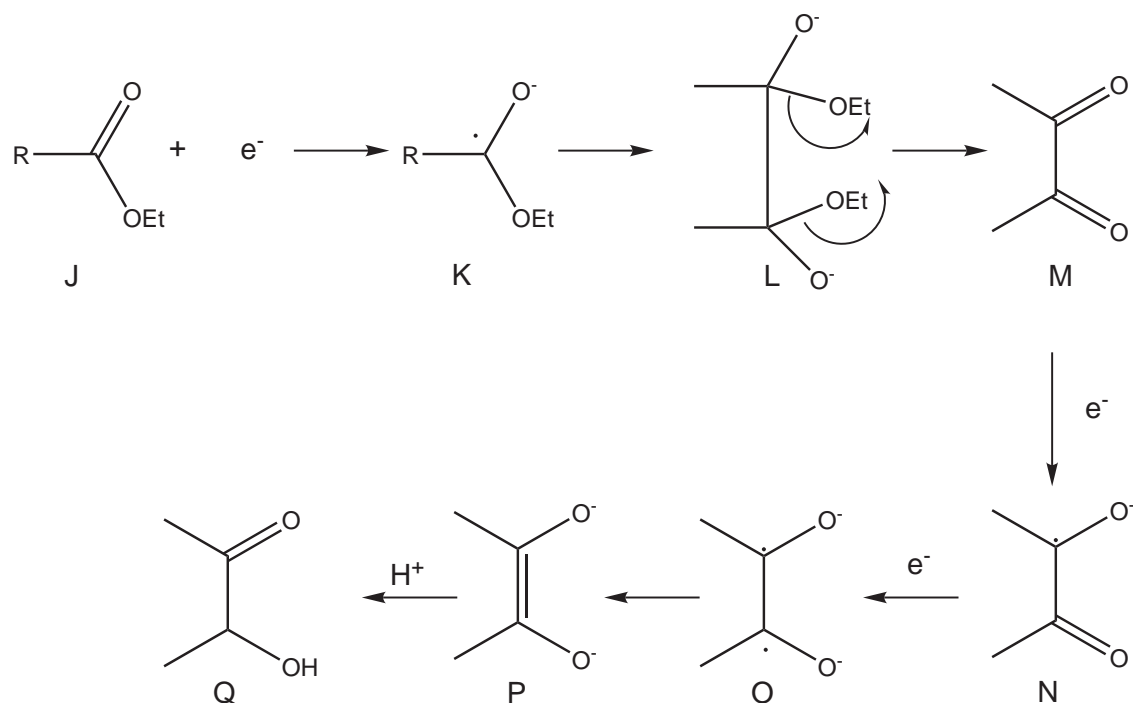


Figure 3: The acyloin condensation mechanism.

Above we have the mechanism of the acyloin condensation. It is just great example of attack of the electron on the carbonyl group. The ester **J** is attacked by an electron, forming the anion radical **K**. Two particles of **K** can combine together, forming dianion **L**, that after two OEt groups are removed forms diketone **M**. The next step of the reaction is once again attack of the electron and forming the compound **N**, that undergoes another electron attack, forming dianiondiradical **O**. This particle can undergo rearrangement to a compound **P**, that after protonation gives α -hydroxyketone **Q**.