

# Using packages to use dynamic acronyms instead of hard-coding them

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In this document I will try to show you how to create and use a list of acronyms in your document the  $\text{\TeX}$  way. One might ask: 'Why you need this? I can type everything manually and it will be alright...' I guess that if you right your thesis which is 200 pages long, checking whether you have included the definition of the acronym the first time you used a phrase is the least you want.

## 1 The acronym package

### 1.1 An example

List of used acronyms:

$\text{D}_2\text{O}$  deuterated water

$\text{H}_2\text{O}$  water

DMF di-methyl-formamide

There are only 2 differences between deuterated water ( $\text{D}_2\text{O}$ ) and water ( $\text{H}_2\text{O}$ ). On the other hand, both  $\text{D}_2\text{O}$  and  $\text{H}_2\text{O}$  should behave chemically identically. Also di-methyl-formamide (DMF) is in the acronym list.

### 1.2 Code used for the example

List of used acronyms:

```
\indent
\begin{acronym}
  \acro{d2o}[\ce{D2O}]{deuterated water}
  \acro{h2o}[\ce{H2O}]{water}
  \acro{dmf}[\ce{DMF}]{di-methyl-formamide}
  \acro{dmsO}[\ce{DMSO}]{di-methyl-sulfoxide}
\end{acronym}
```

There are only 2 differences between `\ac{d2o}` and `\ac{h2o}`. On the other hand,

both `\ac{d2o}` and `\ac{h2o}` should behave chemically identically.

Also

`\ac{dmf}` is in the acronym list.

As you see, I have defined more acronyms than I have actually used. But, since I have initiated the package with `printonlyused` option (ie. I have `\usepackage[printonlyused]{acronym}` in my preamble.) However, it is possible to get individual acronyms printed once `\acused{}` command is issued. Then the acronym will be printed regardless whether it is mentioned or not as the package will think, that it was used. Also, only short version will occur in the text if it will be used.

If the `printonlyused` option is omitted, then all defined acronyms will be printed out as a result.

## 2 The glossaries package

Glossaries package is another possible way to get a similar kind of functionality, but it is a little bit more complicated than acronym package. I believe that it is indispensable in writing glossaries or dictionaries, but for simple acronym usage it might be too heavy.

However, for people who are interested in trying out alternatives, please refer to these web-pages and the documentation of the package.