

## Installing NCEMSS on your machine

The files are provided in a tar archive ncemssV1\_8.tar

Move the file ncemssV1\_8.tar into a location which will be the parent directory for the directory ncemss.

Execute the command: "tar xf ncemssV1\_8.tar"

Which will create the directory ncemss and place the files below into that directory

The files that are provided are:

```
"ncemss"          - Executable Image
"spcgrp.dat"      - Data file for the 230 Spacegroups
"scatt.dat"       - Data file for the atomic scattering factors, x-ray
"elfact.dat"      - Data file for the atomic scattering factors, electron
"microscopes.dat" - Data file for the "known" microscopes
"lprint.ps"       - Postscript Definitions used for printing
```

together with some example structure files.

If you want NCEMSS to be usable to all users on the machine, a typical installation procedure is as follows:

In order for anyone to use the program, the following environment variables must be set; NCEMSSDIR, NCEMSSPOOL and possibly DISPLAY as explained below.

You may have to be running the shell "csh" in order to set your environment variables. In this case if the command "setenv" is unknown, type "csh" to get the appropriate shell before executing the commands below.

```
NCEMSSDIR - path to directory created above. This is needed so that the
           - program can find its data files. If the variable NCEMSSDIR
           - is left out, the program will default to look for the data
           - files in the current directory.
NCEMSSPOOL - path to any directory containing structure files
           - made available to all users
DISPLAY    - normally not required if the user runs the program
           - from the workstation console with an x-window manager
           - running. If the program is run from an
           - X- window terminal then the DISPLAY must be set to
           - the corresponding nonde-name of the terminal.
```

Example:

```
setenv NCEMSSDIR /usr/ncemss
setenv NCEMSSPOOL /usr/ncemss
setenv DISPLAY ux5.lbl.gov
```

A note about printing.

NCEMSS creates a postscript file which it tries to send to some postscript printer by the command "lpr <filename>". In order for this to work, the symbol lpr must be defined such that it takes its argument (a filename) and sends it to a postscript printer.

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