How to use cmd-PC1D6.1 and the associated conversion programs

1. Set up the simulation parameters and the device structure. The original PC1D interface or PC1Dmod6.1 can be used for this.

2. Convert the .prm files to ascii text for editing:
   convert_prm_to_ascii.exe filename.prm filename.txt

3. Change parameters by editing the text version of the parameter file, which is now called *filename.txt*. For a single-region simulation, each parameter will always correspond to a specific line number.

4. Convert the text file back to the .prm format:
   convert_ascii_to_prm.exe filename.txt filename.prm

5. Use one of the cmd-PC1D programs to run the simulation:
   cmd-pc1d5.exe filename.prm (original PC1D)
   cmd-pc1d6-1.exe filename.prm (modified PC1D)

6. To run batch simulations with a batch file, use the following syntax:
   *cmd-pc1d5.exe filename.prm batchfile.txt (original PC1D) **
   * cmd-PC1D 6.0 does not support batch simulations at the moment, but this will hopefully be fixed in a future update. Batch simulations must therefore be done using a loop, or within the PC1D for Matlab GUI.

7. The output from cmd-PC1D is a column vector of x-data followed by up to four column vectors of y-data. The type of output data can be defined in two ways:

a. By using the original PC1D GUI, use "Graph" -> "Defined" under the main file menu.
b. By directly modifying the .prm file.

8. The description field of the .prm file (the second line in the corresponding .txt file) is used to specify a file location for the configuration file, which may be used to specify which physical models to use. See PC1Dmod6.1 help for details.