PLATON for MS-Windows

PLATON for Windows is an MS-Windows implementation of PLATON, released in collaboration with Ton Spek. It is identical to the UNIX workstation version, except that System S is not available because it is too UNIX specific. The program works for all 32 & 64-bit versions of Windows (2000/XP/VISTA/7/8).

**** PLATON for WINDOWS TASKBAR *******

There are two components to the Windows version of Platon :

- (a) the Platon for Windows Taskbar (PWT) and
- (b) the PLATON executable.

The former is only modified occasionally, while the latter is updated frequently. The PLATON executable is now identical to the WinGX version, so that users can update their WinGX versions by downloading this file.

**** Hardware Requirements *****

PLATON for Windows requires a Pentium (or equivalent) processor with at least 32 Mb (preferably more) RAM memory. It will be much slower on older machines. A Windows resolution of at least 800x600 is recommended - the graphics have been optimised for 1024x768 (or better) resolution with a high color display (i.e. more than 8 bits per pixel)

***** Installation ********

- 1. If you are downloading Platon for Windows for the first time, you should obtain and install the Platon for Windows Taskbar. Unzip (using WinZIP) the download file and run setup.exe. This is a standard Windows install program, which will place the files in your chosen directory (by default c:\pwt). >> NOTE that this installation DOES NOT CONTAIN the PLATON executable but is merely a GUI to run the program. It allows the user access to all the UNIX shortcuts, but in the Windows environment. This download will only be modified occasionally, so you only need to obtain this once. You may wish to create a shortcut to this GUI on your desktop.
- 2. The PLATON executable is updated often as and when new UNIX versions of the PLATON code become available. To update your version, you should download the ZIP file, unzip the contents of this file (PLATON.EXE and CHECK.DEF) into your installation directory for the Taskbar, overwriting old versions of these files.

You should also set the following environment variables to get the most out of Platon for Windows:

(see this FAO page if you do not know how to do this)

set CHECKDEF={fullpath for file CHECK.DEF e.g. c:\platgui\check.def} recommended
set RASEXE={fullpath for RasMol executable - if you have it !}
set POVEXE={fullpath for PovRAY executable - if you have it !}
set NETEXE={fullpath for NETSCAPE or other HTML browser - if you have it !}

***** Input files ********

PLATON accepts atomic coordinate files in the following formats: SHELX (.INS or .RES), CIF, PDB, CSD-FDAT, SPF

Files can be opened, and working directories changed, using the File [Select Data File] menu item as is normal for Windows programs. No options will work unless a data file is selected.

**** Hard copy graphics *****

Hardcopy may be obtained from PLATON in the following ways:

- 1. Write a metafile. There are now three options for the metafile format, the most useful being Postscript or HPGL format. These may be selected by typing "SET META ON" then "SET META PS" or "SET META HPGL" (or your other choice) at the dialog box prompt, OR if you are using the menu in the graphics window by clicking on the appropriateEPS/HGL/TEK button in the main menu. There are no facilities in PLATON for directly producing a plot from this metafile this will depend on your local system. Those who have PostScript capable Laser printers may copy a PostScript file straight to the printer.
- 2. Write a POVRAY file from PLUTON. This is a scene-description file for the excellent FREE ray-tracing program POVRAY, available for a number of platforms from : http://www.povray.org/

There is an excellent FREE viewer for graphics files such as are produced

by PoVRay or Raster3D called IrfanView. It is available from the website

http://www.irfanview.com/

There are also excellent programs available for viewing HPGL or PostScript metafiles, and printing them on a large variety of printers.

For HPGL files, program PRINTGL is available from the web-site http://www.concentric.net/~ravitz/

For PostScript files, program GSVIEW is available from the web-site http://www.cs.wisc.edu/~ghost/index.html

***** Problems ********

Known problems: none

Please address any problems with these versions of PLATON to me at the email address below. Please DO NOT contact Ton Spek directly. I will ascertain whether your problem lies with this implementation or with PLATON itself. If the problem lies with PLATON, I will forward your comments to Ton Spek. I will also try and answer general queries about PLATON, but please be aware that I did not write the program!

Dr. Louis J. Farrugia, Department of Chemistry, University of Glasgow, Glasgow G12 8QQ Scotland UK

phone: +44 (0)141 330 5137
fax : +44 (0)141 330 4888
email louis@chem.gla.ac.uk