

## **Explanations for Supplementary Material**

Six steps to execute WinTtrclas in a personal computer (PC) with the 64-bit Windows 10 and later operating system (OS).

1 – Click Start button and type cmd in the Type here to search box. Select Run as administrator option. A windows appears on screen showing "Do you want to allow this app to make changes to your device?".

In this windows, click Yes button to continue.

- 2 A Black Screen appears on screen starting with the C:\Windows\system32> command. In here, type regsvr32 /u "C:\Program Files (x86)\WinTtrclas\MSFLXGRD.OCX and then press Enter key. You will see a windows on screen showing "DllUnregisterServer in C:\Program Files (x86)\WinTtrclas\MSFLXGRD.OCX succeded". Press OK button to continue. [Notice a blank between regsvr32 and /u as well as /u and "C:\Program Files (x86) ...]
  3 - Type
  - regsvr32 "C:\Program Files (x86)\WinTtrclas\MSFLXGRD.OCX and press ENTER key.

You will see a windows on screen showing "*DllUnregisterServer in C:\Program Files (x86)\WinTtrclas\MSFLXGRD.OCX succeded*". Press **OK** button to continue. [Notice a blank between regsvr32 and "C:\Program Files (x86) ...]

- 4 Close the Black Screen by clicking the X sign on the top right side of Black Screen.
- 5 When mouse arrow is on the WinTtrclas icon on desktop, click right button and select Run as administrator option from the pull-down menu appeared on the screen.

6 – Finally, the program that you installed into a PC with the 64-bit OS is ready to calculate columbite supergroup mineral analyses.
For example, you can execute the "Species.ttr" file from the pull-down menu of File —> Open File options.