

Analysing ERD-ToF data with Allegria in 5 minutes

- 1) Download the example:
 - Windows user, download the following file:
<http://www.lps.umontreal.ca/~schiette/Allegria/files/TOFexample.zip> (case sensitive).
This file contains the program and a data file used for this example.
 - Linux user, you must previously have compiled and installed *Allegria*. Then, download the following file:
<http://www.lps.umontreal.ca/~schiette/Allegria/files/TOFexample.gz> (data only)
- 2) Unzip this file in a new directory. (Path name may not contain spaces and letters with accents or other unusual characters.) Linux users must also copy their executable files *SpectrumExtractor*, *Allegria* and *erd2003.exe* to this directory.
- 3) Fire up *SpectrumExtractor* from this directory.
- 4) Open an event file:
 - Select "File > Open event file" from the menu.
 - Select the file "glass.dat" located in the "Data" subdirectory.
- 5) Select "Display > Recall display > m vs E" from the menu.
- 6) Click on the following elements in the periodic table: B, O, Si, Na, K, Qa.
 - Qa is actually a dummy element that we will use to extract ^{10}B , while ^{11}B is specified by element B.
- 7) Select "Projections > Energy Projection" from the menu. Spectra for the selected elements should show up.
- 8) Save the mass-separated spectra: select "File > Write energy spectra in separate files" from the menu, and go to the directory where the file "glass.dat" was located. Click OK.
- 9) Exit *SpectrumExtractor*
- 10) Fire up *Allegria*.
- 11) Open the "Experimental Parameters" dialog by selecting "Conversion > Experimental parameters" from the menu.
- 12) Click the "Select Dir" button and browse down to the directory where the spectra extracted in the previous steps are stored. Click "Ok".
- 13) Click "Ok" to close the "Experimental Parameters" dialog.
- 14) Start the conversion: select "Conversion > Go" from the menu. If every thing goes well, Windows users should see a DOS window with a message at the bottom: "Iteration 1 starting", then 2, and then 3. Linux users will see the same in the console from which they started *Allegria*. The resulting profiles (after 3 iterations) will show up in the "Depth profiles" window.
- 15) You may zoom the profiles by clicking in the graph region and dragging the mouse over the profiles. To unzoom, right-click and select unzoom. Depth profiles data can be saved in a single, multi-column file by selecting "File > Write Depth Profiles in a single file" from the menu. This is a practical format for importation into your preferred graph plotting program. Data saved in this format cannot be reloaded into *Allegria* though, you must manually reload them one by one from the Data directory.