

# **CrystalSleuth**

**Raman Quick Start Guide**

# Table of Contents

Opening files . . . . .	03
Background removal . . . . .	04
Cosmic ray removal	
Automatic . . . . .	06
Manual. . . . .	07
Search RRUFF Raman library . . . . .	10

### Opening Files:

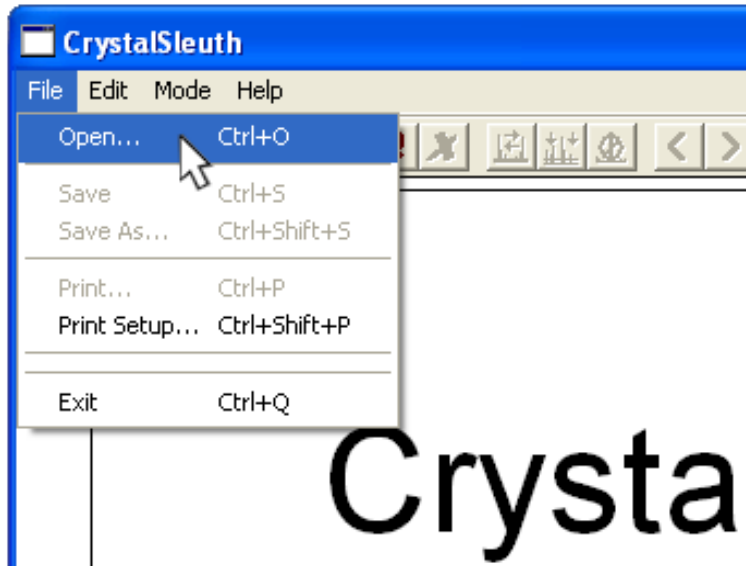
CrystalSleuth will only read plain text files (no rtf, or msword documents) where a single data pair (x, y) is written to each line. Data can be <tab> <space> or comma delimited.

For Omnic Users, saving the file as a .CSV file type will make it accessible with CrystalSleuth.

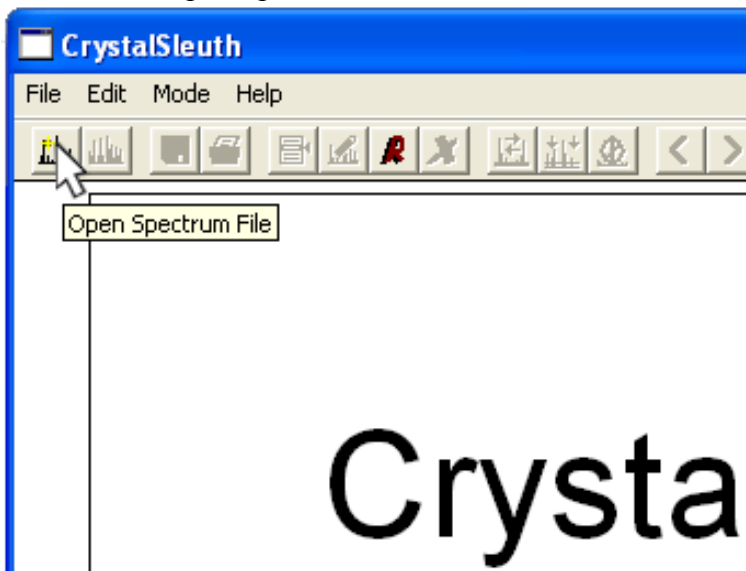
Files with a .ruff extension are associated with CrystalSleuth by default.

To OPEN a file:

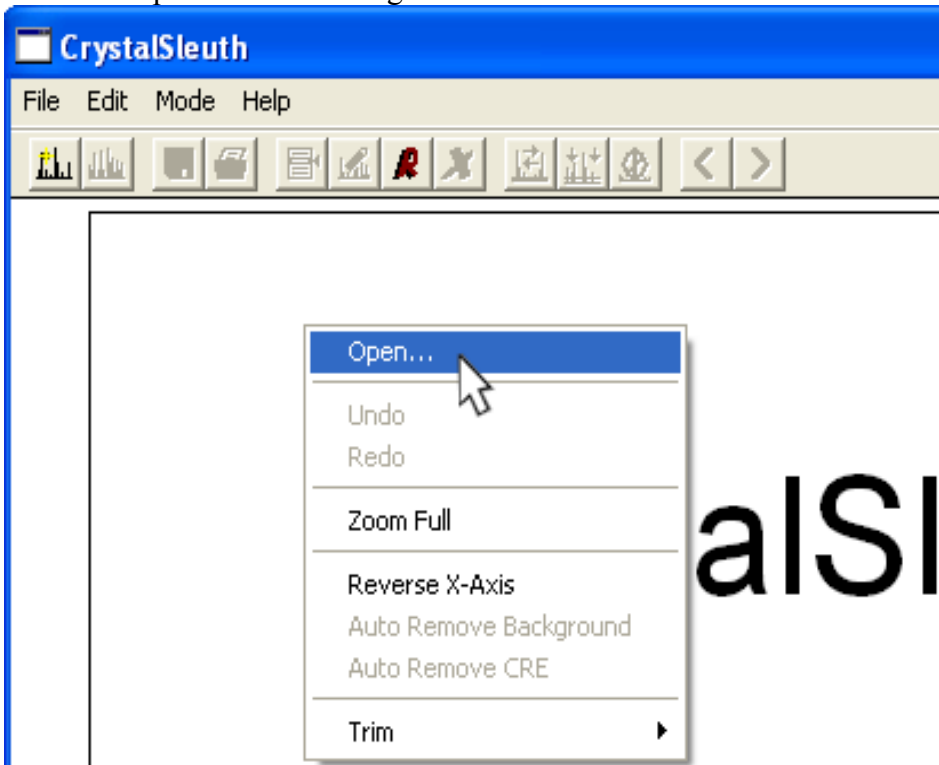
Select 'Open' from the file menu



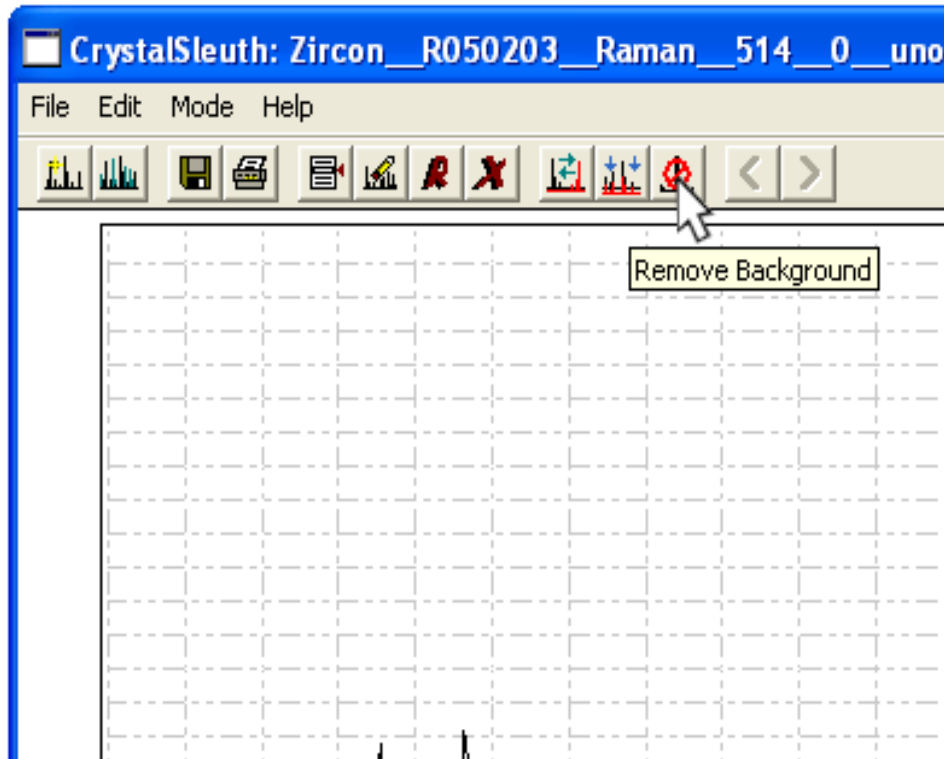
or click the 'Open Spectrum File' button from the toolbar



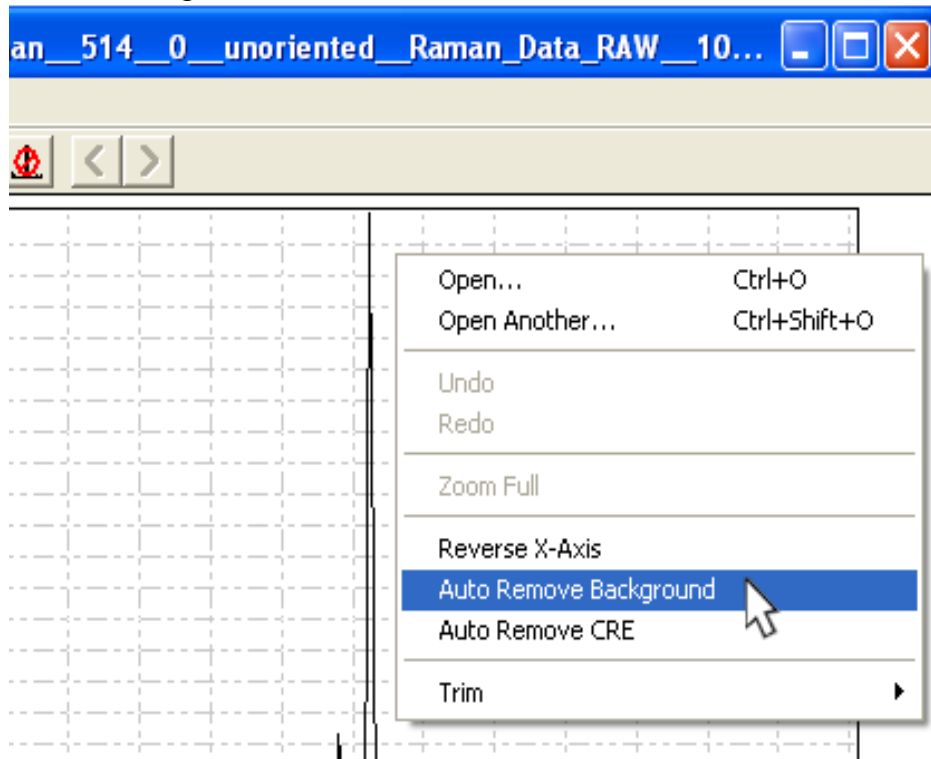
or select 'Open...' from the right-click menu.



**Background Removal:** (subroutine from the Razor library, <http://www.spectrumsquare.com>)  
Remove spectrum background with the 'Remove Background' button in the toolbar.

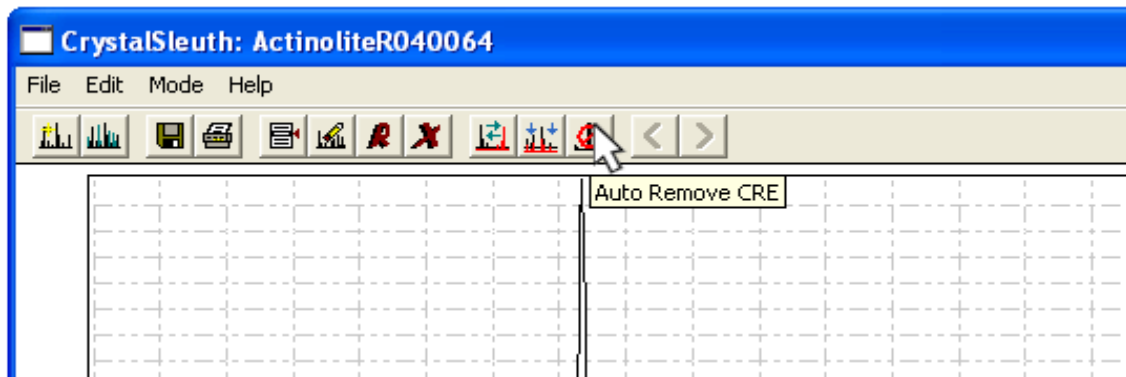


or from the right-click menu

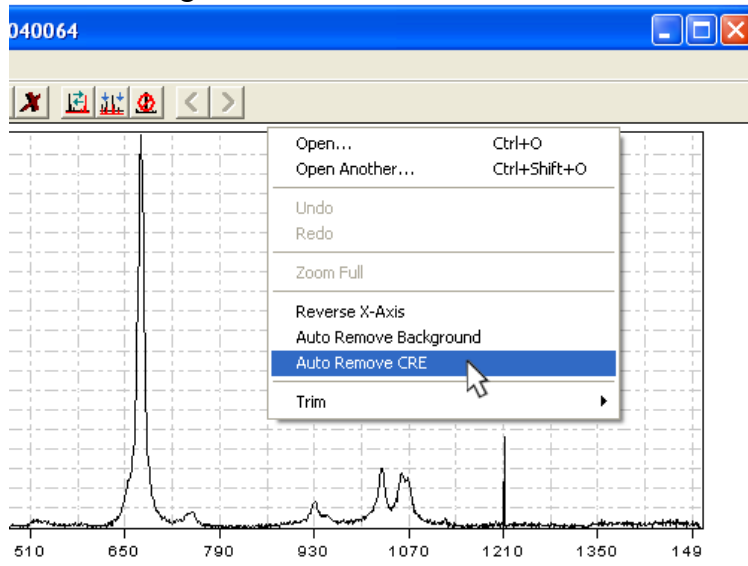


## Remove Cosmic Ray Event(s) (CRE):

Remove many of these automatically with the 'Auto Remove CRE' button



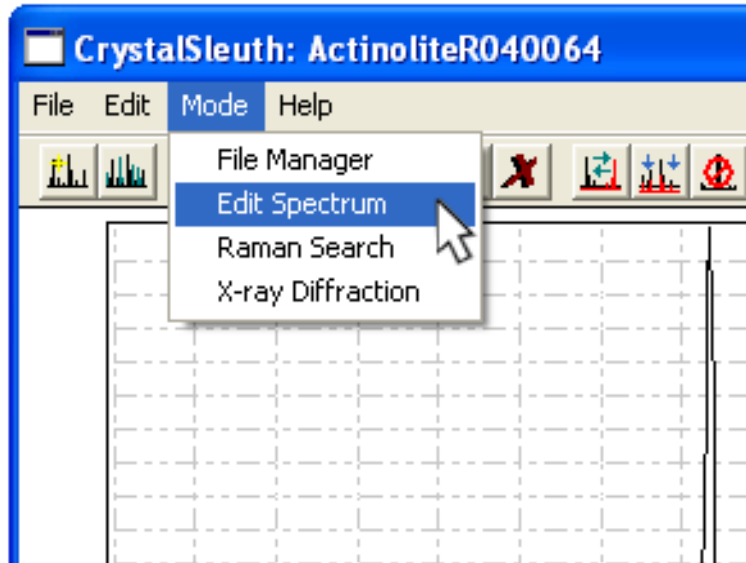
or from the right-click menu



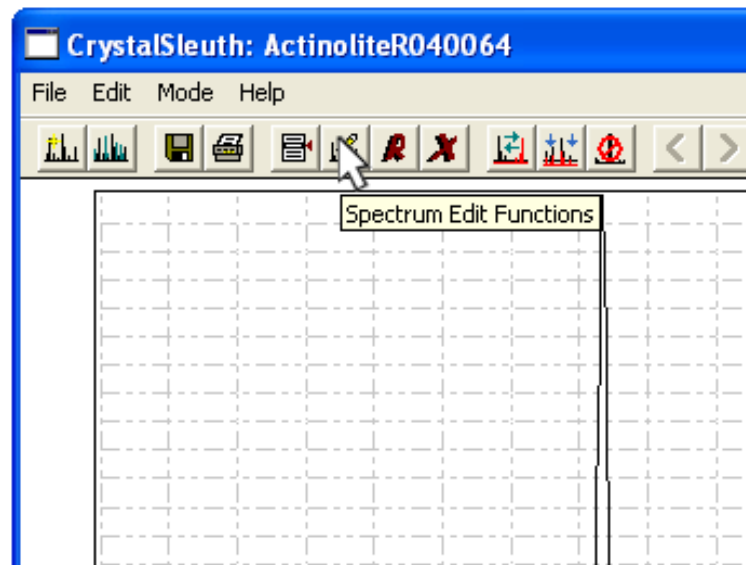
## Manual Removal of CRE:

On occasions where automated removal does not remove the peak, or causes undesirable clipping of well resolved Raman peaks, manually remove CRE(s) in 'Edit Spectrum' mode.

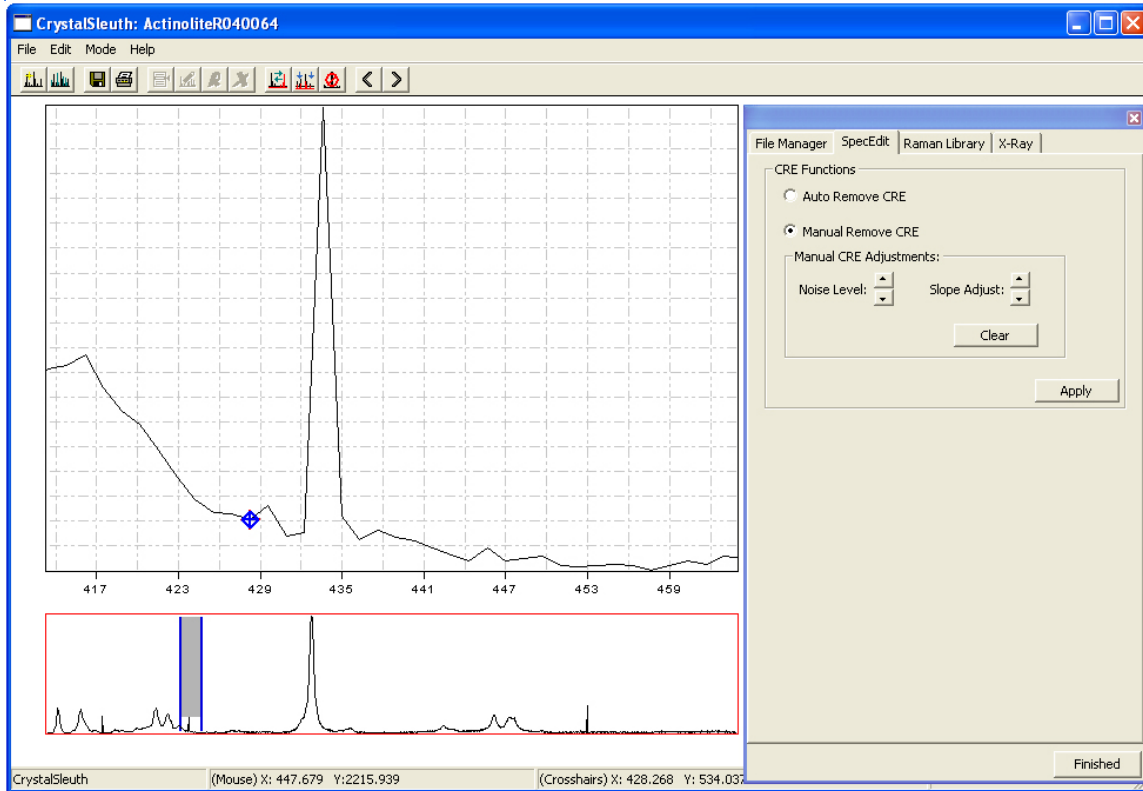
From the file menu:



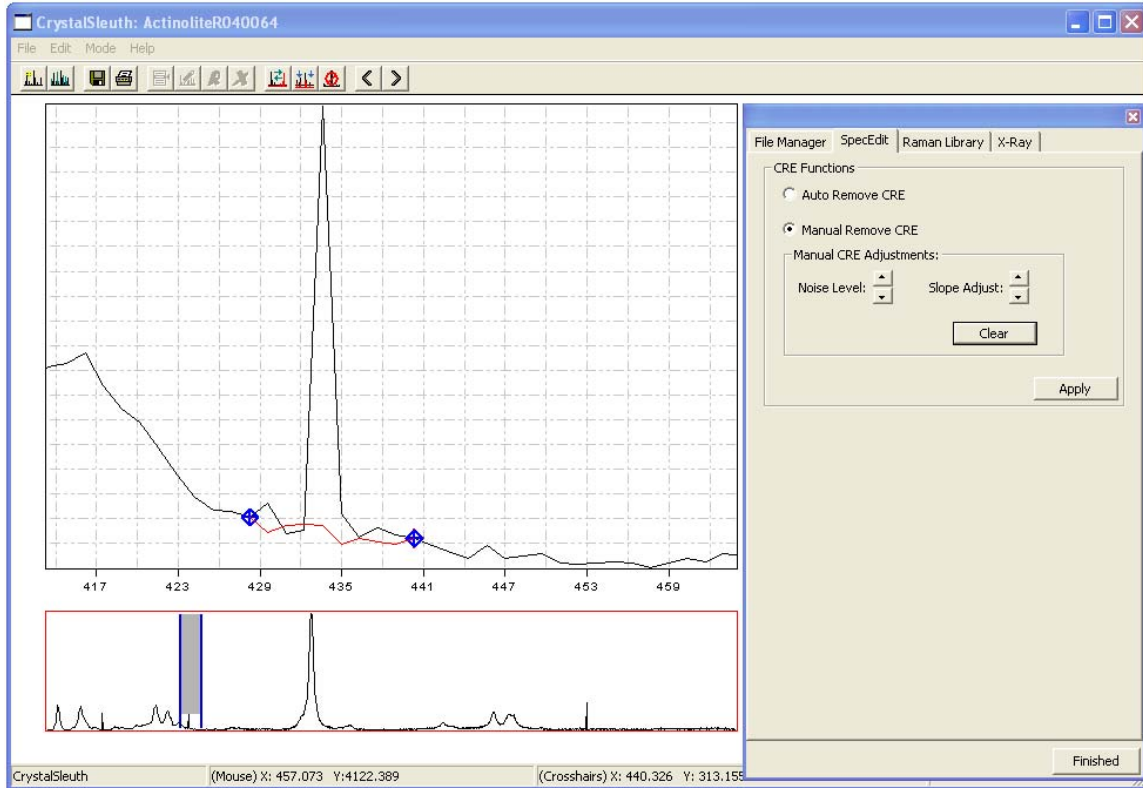
from the toolbar:



Left click, hold and drag the cursor around a peak to zoom in on the region.  
Select upper and lower bounds.

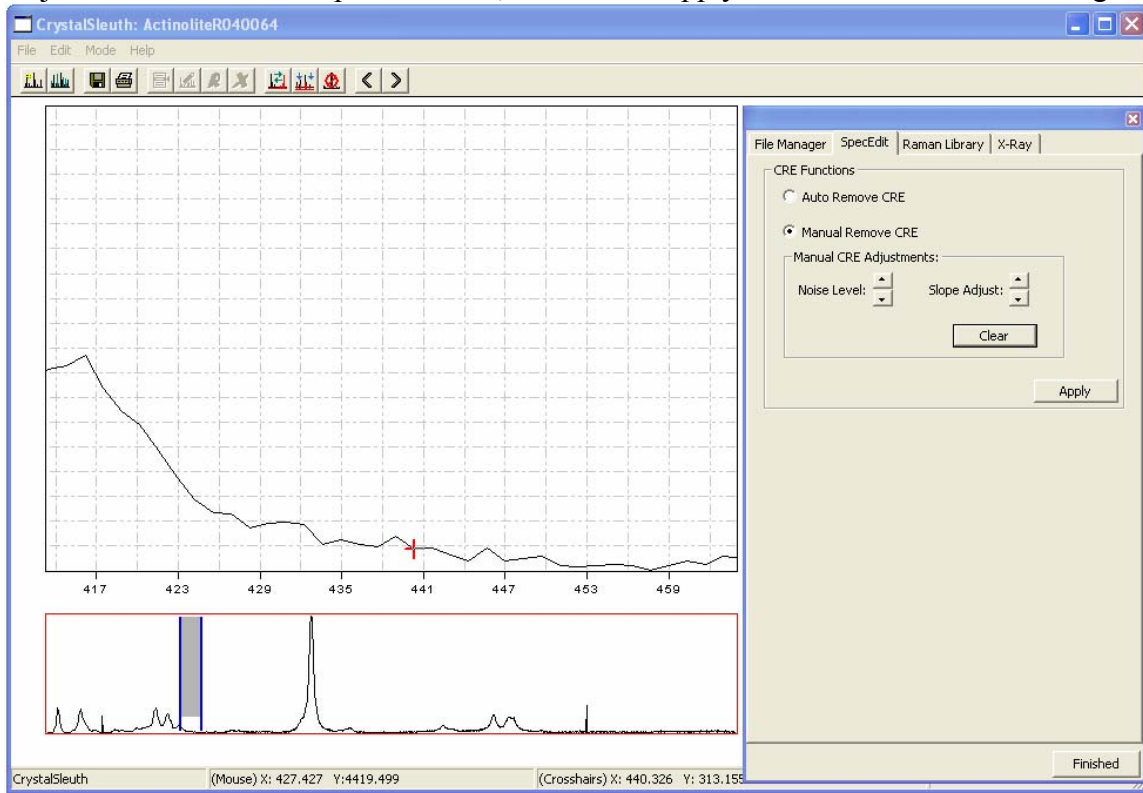


The software draws a red preview of the corrected portion.





Adjust noise level and slope as needed, then click 'Apply' button to commit the change.

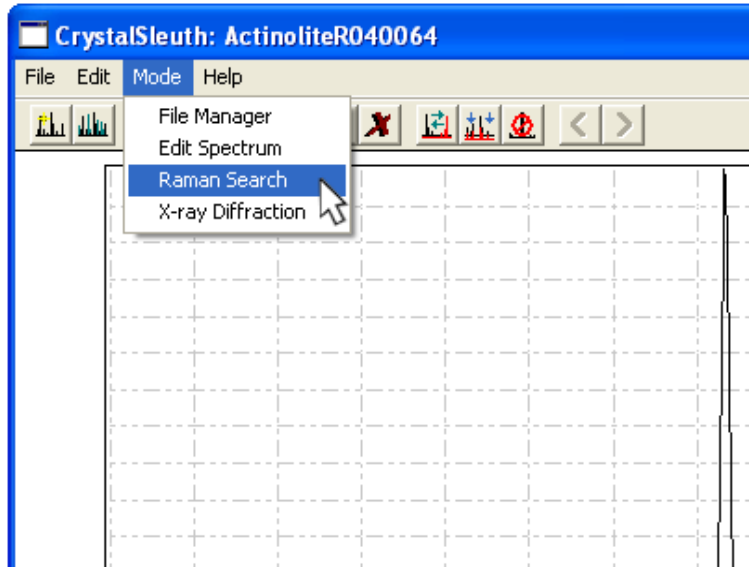


When completed, click Finish.

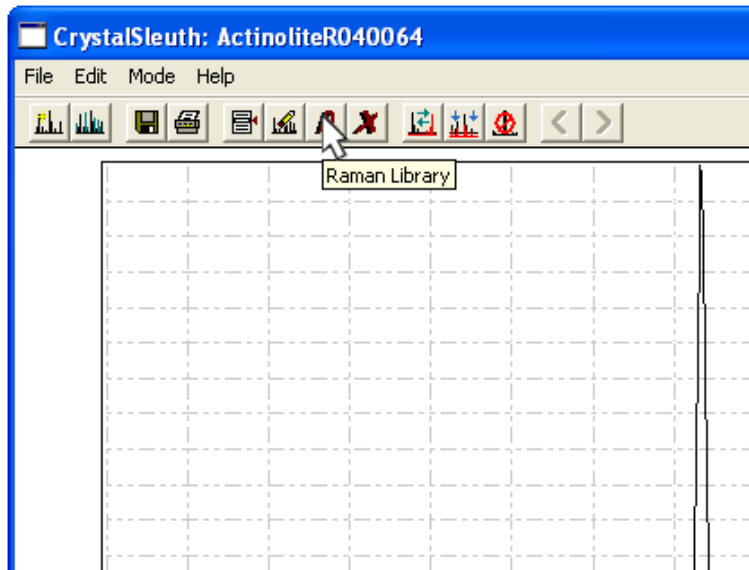
## Search the RRUFF Raman Library:

Access the Raman Search dialog.

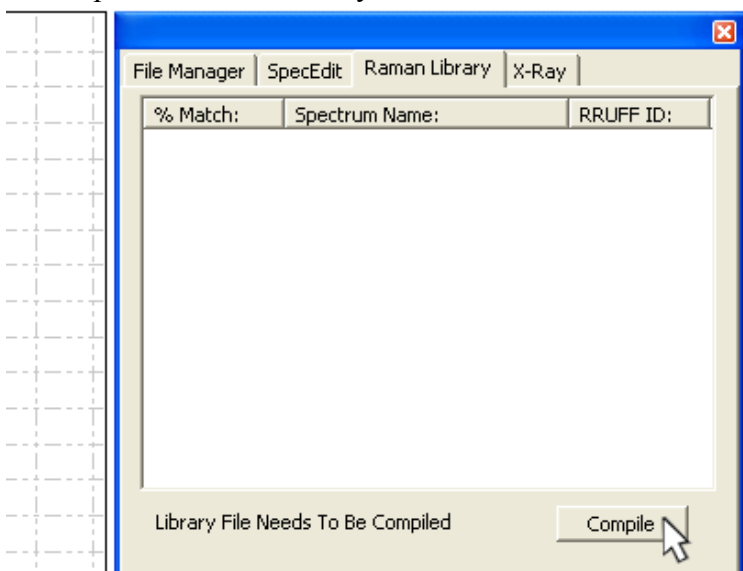
From the File menu



from the toolbar



If this is the first time searching since the installation of the software it will be necessary to compile the search library.



View results in the same window with double click.

