

## How to Perform a Chemistry Analysis of Large Data Sets

- 1) OPEN the Excel calibration spread sheet for that material to be analyzed.
  - a) SAVE the sheet under a different name in the folder with your unknown data.
  - b) KEEP the original calibration sheet as an unaltered template.
- 2) SELECT the pdz tab in the spread sheet.
  - a) CLICK S1CALPROCESS.
  - b) SELECT the Insert PDZ option in the drop down.
- 3) FIND and HIGHLIGHT the spectra you want analyzed and INSERT them.
- 4) SCROLL DOWN to where the names appear and HIGHLIGHT them. The names are in Column B.
- 5) COPY the names.
- 6) SELECT the Chem Tests Tab at the bottom of the Excel page.
- 7) PASTE the names in Column F. 
- 8) In column G, TYPE in the calibration file name (e.g., GL1, or CU1). **DO NOT INCLUDE FILE EXTENSION.**
  - a) ENSURE the names extend all the way down by each spectra name.
  - b) (Note: the CFZ calibration file is saved in the folder listed on the Instrument info tab in cell F1. The Chem Test macro will use  GL1 or CU1 coefficients directly from the Calibration spreadsheet.).
- 9) SELECT the Chem Test tab in the S1Calprocess drop down and ENSURE all spectral files are listed in the window.
- 10) DOUBLE CLICK on any spectra file listed to analyze all files in the Window. It immediately produces an analysis table of all the samples for each element and puts the values in the spread sheet next to each of the spectra and element names.
- 11) COPY and PASTE the data file names to the column in front of the table of values.
- 12) COPY and PASTE the element names to the top of the table.
- 13) COPY this entire table of names, elements and values to a separate spread sheet. The values are in whatever units used to do the calibration.
- 14) Questions? CONTACT Bruker.

PDZ file name (copied from PDZ sheet)

Cal file name

Elements of interest

A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	C:\Documents and Settings\ferguson\Desktop\18-18-08 obs call													
2	AKC008_t1	AKC008_t1	GL1		180.09	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
3	AKC008_t2	AKC008_t2	GL1		180.09	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
4	AKC008_t3	AKC008_t3	GL1		180.97	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
5	ALCA1_T1	ALCA1_T1	GL1		180.15	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
6	ALCA1_t2	ALCA1_t2	GL1		180.12	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
7	ALCA1_t3	ALCA1_t3	GL1		180.12	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
8	ANCA10_t1	ANCA10_t1	GL1		180.1	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
9	ANCA10_t2	ANCA10_t2	GL1		180.06	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
10	ANCA10_t3	ANCA10_t3	GL1		180.05	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
11	BARD09_t1	BARD09_t1	GL1		180.07	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
12	BARD09_t2	BARD09_t2	GL1		180.09	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
13	BARD09_t3	BARD09_t3	GL1		180.16	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
14	BGID01_t1	BGID01_t1	GL1		180.12	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
15	BGID01_t2	BGID01_t2	GL1		180.1	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
16	BGID01_t3	BGID01_t3	GL1		180.09	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
17	BLCA04_t1	BLCA04_t1	GL1		180.06	NaKa1				AlKa1	K Ka1	BaLa1	TiKa1	MnKa1
18	BLCA04_t2	BLCA04_t2	GL1		180.1	NaKa1				AlKa1	K Ka1	Rai a1	TiKa1	MnKa1