IXRF Systems is proud to present the addition of the

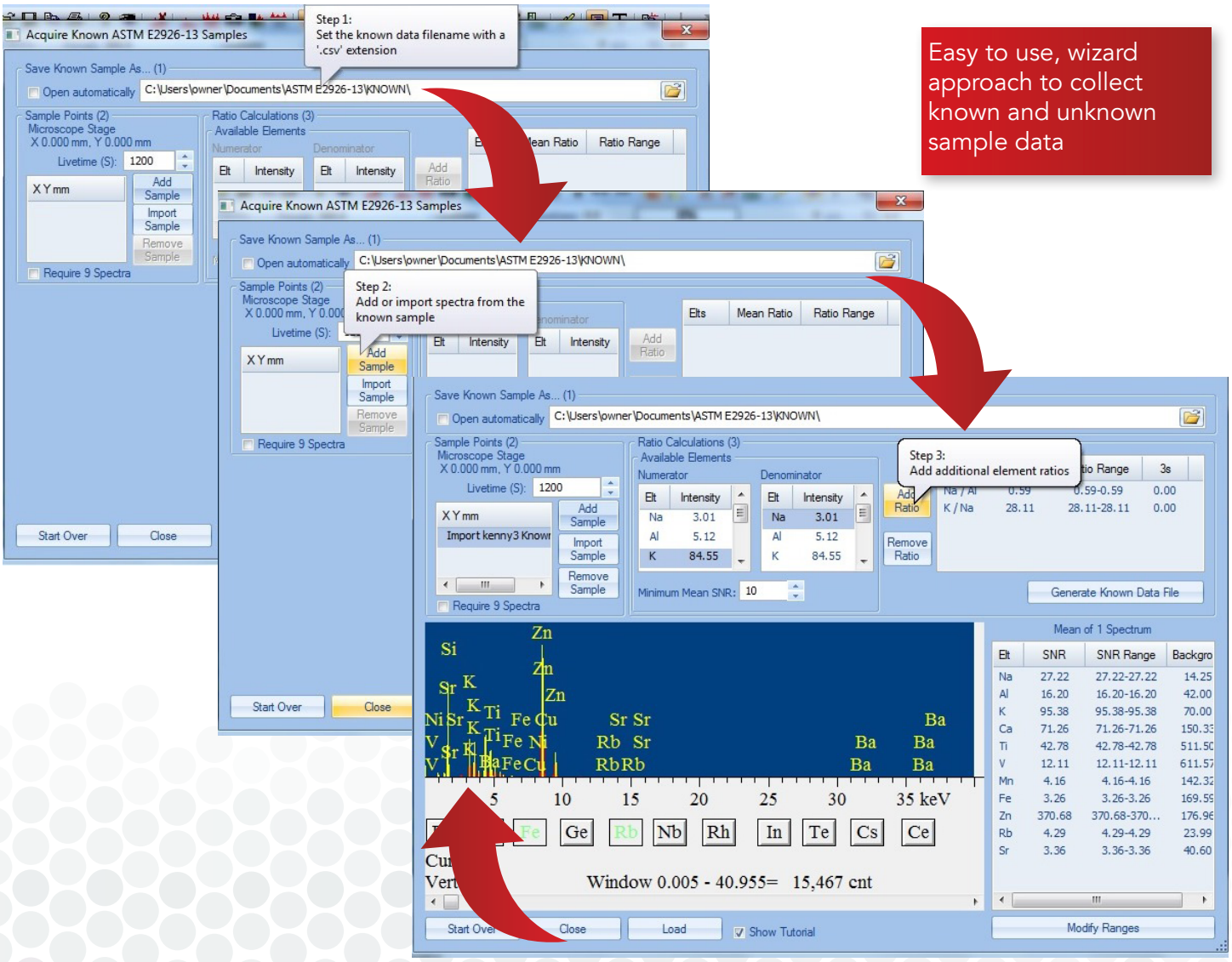
"ASTM Method for Forensic Comparison of Glass Using Micro X-ray Fluorescence (µXRF) Spectrometry"

to our software, Iridium Ultra.

The ASTM method is for the non-destructive comparison of forensic glass fragments by determining the major, minor, and trace elements present in the glass. Iridium Ultra incorporates all of the analytical requirements of the ASTM method in an easy to use format, that includes everything from automatic peak identification to automatic report generation. The guidelines of the method are built into the software to assure that all aspects of the method are correctly followed and documented.

Spectra can be collected via IXRF's micro-XRF mounted on your SEM or by employing one of our ATLAS series of microXRF imaging spectrometers.

ASTM E2926-13



Easy to use, wizard approach to collect known and unknown sample data

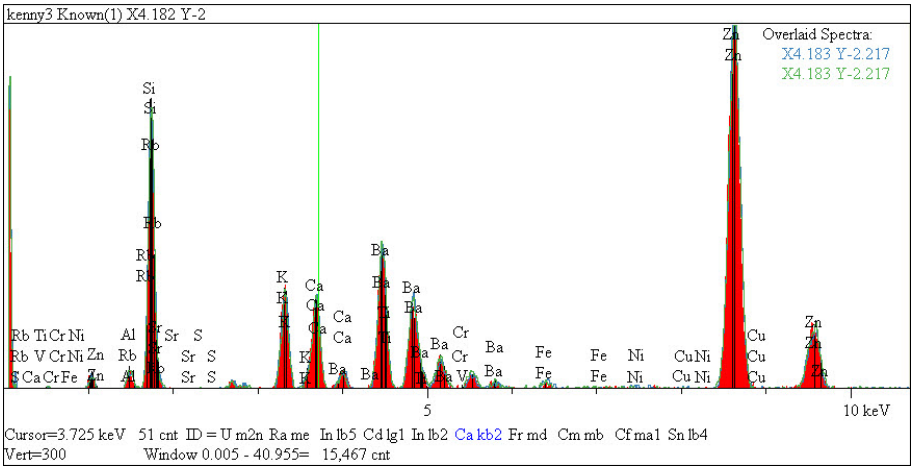
Automatic Peak Identification

Forensic Comparison of Glass

using Micro X-ray Fluorescence (μXRF) Spectrometry

Unknown samples can be automatically searched against a saved library of known samples, in-house standards, or certified reference standards.

Iridium Ultra automatically generates reports and saves the spectra as JPEGs.



	A	B	C	D	E	F	G	H	I	J	K	L	M
1	ASTM E2926-13 report for Question Sample "kenny3"												
2	Generated 12/6/2013 by iXRF Iridium Ultra Software												
3													
4	Q = Questioned												
5													
6	Spectrum overlay shown in files:												
7		C:\Documents and Settings\Administrator\Documents\ASTM E2926-13\REPORT\kenny3.jpg											
8		C:\Documents and Settings\Administrator\Documents\ASTM E2926-13\KNOWN\Known kenny3.jpg											
9													
10	Summary Table of Analysis Results:												
11		Known	Element	Ca / Ti	Ca / K	Ca / Al							
12		Known k	Yes	Range O	Range O	Range Overlap							
13													
14	Decision Tables:												
15		Element Tables:											
16		(Q) kenn	Na	Al	K	Ca	Ti	V	Mn	Fe	Zn		
17		SNR Ran	18.24-40.	13.31-15.	78.85-85.	71.98-79.	37.97-39.	13.95-17.	5.00-5.57	0.92-5.98	361.29-381.91		
18		SNR Mea	26.4	14.75	81.33	76.81	38.53	15.22	5.33	4.15	371.9		
19		Backgrou	10.29	38.63	79.33	133.02	565	581.43	120.71	167.11	175.24		
20													
21		Known k	Na	Al	K	Ca	Ti	V	Mn	Fe	Zn	Sr	Y
22		SNR Ran	21.13-29.	16.20-20.	71.42-95.	69.18-10(	35.83-42.	12.11-15.	2.74-4.16	3.26-8.48	337.21-3!	3.16-7.24	0.00-2.16
23		SNR Mea	26.09	18.86	85.96	80.17	39.29	13.79	3.32	5.31	366.41	4.59	4.18
24		Backgrou	11.88	35	75.33	128.92	557	596.86	145.14	152.82	183.85	36.87	20.32
25													
26		Ratio Tables:											
27		(Q) kenn	Ca / Ti	Ca / K	Ca / Al								
28		Ratio Ra	0.00-1.04	0.00-68.6	0.00-7.95								
29													
30		Known k	Ca / Ti	Ca / K	Ca / Al								
31		Ratio Ra	0.00-0.01	0.00-0.01	0.02-0.11								
32													

kenny3

	A	B	C	D	E	F	G	H
1	Known kenny3 generated 12/6/2013 by iXRF Iridium Ultra Software							
2								
3	Ratio table:							
4	Ratio	Mean	Low	High	3s			
5	Ca / Ti	0.01	0	0.01	0.01			
6	Ca / K	0	0	0.01	0.01			
7	Ca / Al	0.06	0.02	0.11	0.11			
8								
9	Element table							
10	Element	Mean SN	SNR Low	SNR High	Mean Background			
11	Na	26.09	21.13	29.92	11.88			
12	Al	18.86	16.2	20.89	35			
13	K	85.96	71.42	95.38	75.33			
14	Ca	80.17	69.18	100.07	128.92			
15	Ti	39.29	35.83	42.78	557			
16	V	13.79	12.11	15.8	596.86			
17	Mn	3.32	2.74	4.16	145.14			
18	Fe	5.31	3.26	8.48	152.82			
19	Zn	366.41	337.21	391.33	183.85			
20	Sr	4.59	3.16	7.24	36.87			
21	Y	4.18		2.16-12.5	20.32			
22								
23	Ranges table							
24	Element	Low Pre-	High Pre	Low Pea	High Pea	Low Pos	High Post-peak	
25	Na	0.92	0.96	0.95	1.13	1.12	1.16	
26	Mg	1.13	1.17	1.16	1.34	1.33	1.37	
27	Al	1.38	1.42	1.42	1.56	1.55	1.57	
28	S	2.11	2.16	2.21	2.41	2.46	2.51	
29	K	3.19	3.22	3.25	3.4	3.41	3.44	
30	Ca	3.17	3.21	3.49	3.89	4.24	4.28	
31	Ti	4.22	4.31	4.36	4.66	4.71	4.8	
32	V	4.7	4.75	4.8	5.1	5.15	5.2	
33	Cr	5.11	5.21	5.26	5.56	5.61	5.71	
34	Mn	5.59	5.69	5.74	6.04	6.09	6.19	
35	Fe	6.05	6.15	6.2	6.6	6.65	6.75	
36	Co	6.67	6.72	6.77	7.07	7.12	7.17	
37	Ni	7.2	7.27	7.32	7.62	7.67	7.74	

Known kenny3

Iridium Ultra automatically calculates element ratios and signal to noise ratios per ASTM method.

In addition, it automatically creates Excel Spread Sheets.

Want More information?

Contact us at sales@ixrfsystems.com or +1 512.386.6100