

## Appendix 1

The list of standards used for quantitative analysis in the INCA Energy 450 microanalysis system (MIRA 3 LMU) in the laboratory of X-ray spectral analysis methods of IGM SB RAS

Z	T	I	
5	B	B	K
6	C	C	K
7	N	BN	K
	O		K
9	F	BaF <sub>2</sub>	K
11	Na		K
	Mg		K
	Al		K
	Si		K
15	P	Ca <sub>2</sub> P <sub>2</sub> O <sub>7</sub>	K
16	S	FeS <sub>2</sub>	K
17	Cl	Cs <sub>2</sub> ReCl <sub>6</sub>	K
	K		K
	Ca		K
	Sc	Sc	K
22	Ti	Ti	K
23	V	V	K
24	Cr	Cr <sub>2</sub> O <sub>3</sub>	K
25	Mn	Mn	K
26	Fe	Fe	K
27	Co	Co	K
28	Ni	Ni	K
29	Cu	Cu	K
30	Zn	Zn	K,L
31	Ga	GaAs	K,L
32	Ge	Ge	K,L
33	As	PtAs	L
34	Se	Se	L
35	Br	KBr	L
37	Rb	Rb <sub>2</sub> ReCl <sub>6</sub>	L
38	Sr	SrF <sub>2</sub>	L
39	Y	Y	L
40	Zr	Zr	L
41	Nb	Nb	L
42	Mo	Mo	L
44	Ru	Ru	L
45	Rh	Rh	L
46	Pd	Pd	L
47	Ag	Ag	L
48	Cd	Cd	L
49	In	InAs	L
50	Sn	Sn	L
51	Sb	Sb	L
52	Te	HgTe	L
53	I	I**	L
55	Cs	Cs <sub>2</sub> ReCl <sub>6</sub>	L
56	Ba	BaF <sub>2</sub>	L
57	La	LaPO <sub>4</sub>	L
58	Ce	CePO <sub>4</sub>	L
59	Pr	PrPO <sub>4</sub>	L
60	Nd	NdPO <sub>4</sub>	L
62	Sm	SmPO <sub>4</sub>	L
63	Eu	EuPO <sub>4</sub>	L
64	Gd	GdPO <sub>4</sub>	L
65	Tb	TbPO <sub>4</sub>	L
66	Dy	DyPO <sub>4</sub>	L
67	Ho	HoPO <sub>4</sub>	L
68	Er	ErPO <sub>4</sub>	L

69	Tm	TmPO <sub>4</sub>	L
70	Yb	YbPO <sub>4</sub>	L
71	Lu	LuPO <sub>4</sub>	L
72	Hf	Hf	L
73	Ta	Ta	L
74	W	W	L
75	Re	Re	L
76	Os	Os	L/M
77	Ir	Ir	L,M
78	Pt	Pt	L,M
79	Au	Au	L,M
80	Hg	HgTe	L,M
81	Tl	Tl**	L,M
82	Pb	Pb <sub>2</sub> P <sub>2</sub> O <sub>7</sub>	L,M
83	Bi	Bi	L,M
90	Th	ThO <sub>2</sub>	M
92	U	UO <sub>2</sub>	M

Note: \*\* – calculated data for standards from the INCAEnergy standards file supplied by the company (correctness is not guaranteed).