




## ICP-MS Prices

(valid from 1 March 2017)

Process	Description	Unit Cost				
		User		CAF staff		
		Internal	External	SU	Other Academics	Industry
<b>Sample Preparation</b>						
<b>Microwave Digestion</b>						
Drying & Milling				R 20,00	R 23,40	R 60,00
Digestion - ultra pure		R 75,00			R 140,40	R 300,00
Digestion - AR grade		R 65,00		R 105,00	R 122,85	R 262,50
<b>Rock Sample Preparation</b>						
Rock crushing (< 2kg) + Riffle Splitter		R 20,00	R 24,00			
Milling (disk mill)		R 20,00	R 24,00			
Milling (Swing mill)		R 20,00	R 24,00			
Sieve to - 350µm	Nylon mesh cuts supplied per sample	R 30,00	R 36,00			
Panning		R 20,00	R 24,00			
Magnetic separation		R 20,00	R 24,00			
Heavy liquid		R 175,00	R 210,00			
Grain Picking & Mounting		R 0,00	R 0,00	R 250,00	R 300,00	R 900,00
Polishing	Per mount, max 5 samples per mount	R 80,00	R 96,00	R 250,00	R 300,00	R 500,00
Precise rock cutting		R 20,00	R 24,00	R 70,00	R 85,00	R 170,00
Polishing (other)		R 25,00	R 30,00	R 75,00	R 90,00	R 180,00
Grinding		R 25,00	R 30,00	R 75,00	R 90,00	R 180,00
<b>Picking, mounting &amp; polishing of customer supplied concentrates</b>		<b>R 80,00</b>	<b>R 96,00</b>	<b>R 500,00</b>	<b>R 600,00</b>	<b>R 1 400,00</b>
<b>Complete Minsep (excl polishing)</b>		<b>R 285,00</b>	<b>R 342,00</b>			
<b>Geochemical Analysis</b>						
<b>Whole Rock Chemistry</b>						
XRF: Majors on fusion, incl fusion disk & LOI	SiO <sub>2</sub> , TiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Total Fe <sub>2</sub> O <sub>3</sub> , MnO, MgO, K <sub>2</sub> O, CaO, Na <sub>2</sub> O, P <sub>2</sub> O <sub>5</sub> , Cr <sub>2</sub> O <sub>3</sub>			R 165,00	R 185,00	R 480,00
LA ICP-MS Traces	Sc, V, Cr, Co, Ni, Cu, Zn, Rb, Sr, Y, Zr, Nb, Mo, Cs, Ba, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, Ta, Pb, Th, U	R 120		R 150,00	R 168,00	R 400,00
Fusion mount for traces.				R 40,00	R 42,00	R 60,00
In-situ mineral traces (p/h)		R 400,00	R 480,00	R 550,00	R 660,00	R 950,00
In-situ mineral traces data processing (p/h)				R 180,00	R 250,00	R 540,00
<b>Complete XRF Majors + LA ICP-MS Traces</b>		<b>R 325,00</b>		<b>R 355,00</b>	<b>R 395,00</b>	<b>R 940,00</b>
XRF: Traces on pellets	Ni, Cu, Zn, Ga, Rb, Sr, Y, Zr, Nb, Pb, Th, U, Ti, V, Cr, Co, Ba, La, Ce, Nd			R 150,00	R 180,00	R 330,00
XRF: Base Metals on pellets	Cu, Co, Ni, Pb, Fe			R 120,00	R 144,00	R 264,00
XRF: P & S on pellets	P, S			R 100,00	R 120,00	R 220,00
XRF Traces method development (p/h)				R 300,00	R 360,00	R 660,00
XRF qualitative scan				R 250,00	R 300,00	R 550,00
<b>Environmental Analysis</b>						
<b>Elemental Analysis - Complete C, H, N, &amp; S</b>						
C H N S Analysis - fixed minimum rate	1 - 2 samples			R 300,00	R 400,00	R 900,00
C H N S Analysis per sample	3 - 20 samples	R 106,00	R 124,00	R 130,00	R 152,00	R 390,00
C H N S Analysis per sample	21 - 40 samples	R 95,00	R 111,00	R 120,00	R 140,00	R 360,00
C H N S Analysis per sample	> 40 samples	R 90,00	R 105,00	R 115,00	R 135,00	R 345,00
<b>Major &amp; Trace Cation Analysis</b>						
ICP-AES: Single element				R 60,00	R 72,00	R 180,00
ICP-AES: up to 6 elements				R 90,00	R 110,00	R 312,50
ICP-AES: majors & traces	Na, K, Ca, Mg, Al, Cr, Co, Cu, Ni, Fe, Mn, Pb, Zn, P, Si			R 140,00	R 168,00	R 420,00
ICP-MS: 1 or 2 elements				R 110,00	R 132,00	R 385,00
ICP-MS: up to 5 elements				R 130,00	R 163,80	R 546,00
ICP-MS: Trace elements	Li, Be, Al, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sb, Mo, Cd, Pb, Hg			R 150,00	R 187,50	R 656,25
ICP-MS Custom > 5 elements				R 150,00	R 187,50	R 656,25
ICP-AES & ICP-MS Complete	Na, K, Ca, Mg, B, Ba, Sr, P, Si, Al, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sb, Mo, Cd, Pb, Hg			R 240,00	R 300,00	R 960,00
REE's				R 160,00	R 200,00	R 600,00
PGM's				R 140,00	R 200,00	R 600,00
REE's + HFSE's				R 190,00	R 237,50	R 712,50
HPLC ICP-MS Speciation	Single element	R 111		R 120,00	R 150,00	R 450,00
	Standards	R 55,25		R 60,00	R 75,00	R 225,00



**U-(Th)-Pb Geochronology by LA ICP-MS - 2017 Prices**

Rates are per sample, excl. VAT			
Stellenbosch University Client	Other South African Academic Clients	Non South African Academic Clients	Industry Clients
25 spots on grain mount or in situ* (e.g. simple igneous zircon sample)			
R 840	R 1 010	€ 200	€ 800
50 spots on grain mount or in situ* (e.g. complex igneous zircon sample)			
R 1 040	R 1 250	€ 280	€ 900
100 spots on grain mount (e.g. detrital zircon sample)			
R 1 520	R 1 820	€ 400	€ 1 300

**Academic clients:**

description of methodology, metadata and U-(Th)-Pb data tables of the unknown samples and reference materials analysed (cf. Tables 3 and 4 in Horstwood et al., 2016, Geostandards and Geoanalytical Research).

**Industry clients:**

description of methodology, metadata and U-(Th)-Pb data tables of unknown samples and reference materials analysed (cf. Tables 3 and 4 in Horstwood et al., 2016, Geostandards and Geoanalytical Research); short report commenting and representing the data as Concordia diagrams (+ frequency and relative probability plots as appropriate and depending on the nature of the sample).

**\*note:**

the price for in situ work assumes that the client will be available to set their own spots; alternatively there will be a time-dependent additional charge.