



TEMPERATURE

In the area of temperature calibrations CL perform two types of calibration: comparison calibration and fixed point calibration. In case of comparison calibration, standard and semi-standard platinum resistance thermometers are used combined with temperature controlled liquid baths and a climatic chamber. Reference temperature standard is periodically recalibrated at holder of a national standard for temperature in Slovenia (Laboratory of Metrology and Quality) with fixed point method. This external traceability links reference standard to the International temperature scale ITS-90. In case of fixed point calibration two fixed point cells are used: the triple point of water and the melting point of gallium traceable also to the Slovenian national laboratory. Temperature is measured with electrical instruments, so their traceability is also important, and this is tied to the Slovenian Institute for Quality and Metrology. The best measurement capability of the laboratory has been granted for each category of calibration separately.

Measured quantity	Range	Remarks
Temperature		
Resistance thermometers	-50°C do 50°C	Comparison method
Liquid-in-glass thermometers	-20°C do 50°C	Comparison method
Self indicating thermometers	-50°C do 50°C	Comparison method
Mechanical thermometers with indicator for measuring air temperature	-20°C do 40°C	Comparison method
Thermo-physical properties		
Triple point of water	0.01°C	Fixed point method
Melting point of gallium	29.7646°C	Fixed point method

Scope of accreditation is available at Slovenian accreditation web site:
http://www.slo-akreditacija.si/?s=lk-006&post_type=lpacreditation