

# CERTIFICATE OF ACCREDITATION

## ZAMBIA METROLOGY AGENCY

*Established by The Metrology Act No. 6 of 2017*

**Facility Accreditation Number: CAL-14 005**

is a SADCAS accredited Calibration Laboratory  
provided that all SADCAS conditions are complied with

This certificate is valid as per the scope stated in the accompanying schedule of accreditation,  
Annexure "A", bearing the above accreditation number for

## TEMPERATURE METROLOGY

*The facility is accredited in accordance with the recognized International Standard*

## ISO/IEC 17025:2017

*The accreditation demonstrates technical competency for a defined scope and the operation  
of a laboratory quality management system*

*SADCAS is a subsidiarity organization of SADC. A memorandum of understanding between SADC and  
SADCAS serves as the basis for the recognition of SADCAS by SADC Member States  
as a multi-economy accreditation body*

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**Mrs Maureen P Mutasa**  
**SADCAS Chief Executive Officer**

**Original Date of Accreditation: 23 April 2019**  
**Effective Date (Issue No: 2): 19 May 2020**  
**Certificate Expires: 22 April 2024**

## ANNEXURE A

### SCHEDULE OF ACCREDITATION

#### TEMPERATURE METROLOGY

Laboratory Accreditation Number: **CAL-14 005 (ISO/IEC 17025:2017)**

<p><b>Permanent Address of Laboratory</b> Zambia Metrology Agency Plot 4526, Lechwe House Freedom Way, South End Lusaka Zambia</p> <p><b>Postal Address</b> P O Box 30989 Lusaka Zambia</p> <p><b>Tel</b> : +260 211 222 294 <b>Cell</b> : +260 977 776 062 <b>Fax</b> : +260 211 222 297 <b>Email</b> : <a href="mailto:Fredrick.Hamutunda@zma.org.zm">Fredrick.Hamutunda@zma.org.zm</a></p>		<p><b>Technical Signatories:</b> B Fisambo (All Items) MG Nyambe (Items 2, 3, 4, 5.1, 5.2 and 10) ES Kandeke (Items 2, 5.1, 5.2 and 10) C Mutembo (Items 2, 3, 4, 5.1, 5.2 and 5.3)</p> <p><b>Nominated Representative</b> : F Hamutunda</p> <p><b>Issue No</b> : 03 <b>Date of Issue</b> : 19 May 2020 <b>Expiry Date</b> : 22 April 2024</p>		
ITEM	MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT	METHOD	RANGE OF MEASURED QUANTITY	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)
1.2	Base metal thermocouples	Internal: <i>MOP 261</i> Reference: <i>SANAS TR 19</i>	-40 °C to 0 °C	2.0 °C
			0 °C to 100 °C	0.4 °C
			100 °C to 450 °C	1.0 °C
1.3	Compensation and extension lead	Internal: <i>MOP 262</i> Reference: <i>SANAS TR 19</i>	0 °C to 70 °C	0.4 °C
2	Ice Point Reference	Internal: <i>MOP 252</i> Reference: <i>SANAS TR 19</i>	0 °C	0.05 °C
3	Water Triple Point Cell	Internal: <i>MOP 251</i> Reference: <i>SANAS TR 19</i>	0.01 °C	0.05 °C
4	Platinum Resistance Thermometer	Internal: <i>MOP 259</i> Reference: <i>SANAS TR 19 and DKD-R 5-1</i>	-40 °C to 600 °C	0.06 °C
5.1	Liquid - in - Glass Thermometer	Internal: <i>MOP 256</i> Reference: <i>SANAS TR 19</i>	-40 °C to 200 °C	0.13 °C

## ANNEXURE A

Laboratory Accreditation No: CAL-14 009 (ISO/IEC 17025:2017)

Issue No: 03

Date of Issue: 19 May 2020

Date of Expiry: 22 April 2024

ITEM	MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT	METHOD	RANGE OF MEASURED QUANTITY	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY ( $\pm$ )
5.2	Digital Thermometers	Internal: <i>MOP 263</i> Reference: <i>SANAS TR 19, EURAMET cg-8 and DKD-R 5-1</i>	-40 °C to 450 °C	0.06 °C
5.3	Mechanical (Dial) Thermometer	Internal: <i>MOP 263</i> Reference: <i>SANAS TR 19, EURAMET cg-8 and DKD-R 5-1</i>	-40 °C to 450 °C	1.0 °C
10	Furnaces, Ovens, Incubators, Water Baths, Fridges, Freezers	Internal: <i>MOP 257</i> Reference: <i>SANAS TR 19, EURAMET cg-20, JTM K 08 and DKD-R 5-7</i>	-40 °C to 70 °C 70 °C to 140 °C	0.6 °C 1.0 °C
11	On-site Calibration for Items 4; 5.2; 5.3 & 10 above			

Original date of accreditation: 23 April 2019

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The CMC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor  $k = 2$ , corresponding to a confidence level of approximately 95%.

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**Jeanne Françoise Ranorovelo**  
SADCAS Technical Manager