



AFRIMETS
Intra-Africa Metrology System
Système Intra-Africain de Métrologie



AFRIMETS TECHNICAL COMITEE FOR THERMOMETRY (TC-T) REPORT

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TC-T (Vice-Chair)
Cairo, Egypt
2019

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TC-T MEETING ATTENDANCE

| Name | Institute | RMO | Contact details |
|-------------------------------|----------------------|---------|--|
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AFRIMETS TC-T INTER COMPARISON

AFRIMETS. T-S2

- Supplementary comparison of Industrial PRT calibration capability
- Range: -50 °C to 450 °C
- Started: May 2012

Participating NMIs: South Africa, Morocco, Ghana, Burkina faso

Status: **Draft B** report submitted for peer review (CCT-WG-KC)

CONT...

AFRIMETS. T-S3

- Supplementary comparison of Industrial PRT calibration capability
- Range: -50 °C to 450 °C
- Started: May 2012
- Status: Instrument found in Uganda and delivered to NMISA, Currently can't proceed due to lack of fund
- Participating NMIs:
South Africa, Zambia, Zimbabwe, Botswana, Namibia, Mozambique, Uganda, Rwanda, Democratic Republic of the Congo

AFRIMETS. T-S7

- Supplementary comparison of noble metal thermocouple
- Range: 0 °C to 1200 °C
- Started: June 2019
- Status: Initial measurement at NMISA
- Participating NMIs:
South Africa, Egypt, Zambia, Botswana, Kenya, Zimbabwe, Ghana, Morocco, Ethiopia

FUTURE INTER-COMPARISONS

- SPRT, AFRIMETS TS-6 (Hg - Zn)
 - Pilot: NIS
 - Reference: South Africa
 - Participants: South Africa, Egypt, Zambia, Zimbabwe, Kenya, Morocco, Ghana, Ethiopia
 - Status: Protocol under review
 - Fund: PTB
- Radiation Thermometer (600 °C to 1100 °C)
 - Pilot: NIS
 - Reference: South Africa
 - Participants: South Africa, Egypt, Zambia, Ethiopia
 - Status: Protocol to be prepared,
 - Fund: to be secured
- Humidity: Dew point (-20 °C – 30 °C)
 - Pilot: NIS
 - Reference: South Africa
 - Participants: South Africa, Egypt, Morocco, Kenya
 - Status: Protocol to be prepared
 - Fund: to be secured

CMC submission

❑ Botswana Bureau of Standards (BOBS) (Thermometry Service classification 2.4.1)

- Liquid in glass thermometer (0 °C – 200 °C)

Status: Review process completed, CMC published

❑ Zambia Metrology Agency (ZMA) (Thermometry Service classification 2.2, 2.3, 2.4 & 2.7)

- Platinum resistance thermometer (-40 °C – 450 °C)
- Base metal thermocouple (220 °C – 450 °C)
- Digital thermometer (0 °C – 450 °C)
- Liquid in glass thermometer (-40 °C – 200 °C)

Status: Review process completed, CMC published

❑ Kenya Bureau of standards (KEBS),
(Thermometry service classification 2.2)

➤ Platinum resistance thermometer

Status: Quality system peer-review

WORKSHOP/TRAINING

- ❑ NMISA provided training at BOBS in March 2019 funded by PTB
 - SADC MET temperature S-RMO comparison participants (LIG, TC & Temp Data loggers)
 - ILC protocol, report, and CMC preparation
 - CMC submission & review
- ❑ **NMISA will provide training to a temperature metrology staff from TBS Tanzania in October 2019**
- ❑ NIS – Egypt provided training for 8 people in SSMO – Sudan in January 2019

Elections

- Votes for elections were taken for Chair and Vice Charis
- Attendees were agreed on continuing with the current structure for the chair and the three vice chairs as it is



Thank you