



SCOPE OF ACCREDITATION

CALIBRATION LABORATORIES

Limited Liability Company Scientific and Production Enterprise «ELEMER»

name

RA.RU.330337

Accreditation Certificate Registry Number

1. 124489, RUSSIA, Moscow, Zelenograd, 4807th Passage, House 2.

addresses of activity locations

2. 124489, RUSSIA, Moscow, Zelenograd, 4807th Passage, House 7, Building 1.

addresses of activity locations

3. 124489, RUSSIA, Moscow, Zelenograd, 4807th Passage, House 2, Building 3, (Reception and registration of samples (specimens)).

addresses of activity locations

Conforms to the requirements of:

GOST ISO/IEC 17025-2019 General requirements for the competence of testing and calibration laboratories. GOST ISO/IEC 17025-2019
title and reference number of the interstate or national standard

124489, RUSSIA, Moscow, Zelenograd, 4807th Passage, House 2.

addresses of activity locations

| No. | Measurements | Measured Quantity | Object of Calibration | Measurement Range | Additional Parameters | Expanded Measurement Uncertainty | Calibration Method/Procedure | Note |
|--|--|-------------------|---|---|-----------------------|--|--|------|
| 1. Calibration of measuring instruments | | | | | | | | |
| 1.1. | Thermophysical and temperature measurements; - | Temperature | Platinum and copper resistance sensors, resistance thermometers made of platinum, copper and nickel | -196 °C; (-60 ... 660) °C | - | U _{0.95} = 0.02 °C; U _{0.95} = 0.015 °C | Direct comparison method with reference standard | - |
| 1.2. | Thermophysical and temperature measurements; - | Temperature | Thermocouples | -196 °C; (-60 ... 660) °C; (660 ... 1100) °C; (1100 ... 1800) °C | - | U _{0.95} = 0.02 °C; U _{0.95} = 0.015 °C; U _{0.95} = 0.4 °C; U _{0.95} = 0.5 °C | Direct comparison method with reference standard | - |
| 1.3. | Thermophysical and temperature measurements; - | Temperature | Universal temperature transmitters, temperature transmitters with unified output signal | -196 °C; (-60 ... 660) °C; (660 ... 1100) °C; (1100 ... 1800) °C | - | U _{0.95} = 0.02 °C; U _{0.95} = 0.015 °C; U _{0.95} = 0.4 °C; U _{0.95} = 0.5 °C | Direct measurement method using a working temperature standard | - |

124489, RUSSIA, Moscow, Zelenograd, 4807th Passage, House 7, Building 1.

addresses of activity locations

| No. | Measurements | Measured Quantity | Object of Calibration | Measurement Range | Additional Parameters | Expanded Measurement Uncertainty | Calibration Method/Procedure | Note |
|--|--|-------------------|---|---|-----------------------|--|---|------|
| 1. Calibration of measuring instruments | | | | | | | | |
| 1.1. | Thermophysical and temperature measurements; - | Temperature | Standard platinum resistance thermometers, vibration-proof platinum resistance thermometers | -196 °C; (-38.8344 ... 660.323) °C | - | U _{0.95} = 0.002 °C; U _{0.95} = 0.0005 °C | Direct comparison method with reference standard | - |
| 1.2. | Thermophysical and temperature measurements; - | Temperature | Apparatus for realizing fixed points, temperature measures | -38.8344 °C; 0.01 °C; 29.7646 °C; 156.5985 °C; 231.928 °C; 419.527 °C; 660.323 °C | - | U _{0.95} = 0.0007 °C; U _{0.95} = 0.0005 °C; U _{0.95} = 0.0006 °C; U _{0.95} = 0.002 °C; U _{0.95} = 0.002 °C; U _{0.95} = 0.005 °C; U _{0.95} = 0.01 °C | Direct measurement method using a working temperature standard, GOST 8.814-13 | - |
| 1.3. | Thermophysical and temperature measurements; - | Temperature | Temperature calibrators | (-60 ... 660) °C; (660 ... 1100) °C | - | U _{0.95} = 0.01 °C; U _{0.95} = 0.35 °C | Direct comparison method with reference standard | - |

Director General
position of authorized person

Signed with electronic signature
signature of authorized person

Okladnikov V. M.
initials, surname of authorized person