



NABL

National Accreditation Board for Testing and Calibration Laboratories

(An Autonomous Body under Department of Science & Technology, Govt. of India)

CERTIFICATE OF ACCREDITATION

R & D INSTRUMENT SERVICES

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

#5, Natesan Nagar, 27th Street, Alapakkam, Chennai, Tamil Nadu

in the discipline of

THERMAL CALIBRATION

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Certificate Number C-0674

Issue Date 21/10/2016



Valid Until 20/10/2018

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

Avijit Das
Program Manager

Anil Relia
Director

Prof. S. K. Joshi
Chairman



रा.प्र.प्र.बो.

राष्ट्रीय परीक्षण और अंशशोधन प्रयोगशाला प्रत्यायन बोर्ड

(विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार के अधीन स्वायत्तशासी निकाय)

प्रत्यायन प्रमाण-पत्र

आर एण्ड डी इंस्ट्रुमेंट सर्विसेस्

का मूल्यांकन और प्रत्यायन निम्न मानक के अनुसार

आई.एस.ओ./आई.ई.सी. 17025:2005

“परीक्षण एवं अंशशोधन प्रयोगशालाओं की सक्षमता की सामान्य अपेक्षाएँ”

चेन्नई, तमिलनाडु

में स्थित इसकी सुविधाओं के लिए

तापीय अंशशोधन

के विषय क्षेत्र में किया गया।

(इस प्रयोगशाला के प्रत्यायन के विषय क्षेत्र की जानकारी एन ए बी एल वेबसाइट www.nabl-india.org से भी प्राप्त कर सकते हैं)

प्रमाण-पत्र संख्या अ-0674

जारी करने की तिथि 21/10/2016



वैधता की तिथि 20/10/2018

यह प्रमाण-पत्र उपर्युक्त मानक तथा राष्ट्रीय परीक्षण और अंशशोधन प्रयोगशाला प्रत्यायन बोर्ड की अतिरिक्त अपेक्षाओं का निरंतर संतोषप्रद अनुपालन किए जाने पर अनुबंध में निर्दिष्टानुसार प्रत्यायन के क्षेत्र के लिए वैध रहेगा।

रा.प्र.प्र.बो. की ओर से हस्ताक्षरित

अ. दास,

अविजीत दास
कार्यक्रम प्रबन्धक

अनिल रेलिचा

अनिल रेलिचा
निदेशक

श्रीकृष्ण जोशी

पं. श्रीकृष्ण जोशी
अध्यक्ष



NABL

SCOPE OF ACCREDITATION

Laboratory R & D Instrument Services, #5, Natesan Nagar, 27th Street, Alapakkam, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Discipline Thermal Calibration **Issue Date** 21.10.2016

Certificate Number C-0674 **Valid Until** 20.10.2018

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Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (±)	Remarks
I. TEMPERATURE			
1. GLASS THERMOMETER ^S	(-) 80 °C to 0 °C	0.32 °C	Using Standard RTD, Liquid bath, and Digital Multimeter by Comparison Method
	>0 °C to 90 °C	0.15 °C	
	>90 °C to 250 °C	0.34 °C	
2. RTD'S, THERMISTORS, THERMOCOUPLES, TEMPERATURE GAUGES, DIGITAL THERMOMETERS, TEMPERATURE INDICATOR WITH SENSORS, TEMPERATURE SWITCHES, TEMPERATURE TRANSMITTER ^S	(-) 80 °C to 50 °C	0.14 °C	Using Standard RTD, Thermocouple, Liquid bath, Dry block calibrator, Precision Process Calibrator and Digital Multimeter by Comparison Method
	>50 °C to 650 °C	0.21 °C	
	>650 °C to 1000 °C	1.40 °C	
	>1000 °C to 1200 °C	2.28 °C	
3. TEMPERATURE INDICATOR OF BATH, DRY BLOCK CALIBRATOR ^S	(-) 80 °C to 50 °C	0.15 °C	Using Standard RTD, Thermocouple, Precision Process Calibrator and Digital Multimeter by Comparison Method
	>50 °C to 650 °C	0.21 °C	
	>650 °C to 1000 °C	1.51 °C	
	>1000 °C to 1200 °C	2.35 °C	
4. ANALOG / DIGITAL THERMOHYGROMETERS / THERMOHYROGRAPHS / HUMIDITY SENSORS / DATA LOGGERS / TRANSMITTERS ^S	20 % RH to 90 %RH @ (40 °C to 20 °C)	1.48 %RH	Using Standard Humidity Indicator With Sensor, Humidity Chamber by Comparison Method
	15 °C to 50 °C @ (80%RH)	0.31 °C	

Mohit

Mohit Kaushik
Convenor

Avijit

Avijit Das
Program Manager





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Discipline	Thermal Calibration	Issue Date	21.10.2016
Certificate Number	C-0674	Valid Until	20.10.2018
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Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (\pm)	Remarks
5. RTD'S, THERMISTORS, THERMOCOUPLES, TEMPERATURE GAUGES, DIGITAL THERMOMETERS, TEMPERATURE INDICATOR WITH SENSORS, TEMPERATURE SWITCHES, TEMPERATURE TRANSMITTER*	(-)25 °C to 50 °C >50 °C to 650 °C >650 °C to 1000 °C >1000 °C to 1200 °C	0.15 °C 0.22 °C 1.49 °C 2.34 °C	Using Standard RTD, Thermocouple, Liquid bath, Dry block calibrator, Precision Process Calibrator and Digital Multimeter by Comparison Method
6. TEMPERATURE INDICATOR OF BATH, DRY BLOCK CALIBRATOR*	(-)25 °C to 50 °C >50 °C to 650 °C >650 °C to 1000 °C >1000 °C to 1200 °C	0.16 °C 0.23 °C 1.61 °C 2.41 °C	Using Standard RTD, Thermocouple, Precision Process Calibrator and Digital Multimeter by Comparison Method
7. TEMPERATURE BY SPATIAL MAPPING FREEZER, OVENS, INCUBATOR, FURNACE, BATH, ENVIRONMENTAL CHAMBER AND TEMPERATURE ENCLOSURES*	(-)25 °C to 50 °C >50 °C to 250 °C >250 °C to 1000 °C >1000 °C to 1200 °C	1.65 °C 2.50 °C 3.82 °C 4.82 °C	Using Master Thermocouple and paperless Graphic Recorder by Comparison Method


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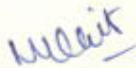
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Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (\pm)	Remarks
II. SPECIFIC HEAT AND HUMIDITY			
I. HUMIDITY BY SPATIAL MAPPING ENVIRONMENTAL CHAMBER AND HUMIDITY ENCLOSURES*	20% RH to 90%RH @(40°C to 20°C)	4.1%RH	Using Humidity Data Logger with Sensor by Comparison Method

* Measurement Capability is expressed as an uncertainty (\pm) at a confidence probability of 95%.

^S Only in Permanent Laboratory

* Only for Site Calibration


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