



CSIR - NATIONAL PHYSICAL LABORATORY

(Council of Scientific & Industrial Research)

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Subject : Invitation of Expression of Interest for the Procurement of “Aging Life test System”

CSIR-National Physical Laboratory, New Delhi is one of the earliest national laboratories set up under the Council of Scientific & Industrial Research. CSIR-NPL is the custodian of National Standards and maintains the Indian Standard Time (IST). It is mandated to be India’s National Measurement Institute (NMI) by an act of Parliament. CSIR-NPL disseminates precision measurements that are needed for the growth of Indian science and industry as well as for the legal metrology needs of the nation. Over the years the laboratory has developed expertise in the subject enabling it to shift its basis for measurement standard from ‘artifact’ to quantum standards. The laboratory provides apex level calibration services in the country; offering National Accreditation Board for Testing and Calibration Laboratories (NABL), the national accreditation body in the country.

EOI are hereby invited through Central Public Procurement (CPP) Portal <https://epublishing.gov.in/eprocure> through **OFFLINE HARD COPY** of offers from manufacturers, their authorized distributors and Indian Agent of Foreign principals, if any, under the provision of various policy initiatives and notifications issued by various Ministries / Departments of the Govt. of India for purchase of items listed below:

Ref no. 14-VIII/SS(31-OTE)2024PB/T-243

Procurement of “Aging Life test System”

Last date of submission : 20th March, 2025 upto 3.00 PM

Date of opening : 21st March, 2025 at 3.00 PM

Interested bidders may download the details form our website : www.nplindia.org or on (CPP) Portal ([https://epublishing.gov.in/eprocure under tender ID 2025_CSIR_790966_1](https://epublishing.gov.in/eprocure_under_tender_ID_2025_CSIR_790966_1) and if you need any query may contact on e-mail saha.shibu@nplindia.org

Sr. Controller of Stores and Purchase

Subject : Invitation for Expression of Interest (EOI) for the procurement of “Aging Life test System”

CSIR-National Physical Laboratory, New Delhi has the responsibility of realizing the units of physical measurements based on the International System (SI units) under the subordinate legislations of weights & Measures Act 1956 (reissued in 1988 under the 1976 Act). NPL also has the statutory obligation to realize, establish, maintain, reproduce and update the national standards of measurement & calibration facilities for different parameters. CSIR-NPL is the custodian of National Standards and maintains the Indian Standard Time (IST). It is mandated to be India’s National Measurement Institute (NMI) by an act of Parliament. CSIR-NPL disseminates precision measurements that are needed for the growth of Indian science and industry as well as for the legal metrology needs of the nation. Over the years the laboratory has developed expertise in the subject enabling it to shift its basis for measurement standard from ‘artifact’ to quantum standards. The laboratory provides apex level calibration services in the country; offering National Accreditation Board for Testing and Calibration Laboratories (NABL), the national accreditation body in the country.

Broad Objectives:-

EOI are hereby invited from reputed engineering/fabricating companies/firms for putting up “Aging-Life Test System for LED Package, Array and Module”. Firms can apply with technical datasheet and/or scheme, along with the documentary evidence for work of similar nature done in the past, if any. The firms should also meet the other parameters as given below and are required to submit following information along with their applications.

- 1.) Name of the firm with their constitution/proprietorship/partnership details etc., with the date of establishment/registration.
- 2.) List of similar orders successfully completed in the last three years as above with testimonials from department concerned and the details of contact persons, if any
- 3.) The firm should not have incurred any loss in more than two years during the last five years ending 31st March 2024.
- 4.) List of works in hand giving nature of work, department, cost, date of start and completion with present progress and the contact details of clients.
- 5.) Balance sheet of the firm for previous two years (2022-2023 and 2023-2024) must be enclosed with the offer certified by chartered accountant evidencing turnover.
- 6.) The article of association in order to know the standing of the firm.

Un-priced Offers against this EOI should be submitted to “The Director, CSIR-NPL, Dr. K.S. Krishnan Marg, New Delhi-110012, Main building, Room No. 160, Purchase Branch as per the requirement. Last date of submission of EOI is 20th March 2025 upto 3.00 PM. Shortlisted firms shall be called for making a presentation at a later date.

If any information furnished by the applicant is found incorrect at a later stage, it shall be liable to be debarred from tendering/taking up of work in CSIR. CSIR-NPL reserves the right to verify the particulars furnished by the applicant; independently. CSIR-NPL reserves the right to reject any prospective application without assigning any reason.

Brief description of Expression of interest for the procurement of “Aging Life test System for LED Package, Array and Module”

Specifications:

**Proposed Technical Specification of
“AGING-LIFE TEST SYSTEM FOR LED PACKAGE, ARRAY AND MODULE”**

S.NO.	SPECIFICATIONS
1	Standard Compliance: IS 16105:2012 (the corresponding international standard is IES LM-80-08)
2.	Temperature adjustable aging chambers: 03 Numbers
2.1	At least three different and independent temperature adjustable chambers for LED sources as per IS 16105:2012
2.2	Minimum Internal dimensions of each test chamber: 0.5m X 0.5m X 0.5m
2.3	Provision to mount at least 20 LED samples per chamber (20 channels)
2.4	Case Temperature control range: Ambient Laboratory Temperature to 100°C or broader
2.5	The temperature of surrounding air, inside the chamber, maintained to be within $\pm 5^{\circ}\text{C}$ of case temperature of LED
2.6	The case temperature should be programmable and can be monitored, using temperature sensor, from the console through the system software (batch or individual)
2.7	The humidity inside the chamber should be measurable, using humidity sensor, and can be monitored from the console through the system software
2.8	All the chambers should have 2-pole power supply terminals
2.9	All the chambers should be equipped with sample viewing window and temperature display which can be viewed in the console also
3a	Variable DC power source: 01 Number
3a.1	The DC power source should be able to power the DUTs in the testing chamber
3a.2	Maximum Output Current: ≥ 10 A DC
3a.3	Maximum Output Voltage: ≥ 30 V DC
3b	Variable AC supply: 01 Number
3b.1	Maximum Output Current: ≥ 10 A
3b.2	AC Output frequency: 50Hz or other frequencies along with 50 Hz
3b.3	AC Output Voltage Range: 10-300 V AC or broader
3b.4	The AC power source should be able to power the DUTs in the testing chamber
4.	Control and test software capable of controlling the measurements and displaying the following quantities: 01 Number
4.1	Aging time: 0-8000 hours or longer with provision of data collection after every 500 hours or lesser interval.
4.2	Ambient conditions: Temperature and humidity should be recorded and displayed.
4.3	Electrical Input parameters: Input Voltage, Current and Power should be recorded and displayed
5	Operating console: 01 Number
5.1	Control software integrated to the console with software separately in an external storage media
5.2	The Operating System must be in English

5.3	HD display (at least 50 inches wall mountable)
5.4	Laser printer
5.5	Online Uninterrupted Power Supply (UPS) for the console with backup of at least 1 hour
5.6	All required licenses for the instrument Operating Software and Operating System
5.7	All Interface Cables
6	Other Requirements:
6.1	The electrical input to the systems should be as per Indian standard (Single phase or Three phase as per requirement)
6.2	The whole system should be covered under on-site warranty for at least one year after commissioning at the installation site
6.3	All cables, required spares and tools should be provided with the system
6.4	Detailed regular maintenance and operation manual in English should be provided along with the system.
6.5	Installation of the complete system, verifications, training and demonstration of functionality of all options/modes should be done on site, as per the specifications
6.6	Training (operations & maintenance) to be provided at CSIR-NPL, India after installation
6.7	Acceptance Test Post Installation: Successful demonstration of working of the instrument after installation at CSIR-NPL

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